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INTRODUCTION

By John P. Hardt* and Sheila N. Heslin**

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I. SUMMARY

At the onset of the 1990's, East European leaders see themselves increasingly compelled to undertake overdue economic and political reforms, as they are faced with an accelerating process of reform in the Soviet Union, bleak economic developments, political instability and social unrest at home, declining competitiveness in international markets, the potential of a "Fortress Europe" and rapid technological change.

East European leaders have until recently resisted demands for comprehensive reform.¹ Insofar as reform had a place in Eastern Europe in the past, it was traditionally instituted as a means of reinforcing four primary objectives which defined the "contract" between rulers and ruled: (1) Ensuring successful maintenance of a one-party Communist system; (2) technological modernization of the economy; (3) maintenance of internal and external policies sat-

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This introduction provides a synthesis of pressures for reform and economic, political and social developments throughout Eastern Europe and Yugoslavia. In our judgment, we faithfully represent the substance of the analyses contained in the volumes. The interpretations and conclusions reached in the introduction are, however, those of the two authors rather than those of any of the contributors or the Joint Economic Committee of the Congress.

¹ Comprehensive reform is defined as a process of systemic change in the economic, political and social spheres. The term comprehensive reform implies the necessity for radical reform in all aspects of the Stalinist centrally planned model. In the long term, comprehensive reform should result in the formation of a market-oriented, multiparty state which is more efficient, has higher standards of living, is able to compete effectively and seeks integration into the global economy.

isfactory to the Soviet Union, particularly with regard to following CMEA and Warsaw Pact policies; in return for (4) the prospect of consistently increasing standards of living for the population. Many argue that past reform efforts may be viewed as short-term tactical concessions set forth to satisfy a key objective or as a means of gaining particular economic or political advantages. Such reforms were undermined as old principles superceded market-oriented reforms either by decree or by lack of full implementation.

The domestic economic and political constraints in Eastern Europe throughout the 1980's have given impetus to a broad range of reforms. Among the most visible signs of failure are the chronic economic deficiencies in Eastern Europe. Economic growth has remained low or negative. Capital and labor productivity have steadily declined. Scarce investment funds have often been put into upgrading or building noncompetitive industrial sectors and, as a result, technological innovation has made little progress. Several countries face rising debt service in combination with inadequate hard currency earnings. Often, these nations have employed strategies of debt repayment which have resulted in substantial decapitalization of the industrial sector and a loss of competitiveness on international markets.

As a result of economic inefficiencies and political mismanagement, standards of living have fallen throughout Eastern Europe in the 1980's. Social conditions, particularly environmental, have worsened, in some cases to explosive proportions. Popular pressure for change has increased, indicating that traditional methods of policymaking may only result in limited economic improvement. Many have come to believe that systemic change is required to create the type of efficient, innovative economy that may compete effectively in the 21st century and which grants its population more room for political diversity. Since the advent of perestroika and glasnost, that belief has begun to be vocally expressed and transformed into substantial internal pressure for reform.

Soviet perestroika presents an inescapable challenge to all East European regimes to review their economic and political model and to establish a system which works—at home, in the CMEA and in world markets. Experts suggest that the Soviet leadership under Gorbachev has taken the deliberate decision to distance itself from Eastern Europe, allowing for a greater diversity in their economic and political framework. However, the Soviet Union's influence continues to be strongly felt insofar as East European leaders are faced with two options: either to follow and possibly even surpass the depth of reform undertaken by the Soviet Union or to attempt to isolate their own systems from the Soviet example to the degree possible. Thus, the Gorbachev Doctrine works through example: distance or alignment under the aegis of reform. Failure to acknowledge reform, however, has been ruled out as an option for Eastern Europe.

The Soviet challenge has been interpreted widely and has prompted a wide range of response in Eastern Europe. Specifically, since the Soviet leadership has gone far in repudiating the Brezhnev Doctrine, East European leaders can no longer use Moscow as an explanation for failure to adopt political and economic reform. Instead, East European governments will be required to justify

policy choices to their own population which compares the domestic system to other East European and even Western politico-economic models. Such public debate is likely to turn into pressure for systemic reform, particularly in those countries where the populace perceives economic decline or mismanagement and lack of individual freedom.

On the economic side, the Soviet Union has made it clear that it would like a more efficient, productive CMEA. Ideally, market-oriented economies could pool resources, establish a division of labor and compete in a technologically driven global economy. As long as the CMEA could be considered another aspect of Soviet domination by many East European nations it has failed to achieve such objectives in the past. In the future, unless all of the economies adopt some form of market-oriented reform, the type of cooperation and the degree of efficiencies which Gorbachev has envisioned will be difficult to achieve. In addition, as the Soviet Union becomes integrated into the global economy, East European nations will no longer simply be able to be the best producers in the East. Instead, they will be required to compete effectively according to the prevailing international standards.

Western nations have, in the past, considered those East European countries which showed relative political or economic independence from Moscow, as reformers. The most advanced reformers were defined as those which guaranteed the highest degree of individual freedoms. Sole reliance on this method of differentiating between East European nations has become increasingly obsolete. Now, Western nations and international organizations are beginning to identify new indicators of success: economic performance—growth and improved standards of living; modernization resulting in improvements in efficiency and quality of goods; access to and competitiveness in the global market place; and political stability based on pluralism, free elections and democratization.

Increasingly, Western nations are beginning to link progress towards systemic reform to preferential economic and political treatment. This is most evident in the policies of the recently established Group of 24,² coordinated by the European Community. Participating nations have agreed that economic reform should be encouraged by linking aid to economic progress and by targeting the private sector of reforming countries. While this new Western conditionality is weak in some of the bloc nations, those countries which still have substantial hard currency debts are presented with wide ranging conditions for reform by Western lenders on whom they depend to reschedule debt or finance modernization to undertake economic and political reform.

Insofar as the Soviet challenge and pressure by Western creditors to reform have elicited ambiguous or even negative responses from several East European leaders, emerging global trends make economic reform and integration into the global economy a precondition for those East European nations which attempt to regain competitiveness, economic growth and higher living standards. The

² The Group of 24 has been formed to organize support for economic reform in Poland and Hungary. The 24 nations participating include the 12 EC member states, the 6 member states of EFTA, and the United States, Canada, Japan, Australia, New Zealand, and Turkey.

accelerating technological revolution has simultaneously fostered the globalization of international markets and the proliferation of free trading blocs. International standards for quality and efficiency have started to replace national standards. Nations which have joined regional trading blocs—the United States, Canada, the European Community—have done so with the intention of creating efficiencies of scale and competing more effectively in global markets. Both globalization and regional trading blocs present Eastern Europe and particularly nonreforming, nonmarket economies with the losing prospect of keeping pace with more efficient, technologically advanced and potentially protectionist economic giants which, by definition, have far greater resources and established markets for their goods.

The prospect of a more protectionist European Community is particularly relevant given Eastern Europe's high level of dependency on trade with Western Europe. Since the level of development and the export structure of East European nations is similar to those of the EC's poorer members, the removal of remaining internal impediments to the free flow of goods and services within the EC makes it more difficult for the East European nations to compete, even if they are marginally more efficient producers. While several proposals have been set forth calling for the adoption of a staged approach towards the integration of East European nations into the EC, the process is conditioned on implementation of comprehensive reform. Nations such as Japan attempting to hedge against a "Fortress Europe" are likely to add a further impetus to radical reform by selectively investing in those East European nations believed to hold out the best prospects for maintaining and expanding stable trade relations with the EC.

In the 1990's East European governments are likely to enjoy a new degree of freedom regarding the type and degree of reform which they will pursue. While those countries that do not embark on a program of comprehensive reform are likely to avoid high short-term political and economic costs (e.g., inflation, unemployment and losses by party candidates at the ballots) at home these nonreformers face a high likelihood of poor or negative long-term growth prospects, increasing social unrest and political instability at home and increasing political and economic isolation internationally. Reforming countries, on the other hand, face political risks and economic and intellectual gaps in conceiving and launching a comprehensive program of reform. Those countries which do reform successfully may be rewarded with increased competitiveness, higher standards of living, greater integration into the global economy and greater maneuverability vis-a-vis the Soviet Union and the West.

II. REGIONAL TRENDS: THE RANGE OF REFORM IN EASTERN EUROPE

Reform, or lack thereof, currently being undertaken by the individual East European countries has been evaluated by the experts who contributed to these volumes by assessing the internal and external pressures faced by the current leaderships: outlining the reform being proposed; and by judging the level of commitment to reform. This analysis reveals a diverse region in which the coun-

tries have conceptualized various types of reform and are currently engaged in various stages of reform. We proposed to group the countries in three categories: the leading reformers; the professed reformers; and the old believers.

A. THE LEADING REFORMERS: HUNGARY, YUGOSLAVIA AND POLAND

The Promise of Reforms of the 1970's. Reforms were designed to replace the legal and economic underpinnings of the command economy in stages. These stages included decentralizing decision-making down to the enterprise level; conducting price reform to rationalize resource allocation decisions and to move toward currency convertibility; and conducting gradual social and political liberalization both in the workplace and on the individual level. Economic reform, it was believed, would lead to modernization, competitive trade, stability at home and a leading role as emerging NIC's integrated into the global economic system.

The Failed Reforms of the 1980's. Partial reform in what effectively continued to operate as centrally planned economies failed. The economic crises of the early and late 1970's did not trigger meaningful economic restructuring. Investment policies failed to address the issue of industrial competitiveness in international markets. Economic policies were not export oriented: the so-called proexport investment projects accounted for a tiny proportion of total investment outlays. Reform governments also failed to address the issue of technological backwardness of the agricultural system. And when cuts were made in investment outlays, they tended to affect heavy industries less than the hi-tech, hi-growth sectors.

The Need for Systemic Reform in the 1990's. The leading reformers have been engaged in a process of reform for at least 20 years. Long considered the leading reformers, these nations, paradoxically, are facing the most difficult political and economic situations at home and abroad. Their current problems can be ascribed to the failed reform policies of the 1970's and an unfavorable external environment throughout the 1980's. Now, the leading reformers face heavy domestic and international pressure for systemic reform. They have all responded by announcing the pursuit of the most aggressive agenda for reform in the region. So far all have succeeded only partially in implementation, in part due to lack of political will but also due to the high economic, financial and intellectual barriers which they face in attempting to transform from a centrally planned model to a multiparty system and a market-oriented economy. While reform remains largely an internal process, formulated and pushed through based on the commitment of those involved, Western nations are beginning to identify means of assisting regimes in the transformation process by targeting economic, financial and technical assistance at those sectors of the political economy that will build a basis for a new system.

B. PROFESSED REFORMERS: BULGARIA AND CZECHOSLOVAKIA

Professed reformers typically announce a far-reaching package of reforms, similar in content to those introduced by the Soviet Union and conceptually equivalent to those introduced by the leading re-

formers. However, the poor definition of details for implementation of reform often results in retention of administrative practices, central intervention and substantial dilution of intended reform. Even purely technical problems, if unresolved by reform-minded bureaucrats could lead to a veering off course from the original intention of reform. Often, in the social sphere, glasnost is suppressed and democratization indirectly criticized through attacks on leading reform countries.

The ambivalence to reform which the professed reformers discreetly display apparently stems largely from perceived or real inability to openly reject the Soviet mandate. Professed reformers face great pressure for reform of the politico-economic framework along the lines of perestroika, particularly since the leaders derived their legitimacy from Moscow and now find themselves in the position of having to adopt a similar program of reform or, alternatively, be able to explain to the population why it is in the best interest of the country not to do so. Although the leadership in these countries have been put on the defensive by Moscow's rapidly evolving reform program, apparently they intend to defend their refusal to accept Moscow's model for reform—indirectly. For example, the level of interstate tension in the bloc has been rising as the professed reformers and the "old believers" wage an all out verbal war against the most liberal bloc reformers.

C. THE OLD BELIEVERS: GERMAN DEMOCRATIC REPUBLIC, ROMANIA AND ALBANIA

Old Believers continue to function as centrally planned economies based on the Stalinist politico-economic framework. In general, the each leadership prioritizes rapid industrialization, self-sufficiency, and a strong defense. The German Democratic Republic has, however, moved towards a more sophisticated system of central control, emphasizing efficiency gains and profit maximization over rapid industrialization and quantity output. They all expound the point of view that radical reform of the centrally planned model is unnecessary and that national goals can be achieved by more efficiently using the command system to squeeze inefficient processes and production out of the system. In all of three cases, the countries are subject to the personal leadership of one man or a small cadre of men who continue to rule according to the orthodoxy of the Stalinist model.

Despite the perceived or real costs, the Old Believers have been vocal in rejecting glasnost, democratization and market-orientation and have placed themselves squarely in the front lines of the verbal and political war against revisionism. Up to now, the Soviet Union has had no significant impact on reform policies of the Old Believers but the Soviet Union remains a persistent challenge to the leaderships. Efforts by Moscow to convey its message of perestroika, glasnost and democratization have had varying degrees of influence on the popular level. As the Soviet Union and the leading East European reformers embark on radical reform, the Old Believers also become increasingly criticized in and insulated from the West.

III. INDIVIDUAL COUNTRIES

HUNGARY

A. Pressures for Reform

Internal Pressures for Reform. After years of economic stagnation, financial crises, austerity programs and declining standards of living, the Hungarian leadership is faced with mounting economic, social and political pressure for systemic change. Throughout the 1980's, growth has stagnated due to constrained import and investment resources in the wake of government austerity. The economy has also experienced declining factor productivity. Despite the cut-backs in investment and imports in the 1980's, substantial structural adjustment did not take place. Instead, ailing industries were supported through subsidies while the most competitive industries failed to modernize and lost Western market share.

The government's 1985 decision to ease import and travel restrictions and to increase state subsidies for enterprises resulted in balance of payments difficulties and the necessity to reinstate a strict austerity program in 1987. This augmented popular skepticism regarding the party's ability to govern. The inability of the government to restructure the economy away from heavy industry or to control inflation has reinforced popular discontent. Declining real wages and increasingly unequal distribution of income and poverty have exacerbated the public's loss of confidence in the ruling party.

Deterioration of the economy and loss of public confidence put pressure on the Communist-led government to increase individual freedoms and to democratize the political process. At the same time, given the outcome of the Polish elections and the upcoming Hungarian elections, the Communist Party faces heavy pressure to successfully consolidate itself and design a strategy for a future market-oriented socialist state which can compete in the global economy. To the extent that it fails to do so and independent parties succeed in doing so, upcoming elections hold out the possibility of an end to the leading role of the Communist Party and the establishment of a multiparty system.

External Pressures for Reform. The Soviet Union presents Hungary with both political and economic challenges that are likely to push Hungary towards greater reform. Politically, if Hungary is to maintain its present status as a leading reformer, it must move towards both political and economic reform with or just ahead of Soviet reforms. Economically, the Soviet demand for hard currency goods from Hungary in the absence of equal Hungarian demand for Soviet products has resulted in the build-up of a large Hungarian trade surplus vis-a-vis the Soviet Union. The trade surplus is, however, the equivalent of a zero interest loan to the Soviet Union since the surplus is in inconvertible rubles. This means that Hungary must produce enough hard currency goods to sell to the West to service debt and invest in the future industrial base as well as provide for the Soviet market. The problems which Hungary faces with the Soviet Union may be generalized to the CMEA, which is likely to continue to function on a bilateral basis until the other bloc nations adopt market-oriented reform.

Hungary also faces explicit and implicit Western pressure to undertake far-reaching political and economic reform. The IMF, World Bank and now the Group of 24 have linked Western willingness to lend and encouragement of direct investment to the scope and authenticity of structural adjustment and systemic reform. Western conditionality is likely to have an impact given Hungary's rising debt service, inadequate hard currency earnings and its concurrent desire to maintain international creditworthiness. In addition, Hungary depends on Western financing and direct investment to continue its program of modernization which is crucial to Hungary's attempt to stem the consistent erosion of its Western market share to the Asian and Latin American NIC's.

B. Hungarian Response: The Reform Agenda

Economic Reform. For the first time in Hungary's 20-year reform process, the leadership has adopted reforms which compromise standards of living, guaranteed employment and economic stability in favor of structural adjustment and modernization of export sectors. Specifically, Hungary has opted for modest decreases in consumption accompanied by modest increases in enterprise investment and hard currency exports, under the guidance of an IMF-assisted austerity program.

Enterprise management is to be conducted on the basis of self-management and self-financing. Hungarian leaders are planning to establish a new tax system which will force unproductive enterprises either into bankruptcy or towards greater efficiency. All forms of ownership—Socialist, cooperative, private, and foreign are now considered equal under the law. In addition, state enterprises may become joint stock companies, with stockholder from Hungary as well as from foreign countries. Central banking has been separated from commercial establishments, domestic banks have expanded and foreign banks have been introduced. A securities market has been started and now functions well enough that securities are issued by the central bank, commercial banks and some major companies.

Regulations concerning external economic relations have become more transparent in an effort by the Hungarian leadership to encourage trade and integration into the world economy. Forint convertibility, hard currency trade with the Soviet Union and closer trade relations with the European Community are all medium-term goals. Since the beginning of 1989, any enterprise has the right to register to conduct foreign trade.

Political and Social Reform. Hungary is in the process of redefining the political and social framework within which the country will operate. The current leadership has drafted a constitutional amendment to allow for the formation of a multiparty system on the basis of the results of free elections. Elections are scheduled to be held in June 1990. Freedom of association, speech, travel and emigration have become cornerstones of Hungary's rapidly evolving reform.

C. Commitment to Reform

Level of Commitment to Reform. The Hungarian government has underscored its high commitment to an irreversible shift to a market-oriented economy repeatedly. In a recent letter to the Group of 24, the Hungarian leadership made it clear that it wishes to construct a free-market economy and a multiparty state—with the support of Western aid—even if it does cause undesirable side effects such as bankruptcy, unemployment and unequal distribution of income. The Hungarian leadership has, indeed, moved quickly to implement political and social reform. Given the upcoming elections, reformers inside and outside of the party are likely to continue maneuvering to capture the support of a still undecided electorate. As a result, much of the leadership's energies are devoted to the establishment of a multiparty state—to the detriment of hard economic policies.

Key Players. Among the key players in Hungary at this time there is apparently no central figure with a strategy for reform who commands the widespread support of the population. As the "old guard" begins to retire or be replaced, a "reform-minded" generation is moving into power. In May 1988, Karoly Grosz, a pragmatic conservative reformer, replaced Kadar as General Secretary. Since then, Grosz's popularity consistently declined in the face of his attempts to walk a middle course between party conservatives and liberal reformers. The General Secretary's position was recently expanded into a four-man presidium made up of Grosz and Mr. Imre Poszagy, Mr. Reszo Nyers, Mr. Miklos Nemeth, the country's three leading liberal reformers. The latter three in particular are in competition for the top party leadership, to be decided at the Party Congress in October 1989. On the other side of the spectrum, conservative forces are made up of members of the Marxist Unity Platform, which wants to "restore order" in the media and the reactionary Ferenc Munnich Society, which draws support from the Worker's Guard, the police and the security service. Proreform opposition parties have not yet produced an agenda for change or a leader of enough stature to gain widespread popular support.

Prospects. Hungary is clearly a leader in efforts to reform and is likely to continue along the same path. It has the most developed cooperative and private sector among the bloc nations. It is in the process of establishing, with World Bank assistance, a working capital market. Subsidies have been cut and some money-losing operations have been allowed to go bankrupt. Hungary has cut its defense sector substantially. Most recently, Hungary cut the Worker's Guard by 30 percent (largely manpower) in order to trim its budget deficit to meet IMF austerity guidelines. Nevertheless, Hungary's much-applauded economic reform is likely to remain in limbo until elections are undertaken and a legitimized leadership can call on the population to make the necessary economic sacrifices. In the meantime, the Hungarian economy continues to deteriorate, functioning in a partially reformed state. After election promises have been made, the necessary political will be required to impose economic austerity. Even then, if a leadership is elected which does impose economic austerity and structural adjustment, implementation of the reform implies a high level of commitment

(or coercion) of bureaucrats who wield enormous economic influence to reform a system from which they benefit.

YUGOSLAVIA³

A. Pressures for Reform

Internal Pressure. The Yugoslav economy has deteriorated to the point where inflation is currently expected to reach as much as 1,000 percent by the end of 1989. Efforts to curb inflation such as strict monetary and credit policies announced at the federal level, are circumvented at the regional level. The industrial infrastructure has obsolesced as investment has been cut by 4 and 5 percent in the past 2 years. And balance-of-payments difficulties have continued as Yugoslavia struggles to open its economy and follow an austerity program.

Social unrest continues to increase—including more than 1,700 strikes and political demonstrations in 1988 alone. Economic crisis has exacerbated historic ethnic tensions between the northern regions (Slovenes and Croats) and the Southern regions (particularly the Serbs) as well as tensions between the Serbs and the ethnic Albanians which occupy part of historic Serbia. The deepening economic crisis and heightening ethnic tensions have exacerbated each other and have severely hindered the implementation of an effective Yugoslav austerity program. The upshot is a further delegitimization of the leadership and a deterioration of the political process—creating an explosive economic, social and political crisis.

External Pressures. Yugoslavia faces new challenges from the Soviet Union, both economically and politically. Soviet perestroika poses a challenge to Yugoslavia's government which had heretofore been accepted as the leading reform model outside of the bloc. Now, as the Soviet Union is putting policies and institutions of traditional party or state monopoly up for discussion and is calling for a redefined and revitalized socialism, Yugoslavia faces pressure from its politically-aware population to establish a competitive model. In addition, the Yugoslav leadership faces pressure to design a model which will continue to differentiate it from those nations inside the bloc.

Economically, the Soviet Union, which is Yugoslavia's main CMEA partner, has built up a bilateral trade deficit of \$1.7 billion—which provides the U.S.S.R. with an interest free credit and fuels Yugoslav inflation. Under such conditions, Yugoslav industry must restructure its exports towards Western markets. Yugoslavia's ability to meet debt service obligations will be determined by its ability to upgrade its domestic infrastructure, undertake structural adjustment, modernize high-growth export sectors and restructure its trade towards the West, where it can earn hard cur-

³ Yugoslavia is fundamentally different from all of the other nations considered in this section insofar as it successfully broke away from the Soviet bloc in 1948 and has successfully maintained its *nonaligned* status since that time. Thus, it is neither a member of the Warsaw Pact nor can it be considered in any way, part of the bloc. However, because Yugoslavia is geographically located in Southern Europe (see map) and because it too is facing many of the same dilemmas that the most advanced reformers in the bloc are facing, it has been included in this section. The United States and Yugoslavia have had normal trade relations since 1950. Yugoslavia has in the past received military assistance from the United States and also receives the most preferential commercial treatment of the nations located in Eastern Europe.

rency. The IMF and the World Bank provide a further inducement for the leadership to undertake structural adjustment, both of which have paved the way for rescheduling arrangements for its debt repayment and which have set the terms by which Yugoslavia is expected to implement an austerity program.

B. The Yugoslav Response: The Agenda for Reform

Economic Reform. At the end of 1988, far-reaching reforms to reduce the Communist Party's role in the economy and reshape the country's trade and industry were passed by Yugoslavia's Parliament. The reforms are intended to break the unwieldy power of the bureaucracy and to reduce the power of individual republics and provinces. The party and the state have been separated in an attempt to enable the federal government to push through economic reforms designed to promote economic recovery and growth of the whole country, above regional or party interests.

Self-management of enterprises has been redefined, allotting worker's councils less say in strategic decisionmaking. Bankruptcy laws have been strengthened. All forms of economic activity—private, cooperative, socialist and joint ventures—are to be treated equally. Commercial banks, which were originally set up similar to cooperatives, had no leverage to force firms to function on a market-oriented basis. The reform formally splits banks from firms which will give banks greater independence and allow firms to raise capital based on expected rates of return and profit. The establishment of a capital market in Slovenia will take place in 1991. Establishment of stock exchanges in Zagreb and Belgrade are currently under consideration. Laws concerning foreign trade and decision making in the domestic economy have been considerably liberalized and put on the basis of market orientation. Joint venture legislation has been liberalized to allow foreign firms to repatriate profits, select their own management and workforce, and disregard the longstanding principle of worker's self-management.

Political and Social Reform. Discussion of political reform is currently underway in Yugoslavia. Unlike Hungary and Poland, which have been occupied primarily by political reform, regional leaders apparently decided that reaching a consensus on reform of the crippled economy was both the priority and more readily attainable. Currently, each of the republics has set forth and is pursuing its own agenda of reform. Slovenia, the northernmost republic, is in the process of changing its constitution to allow for free elections and a multiparty state. Serbia, on the other hand, has proposed a populist one-man, one-vote political system. Ante Markovic, the Prime Minister has stated that economic efficiency based on competition of independent economic entities and political democracy along the lines of a multiparty system are to be key features of a future Yugoslavia.

C. Level of Commitment to Reform

Commitment to Reform. After almost a decade of a worsening economic crisis, which has by now also affected the political and social sphere, Yugoslavia's policymakers face a broad-based, albeit fragmented, popular movement for systemic change. While Yugo-

slavia's economic policy framework has moved ahead, particularly concerning foreign direct investment, social and ethnic tensions have increased to the point of creating a political stalemate that prevents regional leaders from supporting economically costly programs which Yugoslavia must adopt to sustain future growth. Without the support of all of the regions, prospects for successful adoption and implementation of reform are substantially diminished.

Key Players. The reform process has in part resulted from popular demands for systemic change. In large-scale street demonstrations and strikes, the recentralization of the political⁴ and economic process was demanded particularly the marketization and deregulation of the regional and local economies to formulate a national economy and a reduction of the role of the party. However, Yugoslavia's leading politicians are divided by regional loyalties and ethnic tensions. Ante Markovic, a pragmatic technocrat from Croatia became Yugoslavia's Prime Minister in March, 1989 after the Mikulic government fell due to loss of public confidence in his ability to control inflation. Markovic is noted as a proponent of market-oriented reform and democratization and has, so far, managed to negotiate a package of economic reforms with regional leaders otherwise engaged in political warfare. Milan Kucan is the party leader in Slovenia and noted for his outspoken support of a multiparty system and for market orientation which would enable Yugoslavia to compete effectively in 1992 and eventually make a bid to join the European Community. Slobodan Milosevic is Serbia's President, the region's most popular Serbian political leader and one of the most controversial political figures in Yugoslavia. Serbs credit him with bringing about the unification of Serbia, Kosovo and Vojvodina while others, particularly in Yugoslavia's northern regions, view him as a demagogue unleashing deep-seated Serbian nationalism. Milosevic is also noted for innovative thinking on economic issues as well as a supporter of market orientation. Even more than the individual rivalries, historic ethnic tensions play a crucial role in Yugoslavia's ability to adopt and implement reform measures.

Prospects. The broad popular support for systemic reform based on market orientation and democratization of the political system in combination with compelling international pressures leaves the Yugoslav leadership with little choice but to reform. Initial signs point to implementation of economic reform introduced in January. The federal budget was unified (off-budget items were added to the budget) and debts were assessed and made transparent. Then budget cuts were made which included cuts in defense spending. The liberalization of the foreign trade system, in particular with regard to the regulatory framework surrounding joint ventures has been noted. Markovic has stressed that implementation of the economic package recently passed will take place no later than the end of the year.

⁴ The Serbs have been most active in demanding political recentralization. Other ethnic groups, particularly the ethnic Albanians, the Slovenians and the Croatians strongly oppose political recentralization on grounds that Serbia will attempt to dominate the smaller republics.

While the radical reform package pushed through the parliament suggests a perceived need for systemic change and market-orientation at a level which would have been considered unacceptable in the past, implementation of the reforms passed in a weak federal parliament, must take place at the local and regional levels—where entrenched nepotism, party dominance, and corruption have held sway. Radical reform will mean that local bureaucrats must rescind power and that an ensuing restructuring of the economy, with the gravest of social consequences in a country which already has high unemployment, must take place.

In addition to such problems—which all centrally planned economies attempting to make the transition to market orientation face on some level—Yugoslavia's ethnic tensions threaten to undermine reform policies. For example, although Yugoslavia must restructure its export industry away from Soviet markets, the process of switching resources will be a costly one: in the short term, Yugoslavia and particularly Serbia could face a trade crisis until it establishes new export markets. Hence, the leadership's ability to ease regional tensions and keep Yugoslavia on a reform track will be a formidable challenge for the foreseeable future.

POLAND

A. Pressures for Reform

Internal Pressures. The disenchantment of the populace and delegitimization of the political, economic, and moral leadership of the party and the official government since 1981 fostered a stand-off between the populace and communist leadership. That standoff has been a critical factor in the economic decline, widespread social unrest and political instability of Poland. Throughout the 1980's, a long-term economic crisis has been accompanied by prolonged stagnation without any apparent hope for improvement. Low labor and capital productivity can be attributed to structural and technological factors in addition to lack of sufficient motivation and incentives to reverse the situation. Poland's attempt to reorient trade from Western to Eastern markets in the early 1980's exacerbated the strain of hard currency debt repayment. Economic stagnation coupled with the strains of debt repayment has resulted in long-standing decline in consumption and investment. Throughout 1988, shortages of basic consumer goods increased, prices rose, and hard currency shortages constrained imports, threatening output levels and increasing the pressure for and likelihood of social unrest.

After several unsuccessful years of attempting to liberalize economic institutions without altering political or social aspects of the Stalinist model, the leadership initiated the Roundtable to broaden the base of support for reform and to negotiate a sustainable blueprint for Poland's future. Since then, political reform has proceeded rapidly: Solidarity has been relegalized, free elections were undertaken and a new, multiparty political system forged. By late summer 1989 little has been decided regarding a strategy for economic reform or transformation to a market-oriented economy. Pressure for economic reform—with tangible results—continues to build in a country where people have suffered much and grown impatient of ineffective reform.

External Pressures. The Soviet Union presents both political and economic challenges to Poland. Since the Soviet Union has begun to scrutinize, publicly discuss and alter policies and institutions once considered to be irreversible underpinnings of a socialist state, Poland's leaders face pressure from a politically aware population to establish a model based on Polish history, society and current needs. Another source of pressure stems from Poland's obligation to repay debts owed to the Soviet Union. Repayment requires Poland to modernize industries which produce goods that are not demanded in world markets. Investing in such sectors, however, is contradictory to Poland's goal of building an export sector that produces goods competitive in global markets.

Poland's indebtedness to the West, specifically a hard currency debt of \$39 billion owed to Western bankers and governments, constitutes a major source of pressure for political and economic reform. In 1986, initial reengagement of Poland with the West allowed for the reopening of Western credit facilities, the potential extension of a World Bank loan and the extension of investment funds from the IFC. Poland is highly dependent on Western financial and technical assistance to successfully restructure, modernize and create a competitive economy. In the wake of lessons learned in the 1970's when bankers lent money to a leadership which did not have the political will to undertake structural adjustment, Western policymakers have sent a clear message to Poland: the potential benefits of Western aid are directly linked to Poland's ability to conceptualize and implement a comprehensive program to transform the economy from bureaucratic control to market orientation.

B. Polish Response: The Agenda for Reform

The conclusion of the Roundtable Accords between the Communist-led government and Solidarity, completed April 7, 1989, represent a turning point in Poland's postwar history. The Accords set forth with varying degrees of specificity a program for political reform, economic and social policy, and trade union pluralism. In the political arena, the authors of the Accords conceive the emergence of a constitutional democracy based on the separation of powers among a very powerful executive branch, a freely elected legislative branch and an independent judicial branch. Specific guidelines regarding the formation and powers of each branch are also outlined. With regard to trade unions, the Accords legalized Solidarity, the right for workers to strike, and for political associations to be formed.

In the economic sphere, the Accords outline, in general terms, systemic reforms which would change the institutional framework by strengthening self-management, property rights and competition, acceleration of privatization; making equal all forms of property (state, cooperative, private and foreign) and labor (socialist and nonsocialist); and phasing out state intervention regarding rationing of consumer goods, state orders and administrative setting of prices, exchange rates and interest rates by 1991. The Accords also refer to shifting macroeconomic policy to allow for a reallocation of the current budget in favor of social sectors such as housing and

environmental protection as well as reallocation of investment away from an obsolescent coal mining sector to consumer goods and export-oriented sectors.

C. Commitment to Reform

Level of Commitment to Reform. In many ways, the Accords represent an apparently successful attempt by Poland's major players to reach mutual agreement on defining a pluralistic political and social framework. Concessions on the part of the Communist government are both historic and far reaching. In turn, the political reform of the government creates a forum for the development of a strategy for overhauling the economic system. But, the detailed nature of the political compromise struck between the government and Solidarity stands in striking contrast to the lack of details regarding the overhaul of the state planned economy in favor of market institutions. Noticeably absent are detailed guidelines on how to control prices, combat inflation, reform the tax system, bolster the independent decisionmaking of firms which still answer to central planners, cope with repayment of international debt, and marketize the economy. While overall commitment to reform is clearly high—illustrated by the concessions of the communist leadership in late summer 1989, the lack of a detailed economic reform strategy and the uncertain acceptance of a Solidarity-led government by the Communist Party poses enormous barriers to successful reform for the foreseeable future.

Key Players. They include: Wojciech Jaruzelski, President; Mieczslaw Rakowski, Party Chairman; Lech Walesa, leader of Solidarity; Tadeusz Mazowiecki, Poland's first Solidarity Prime Minister; Kiszczak, the head of Poland's police force; and the Catholic Church, particularly Cardinal Glemp and the Pope. These men each with his own personal and political agenda, must be able to work together in designing a vision of Poland which the population will accept and undergo hardship to attain. The risks for each is high, as is no more clearly shown by the loss of Party dominance in the wake of the elections—despite the Solidarity Accords guaranteeing the Party's leading role. The potential gains are high for a leadership which does lead Poland out of economic stagnation. The Polish people perhaps constitute the most important player, since it is their willingness to accept austerity that will ultimately determine whether even the most detailed and economically sound plan for transition can be accomplished.

Prospects. Prospects for comprehensive reform in Poland hinge on the institutional transformation of both the political and economic system and on full implementation of economic reform measures. Certainly, the first definitive step towards comprehensive reform was taken with effectively free elections and the resultant formation of a Solidarity-led government. Indeed, without political reform, a radical restructuring of the economy has in the past proven impossible. Now, the political sphere can create a favorable environment for systemic economic reform. Yet no group has taken on the responsibility of making the hard economic decisions. These decisions include price reform—which will cause a rapid decline in real personal income shortages of basic goods, bankruptcy and un-

employment. Moreover, reform, particularly during an economic crisis, is likely to exacerbate supply shortages and decreases in output. Even reallocation of budget resources from defense and coal mining is not likely to cover increased social services—threatening even new Solidarity social programs. Only with substantial political commitment in combination with popular support may the heavy short-term costs of economic reform be overcome. Several barriers weaken this commitment.

Both the Communists and Solidarity have high stakes in the transformation of Poland into a multiparty, market-oriented system. However, each party has the goal of maintaining or bolstering its present political power too. In the face of a population which has grown restive after a decade of economic privation, no group is eager to undertake such reform. Both parties face the prospect of sacrificing established interest group support in order to reform the economy. Moreover, Solidarity must be able to transform itself from a trade union to a political party. As a trade union, Solidarity's commitment to democracy is inherent and has been unwavering—despite the costs. But the opposite is true of painful economic reform—hence its commitment to a market reform is still of question. And then there is the nagging question of whether it is not more in the interest of the Communist Party to undermine Solidarity's popularity by hampering economic reform under a Solidarity-led government? Equally disturbing, will the Communist Party resort to the use of party-controlled police or military power to counter the increasing influence of Solidarity.

There is, however, hope for implementation of reform for several reasons. As the majority party, Solidarity stands to lose by not implementing reform as nonimplementation will de facto make it party to bureaucratic control of the economy with the attendant inefficiencies, shortages, rationing and corruption. In addition, it is unlikely that Solidarity's planned expansion of the social sector in areas such as environmental protection is sustainable without economic reform. In effect, while politically unpopular in the short-term, it is in Solidarity's interest to undertake radical reform. A positive scenario is conceivable insofar as the combination of an even gloomier economic outlook without reform and the opportunities now created in the political process will engender the necessary consensus in Polish society to weather the economic hardships which must precede the creation of a viable economic system. Moreover, it is only in the presence of a viable reform program that the necessary levels of Western support needed to modernize the economy will be forthcoming.

BULGARIA

A. Pressures for Reform

Internal Pressure. In contrast to the Hungarian, Yugoslav, and Polish cases, Bulgarian reform has not been motivated by any apparent internal economic or political crisis. Bulgaria may face pressure to undertake reform in the form of positive popular reaction to reports of perestroika, glasnost, and democratization from bloc neighbors and the U.S.S.R. The example of higher standards of living or greater personal freedom in Yugoslavia and Hungary—

both leading East European reformers—may have spurred public debate and pressure to undertake similar steps towards reform.

External pressure. Bulgaria's aging leader, Todor Zhivkov, faces external pressure from Moscow to conduct a program of reform: viewed in the past as a staunch ally of Moscow, Bulgaria may simply be performing its old role in a new context. Similarly, since Bulgaria's leaders derive their legitimacy primarily from Moscow, the leadership must be hard pressed either to adopt a similar program of reform or be able to explain to the population why it is not doing so. In addition, since Bulgaria is likely to benefit from the division of labor set out in the CMEA Science and Technology agreement, its leaders may view reform of the economic mechanism a necessary medium-term policy. Bulgaria faces relatively little pressure for reform from the West: it reduced its balance-of-payments debt to the West quickly, with substantial assistance from Moscow. Its stated interest in graduating from an observer nation at GATT may influence the leadership to undertake a reform program but such pressure is probably self-imposed and may be easily retracted or go unimplemented.

B. Bulgarian Response: The Agenda for Reform

Economic Reform. Bulgaria has announced a reform program which is strikingly similar to the one introduced by the Soviet Union. The Bulgarian government has announced that regulation of the economy is to be shifted away from administrative control through planning targets to the use of indirect tools such as price setting, interest rates, taxes, subsidies and the application of accounting normatives. Wholesale prices are to reflect world prices and turnover taxes are to be replaced with sales taxes. And commercial banks are to provide banking services to firms on a competitive basis. Under the new system, firms are to be self-managed and self-financed. Investment, wages, taxes and research and development are to be financed from sales income. Unprofitable firms are to face the prospect of bankruptcy, reorganization or dissolution. Decentralization of the agricultural sector to allow sharecropping by peasants and small cooperatives and leasing of state land to private families is under consideration.

Foreign trade is to be encouraged through reforms which include a degree of decentralization, broader rights for economic organizations to conduct trade; increased emphasis on tariffs and exchange rates, which have been simplified and brought closer to convertibility; creation of free zones; and liberalization of the regulatory framework affecting joint ventures.

Political and Social Reform. In the political sphere, Bulgaria has professed a concept of perestroika more far-reaching even than the Soviets. Proposals open for discussion call for a separation of high level party and state functions; the possibility of limiting high office to 2 or 3 5-year terms; a passport law granting every citizen the right to an external passport valid for 5 years; and a law providing for the indemnification of individuals that have incurred damages by state or economic bodies.

C. Commitment to Reform

Level of Commitment to Reform. Western observers believe that while the Bulgarian reform package offers a significant possibility for changing the country's economic organization, even purely technical problems, if unresolved by reform-minded bureaucrats could lead to a veering off course from the original intention of reform. Given the present scope of reform, implementation of new and proposed laws will presumably be shaped by the prevailing politics of the day. In this respect, some observers cite past history, in which Bulgarian reform measures have gone further and been more consistently developed than those in the Soviet Union. Others believe that reform has been politically motivated by Zhivkov's desire to maintain power.

Key Players. Todor Zhivkov, Bulgaria's leader since the 1950's, appears to be the main force behind reform. Todor Zhivkov's positioning at the forefront of Bulgarian reform appears to be his strategy for maintaining control over the actual direction and pace of reform as well as a continuation of his virtually unchallenged post and unlimited control. Unlike other bloc nations, most of Bulgaria's leadership is relatively young; players in the leadership who might be able to challenge Zhivkov for power are regularly rotated or replaced. As a result, those party members which have survived Zhivkov's removal maintain a low profile, refraining from comment concerning current developments.

Prospects. Conceptually, while the reforms proposed in Bulgaria come close to those introduced in Hungary, the speed with which such a far-reaching reform program was introduced has led to a high degree of skepticism regarding the will of the leadership to fully implement the proposed reforms. The poor definition of details concerning implementation of reform programs has, in other reform-oriented nations, resulted in retention of administrative practices, central intervention and substantial dilution of intended reform. So far, developments in Bulgaria seem to point in the same direction: the frequency with which the guidelines for implementing the economic mechanism are changed reveals a certain degree of oscillation between expanding and limiting reform. In the social sphere, glasnost is tightly constrained. Even the most limited attempts to foster freedom of expression and free speech have abruptly ended. This has been well exemplified in the crushing of a Bulgarian democratic front organization which conducted demonstrations in June and in the mass resettlement of the ethnic Turks and for those who remain, pressure to accept Bulgarian identity. Furthermore, if as some surmise, Zhivkov's reform package was introduced to protect Bulgaria's "special status" with the Soviet Union as well as Zhivkov's job, then the short-term prospects for implementation of proposed reforms are limited.

CZECHOSLOVAKIA

A. Pressures for Reform

Internal Pressures. The long-term slowdown in economic growth has created a slowly but steadily increasing pressure for the leadership to undertake reform and restructuring to ensure growth in

the medium term. The Czechoslovak leadership has inherited decreasing availability of factor inputs, with an aging population; a rapidly declining natural resource base accompanied by rapidly increasing environmental problems. Poor labor productivity, a technologically obsolete capital stock, and an inefficiently structured industrial base exacerbate the poor endowments outlook. The agricultural sector, while performing above plan targets, is constrained by severe environmental problems. Energy efficiency and resource utilization did not improve in the period of deflation. While deflationary policies of the early 1980's created a healthy environment for growth by the mid-1980's, subsidies continued, precluding the shakeout of inefficient firms and the reallocation of resources to higher growth sectors.

The Czechoslovak population, which views its leaders and the last 20 years of repressive, Soviet-inspired rule with skepticism, identifies with its West European heritage. With the rise of Mikhail Gorbachev and his message of reform, renewal, and restructuring, the leadership cannot easily justify a nonreform stance at home. Thus, there is underlying though not urgent popular pressure to design a model for reform which makes sense in the context of the Czechoslovak experience and which will improve the worst aspects of inefficient planning and slow economic growth. At the same time, the Czech leadership faces little outright political opposition outside of the Charter 77 Group, which has been harassed into a relative state of isolation. The muted character of the potentially substantial opposition is perhaps best illustrated by the relatively small group which defied state orders and went to Wenceslaus Square to commemorate the Soviet invasion of 1968.

External Pressures. Czechoslovakia faces the greatest pressure for reform of its economic and political system from Soviet and bloc neighbors which continue on a process of reform. Particularly since Czechoslovakia's leaders derive their legitimacy from Moscow in the wake of the 1968 invasion, Czechoslovakia's leadership is now in the position of having to adopt a similar program of reform or to explain to the population why it is in the best interest of the country not to do so. Although the Czechoslovak leadership has been put on the defensive by Moscow's rapidly evolving reform program, Prague apparently intends to defend its refusal to accept Moscow's model for reform—particularly in the social and political arena. While Czechoslovakia has officially praised Soviet perestroika, the leadership has become increasingly critical of democratization in Hungary and Poland, deploring the establishment of a multiparty state and warning of dire consequences.

Czechoslovakia finds itself in a relatively comfortable economic position vis-a-vis external trade partners in the short term: it has a relatively low hard-currency debt and it enjoys guaranteed trade with its CMEA partners. With the focus of Czechoslovakia industrial policy on the CMEA and particularly the Soviet market, Czechoslovakia has been able to develop competitive positions in certain sectors at low risk, since it has had few or no outside competitors and did not have to meet world standards for quality or efficiency. This positive scenario could, however shift in the medium term as Czechoslovakia is more likely to find itself facing stiffer CMEA competition

from countries (including the Soviet Union) willing to make greater use of Western technology to modernize.

B. The Czech Response: The Announced Agenda for Reform

The stated goal of the leadership is to increase the efficiency of resource allocation and factor productivity, and to secure the improvement of the quality of life through the decentralization of economic management. The announced reforms, if fully implemented, would constitute a move beyond superficial reform of the central planning model with such changes as the establishment of autonomous enterprises as a means of increasing financial discipline and economic efficiency; the liberalization of the pricing mechanism to rationalize the price system; and the decentralization of economic decisions to reduce inefficient bureaucratic meddling and micro-management; and an industrial restructuring strategy.

Economic reform is to address the problems of economic distortions through a modified price reform. The price reform, while limited by certain conditions including a continuation of price fixing, is to discourage growth in capital intensive techniques, and to promote production for export rather than the domestic market. In addition, a uniform, flexible, and realistic exchange rate is to be put in place—even if its effect is moderated by a multitiered domestic pricing system. Restructuring is to take place through bankruptcy and rationalization of inefficient producers. The role of the ministries in investment decisions is also to be decreased. Self-management and self-financing are to be implemented throughout the economy in 1991. According to draft bills the power of central authorities would be limited to broad economic and strategic decision-making and most enterprises and cooperatives would be given the right to produce whatever goods they chose, retain a portion of export earnings and make its own import decisions. At the same time, the leadership has taken steps to retain tight control over the political and social superstructure. Democratization of politics and liberalization of individual freedoms has been declared anathema to the functioning of the state.

C. Commitment to Reform

Level of Commitment to Reform. Reform measures announced in Czechoslovakia suggest a major conceptual departure from the policies prevailing in the last twenty years. The reform outlines policy changes and addresses issues of incentives, structural changes, institutional reform, and macroeconomic management. Still, plans for implementation imply that the party will continue to assert administrative decision-making over most of the reforms and that Czechoslovakia's social and political structure will be tightly controlled by the leadership.

Key Players. Czechoslovakia's new party leader, Milos Jakes, viewed in Prague as a cautious technocrat and conservative economist replaced Husak as party general secretary late in 1987. Since that time, Jakes is seen as having slowed the reform process—downgrading, when possible, the party's most vocal reformers while promoting the more conservative thinkers. In this way the "hard

line" of the Czechoslovak Communist Party (KSC) leadership appears to have been assured for several years.

Prospects. Although proposed reforms are considered a major conceptual departure from past policies, key figures in the KSC appear to be strongly against the kind of radical reform necessary for the economy to put itself on a long-term growth path. Moreover, plans for implementation imply that the party will continue to assert decisionmaking over most of the reforms. Several examples may be cited. Enterprise decisionmaking is to be expanded but functions at the state level, such as a reduction in state planning or a more pronounced decentralization of the investment process, have not taken place. So far, the principles of self-management and self-financing are so far only being applied on a trial basis to a limited number of enterprises. Bankruptcy can take place but the state, rather than the market will make decisions regarding which and when a firm will be restructured. And the role of the ministries in investment decisions is also to be decreased, but, at the same time, less direct bureaucratic "influence" is to be retained. On the other hand, a less skeptical observer might point out that Czechoslovakia is simply laying the institutional and legal foundation for radical reform which is to be fully in place and implemented in 1991. Finally, prospects for reform in Czechoslovakia may be shaped by ethnic tensions, particularly if economic and political reforms are judged by Czechs to favor the Slovaks.

GERMAN DEMOCRATIC REPUBLIC

A. Pressures for Reform

Internal Pressures. In the near term, the East German leadership faces few pressing economic reasons for systemic change. Leaders in the GDR apparently remain convinced that they have achieved successful growth and development, particularly by East European standards. In addition, they believe that the GDR offers the greatest potential for keeping instep, even if behind, with the West in hi-tech fields. Although the 1980's have resulted in a squeeze on consumption, the German Democratic Republic still offers the highest standard of living in Eastern Europe. However, while the leaders of the German Democratic Republic would be quick to point to their economic accomplishments and status as the CMEA nation with the highest standard of living, the government has come under increasing popular pressure to undertake reform. Massive East German emigration is taking place at levels not seen since the erection of the Berlin Wall more than two decades ago. Some estimate that more than 100,000 East Germans will leave for the Federal Republic of Germany this year. Moreover, East Germany's ability to contain reform has also come under pressure in the wake of Hungarian acceptance of Western standards concerning travel and emigration.

External Pressures. The Soviet Union has had a significant impact and remains a persistent challenge to a leadership that heralds the efficiencies of the central plan and the political and social order derived from a one-party system. Persistent efforts by Moscow to convey its message of perestroika, glasnost, and democratization shows signs of influence on a popular level. One example

of East German attempts to contain the "reform onslaught" from Moscow is the East German ban on the sale of the Soviet journal, Sputnik in the GDR. Similarly, Moscow may become impatient with East German intransigence over the issue of reform—particularly as such intransigence may be costly to Gorbachev as he attempts to create modern, reform-oriented economies in the CMEA.

Threats of cutbacks in financial support from the Federal Republic of Germany have put pressure on the East German leadership to ease individual freedoms and undertake reform. Furthermore, European economic trends, particularly the formation of the integrated European market in 1992, will present East Germany with a much greater economic and technological challenge. Specifically, it could become increasingly difficult for East Germany to become a "full participant" in the international economy and still maintain a narrow economic policy if it becomes isolated from effective trade with the East or economic integration with the West. Popular comparison of the differential between their own and West German quality of life remains a continuing factor.

B. The East German Response: Reform Through Centralization

The East German leadership has consistently and emphatically rejected all forms of economic and political reform presently underway in the Soviet Union and reform-oriented countries of Eastern Europe. Political and social life continue to be directed, as in the past, by the central party apparatus.

Economic Reform. Planners in the GDR remain convinced that they have achieved successful growth and development, particularly by East European standards by modernization and rationalization of the traditional centrally planned economy (TCPE) through intensifying the utilization of all factor inputs. Policies have focused on (1) *increased economic efficiency* through reorganization of the central administration, more controlled commodity steering; increased factor and energy productivity through refined monetary steering and improved utilization; and production based on profit maximization; (2) the *development of key technologies* such as microelectronics, robotics, and biotechnology; (3) establishment of market share in hi-technology sectors in the West. Organizational changes, particularly on the ministerial level, have transferred a significant amount of power to units called combines. Combines share planning functions with the ministries. They link research and development labs with production units in order to minimize the lag between technological innovation and industrial output. Incentives are geared toward profit maximization rather than volume output. And private enterprises are allowed, although not encouraged, in the service and retail sectors.

C. Commitment to Reform

Level of Commitment to Reform. At present the East German leadership continues to be outspoken in support of its reform within the framework of the centrally planned economy. Whether technocratic control can yield the same level of efficiency results that a market price system could in a capitalistic environment is a question the GDR will need to face. For now, however, the East

German economy continues to function at a higher level of efficiency than those of its East European competitors. In the short term, it is likely that the German Democratic Republic will continue its policy of complete rejection of Gorbachev's version of reform.

Key Players. Eric Honecker and the rest of the SED leadership—the majority of which is 70 years of age or older—fully support the present resistance to domestic political and economic reform. The Lutheran Church plays an active role in promoting liberalization in the GDR. In many respects, the role of the Lutheran Church in the GDR may be compared to that of the Catholic Church in Poland. An emerging set of players are the young, middle-class and educated people who may continue to seek emigration from East Germany in favor of West Germany's better living standards and increased personal and political freedom.

Prospects. In the short term, rather than undertake systemic reform, the leadership is likely to concentrate its energies on finding better combinations of administrative and economic instruments to produce increased efficiencies. Economic short falls are not great enough to force systemic change upon the SED. The leadership's confidence in maintaining economic competitiveness and perceptions of the special political risks which could result from democratization both act as a brake to reform. Given the presence of the Federal Republic of Germany as a more desirable model and the rate of political change and depth of economic difficulties in Poland, the East German leadership is likely to embark on reform cautiously and only if it has no other choice. Moreover, it would not come as a surprise if the rising international attention on the mass migration of East Germans via Hungary and the direct economic loss incurred in the form of a shrinking labor force, will permit the hardliners to curtail even the modest "humanitarian privileges" conceded and enforce a crackdown on dissidents. In the medium term, reform in the German Democratic Republic could potentially change substantially—most likely within the context of a switch in the generation of leaders from the old guard to a younger, and conceivably less ideological and more pragmatic leadership.

ROMANIA

A. Pressures for Reform

Internal Pressure. Ceausescu and the current Romanian leadership will face mounting pressure to reform as the economy deteriorates further and the ability of the Romanian people to withstand hardship is further tested. The absence of rational economic policies has resulted in the steepest economic decline in postwar Europe. The Romanian consumer has had to bear the major burden of a drastic adjustment. Supplies of goods for domestic consumption have been cut back sharply through rationing and price increases. The forced resettlement of people has brought a nationalistic and loyal nation to mounting hostility toward its leadership. As a result, the potential for widespread popular anger to coalesce into a strike and even an open revolt may be considered a possibility. Mounting dissatisfaction with the current system is illustrated by the circulation of a letter by six prominent Romanian bureau-

crats accusing Ceausescu of ravaging the Romanian economy and people. Nevertheless, barring an open revolt, the security system is so pervasive and the Romanian people so repressed that the organization of an effective opposition is limited.

External Pressure. Romania is under considerable pressure from Moscow, some of its bloc neighbors (particularly Hungary) and the West to undertake economic, social and political reform. The Soviet Union has stepped up pressure for reform by broadcasting to Romania up to 5 hours per day about reform, restructuring, and renewal. Hungary has openly criticized Romania's policy toward ethnic Hungarians and has pledged to shelter all Romanians who successfully flee across the border.

Romania has also become increasingly criticized and isolated in the West. In stark contrast to its former role of foreign policy maverick and "policy broker" between East and West, Gorbachev's new thinking has superceded what diplomatic "chips" Romania has accrued by extravagant shows of independence such as its decision to attend the 1984 Summer Olympics. Ceausescu has also rejected Western attempts to link trade relations with human rights, disregarding the loss of significant trade concessions in Western markets. In 1988, Romania repudiated U.S. MFN status rather than accept liberalization of its human rights policies. The same year, the European Community suspended trade negotiations due to living conditions imposed on the Romanian population. Despite Romania's creditworthiness and potential for commercial opportunity as it attempts to modernize, several European nations have closed their embassies in Bucharest. Thus, although Romania succeeded in paying off its foreign debt, its isolation in the West and increasingly in the East may hamper Romanian attempts to modernize its seriously declining economy.

B. The Romanian Response to Pressure for Reform

Change in Romania has taken a severe turn towards repressive neo-Stalinism. Ceausescu has imposed a strict Marxist-Leninist organizational structure on the nation and, to the extent possible, pursues complete national economic and political independence. Ceausescu has made it clear that Romania will continue the tradition of Communist orthodoxy. Another pillar of Romanian policymaking from 1982 through half of 1989, was Ceausescu's policy of repaying Romania's foreign debt at any price. Recently, Romania has become vocal in rejecting all types of reform of the Stalinist politico-economic model.

The economy continues to be run through detailed central plans which are subsequently broken down to mandatory planning indicators and handed down from ministries to associations and enterprises. Widespread rationing is applied to reconcile the frequent imbalances which exist on consumer markets. Extensive razing and resettlement of whole villages, particularly those populated by ethnic Hungarians, has been undertaken to create agro-industrial centers envisioned as part of a socialist utopia. The repayment of Romania's hard currency debt has taken place at the cost of depriving Romanian citizens of many basic living necessities and badly decapitalized the economy.

Since Romania's total repayment of its foreign debt, Ceausescu has announced plans to utilize capital flows for modernization of obsolete plants and equipment, increased imports of consumer goods and supply of soft credits to developing countries. Apparently, Ceausescu hopes to replace Western, and for that matter, CMEA markets by attempting to forge relations with Japan to modernize and to develop trade relations with developing nations. Political challenges are dealt with quickly and harshly. Ceausescu has responded to the letter of six with house arrests and stepped up security. And Romania's ethnic minorities, viewed as potential sources of unrest, have been forced to undergo "Romanization."

C. Potential for Change

Commitment to Current Policy. Romania's leadership seems to be unwavering in its commitment to total eradication of any vestiges of private property and the complete institutionalization of the Stalinist framework. To date, the policymakers appear to be moving ahead with rapid industrialization and the "resettlement" of peasants to the cities.

Key Players. Ceausescu and a small family circle determine Romania's policies. A small circle of bureaucrats, military and security officials continue to be loyal to be Ceausescu—often in return for economic and political rewards.

Prospects. Romania is likely to remain a leader among East European nations attempting to stem the tide of reform. Notwithstanding an open revolt, the domestic and international pressures for reform have not and apparently will not be regarded by Ceausescu as sufficient cause for reform. But since Romania cannot function forever in isolation and Ceausescu must someday be replaced, the potential for change should not be dismissed. Indeed, future gains in overall efficiency and standards of living would require considerable reform of the current centrally planned framework.

ALBANIA

A. Pressures for Reform

Internal Pressures. The Albanian leadership faces growing economic pressure to undertake reform. Poor resource endowments and declining factor productivity have resulted in significant shortfalls in plan fulfillment. Excess demand, evident in the unusually high savings rates and hidden inflation has come about due to a chronic lack of goods. A rapidly growing population threatens to outpace Albania's ability to produce enough food on the land that is arable. At the same time, the leadership is apparently faced with little social unrest or internal political pressure to reform.

External Pressures. Until recently, Albania's almost complete isolation has greatly diminished the potential for reform from outside actors. The lack of foreign debt reduced the leverage of Western partners seeking to encourage systemic reform and Albania continues to prohibit the borrowing of foreign credits. But, upgraded trade relations with Western partners, particularly Greece and Italy, and the opening of commercial relations with countries such as Japan and Austria will inevitably broaden the range of ideas re-

garding economic systems and the potential for reform. Similarly, as Albania becomes more open, Gorbachev's program of reform is increasingly likely to challenge the adequacy of Albania's present economic and political model.

B. The Albanian Response: The Reform Agenda

The Albanian leadership has fully rejected all of the current reform models as revisionist but appears to have begun limited reform of the economy. In response to declining factor productivity the leadership has announced the replacement of extensive growth, which concentrates on increasing the quantity of factor inputs with a strategy of intensive growth, implying increased efficiency through modernization. The agricultural sector is to receive a larger portion of investment funds and is increasingly viewed both as a means of alleviating the food shortages and as a potential source for export earnings. Bureaucrats will be re-shuffled, increasing the likelihood that the bureaucracy may be reduced. Defense spending has been decreased. And political prisoners have been granted shortened sentences.

C. Commitment to Reform

At present, Albania continues to function as a centrally planned economy, based on the Stalinist politico-economic framework. The leadership has prioritized rapid industrialization, self-sufficiency, and a strong defense. Moreover, past and current Albanian leaders have repeatedly rejected market-oriented reforms, labelling such attempts as revisionism. Nevertheless, with a recently changed leadership, Albania appears to be moving away from the worst aspects of Stalinist orthodoxy. While explicit reform of the centrally planned model does not seem likely, it appears that priorities have been shifted away from development of heavy industry and self-sufficiency in favor of investment in the agricultural sector, increased production of consumer goods and increased external economic relations.

Key Players. Ramiz Alia, the new Party Secretary, appears to be a more pragmatic Communist leader than his predecessor, Enver Hoxha. While his rhetoric has been sharply aligned with those Communist countries that reject Soviet, Hungaria, Yugoslav and Polish reform, he has taken steps to ease the most aggravated aspects of the Stalinist system. Enver Hoxha's widow, Nexhmija, continues to hold sway with the country's most conservative elites and can exert considerable influence in national politics.

Prospects. Albania is likely both to continue on a path of staunch ideological opposition to market-oriented reform but at the same time is likely to continue to develop a less rigid Stalinist model in practice. Moreover, Albania's isolation is likely to be gradually compromised by increased interaction with potential Western trading partners. A continued problem for reform-minded leaders in the Albania leadership stems from the popularity of Enver Hoxha and his version of Stalinist orthodoxy. Since Alia was handpicked as General Secretary by Hoxha, an open and explicit break of Stalinist ideology in favor of reform is politically difficult. Alia has, however, been judged as a reform-minded leader who will most

likely work for change within the Stalinist centrally planned model. And, given Albania's small size and relatively high level of self-sufficiency, pragmatic alteration of the Stalinist model is more easily accomplished without having to reform the model itself.

IV. PROSPECTS FOR REFORM IN EASTERN EUROPE

Mounting internal and external pressures for reform point to a likely scenario of continuing reform currently sweeping across the Soviet Union and Eastern Europe. Trends indicate that ideological, political, economic and ethnic tensions are likely to increase within and between bloc countries. Several sources of tension may be noted. First, the disintegration of a static model of socialism based on the Soviet example has already resulted in a division of the region along ideological lines. As each country attempts to project its own model of socialism—both at home and abroad—those divisions are likely to deepen and the region is less likely to function as a viable political or economic unit. Second, economic adjustment whether due to transition to a market-oriented economy or to mounting hard currency debt burdens, result a drop in standards of living which are likely to increase reinforce popular unrest, ethnic tensions and instability throughout the region.

Although the outcome of reform will ultimately be determined by internal developments, external actors are likely to adopt an active approach by encouraging Eastern Europe's reformers. The Soviet Union may be willing to allow substantial reductions of Warsaw Pact military expenditures in order to free up resources which the reformers will need to restructure their economies. A high degree of coordination between Western nations with regard to assistance for East European reformers is likely to result in economic and technical assistance which is specifically targeted to restructuring of socialist economies and towards the development of private sectors and individuals trained to function in them. As East European reformers implement the political and economic reforms which are critical preconditions for integration into the global economy, it is likely that Western nations and multilateral institutions will reciprocate with the necessary financial, economic and technical assistance to help them succeed.

Insofar as reform is undertaken by East European nations, it must be viewed as an incremental and disjointed process—one in which countries continuously face tradeoffs between loss of party control and long-term economic, social and political reform. At any particular point, a country may be on a path of relative progress or it may regress from its prior position. A country may embark on reform from a position of long-term reform, as in the case of Hungary, Poland and Yugoslavia or from a position of central planning, as in the case of Bulgaria. Likewise, reform-spirited countries may veer from the path of reform and, in the extreme, regress to the Stalinist model, as in the case of Romania. Clearly, for reform to be

effective it must be comprehensive. Rapid and impressive political change or economic reform alone might be undermined by institutions and participants which continue to function according to the tenets of the traditional system. On balance, reform must be regarded as an ongoing, fluid process the outcome of which will be determined by its internal support and influenced, to a lesser degree, externally.

V. APPENDIX



I. COUNTRY STUDIES

HUNGARY'S REFORM AND PERFORMANCE IN THE KADAR ERA (1956-88)*

By Paul Marer**

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INTRODUCTION

Despite more than 20 years of reforms, in the late 1980's Hungary found itself on the brink of an economic and political crisis. Why is it that even though the New Economic Mechanism (NEM) was introduced in Hungary more than two decades ago, the country is in such a precarious situation?

Hungary's reform experience is also of general interest. Since the country has been a pioneer in the reform movements among the Communist countries, its experience has implications elsewhere. Specifically, the reform design that the country introduced in 1968 is quite similar to the kinds of reforms envisioned by Gorbachev for the U.S.S.R. It also has much in common with the reforms being introduced in Poland, and to those being contemplated in Bulgaria and, to a limited extent, in Czechoslovakia.

This essay is a summary assessment of the 32-year Kadar era (November 1956-May 1988). After Kadar, Hungary had entered a new, uncharted course, characterized by rapid economic and political transformation. These most recent developments are summarized in the author's brief companion essay in this volume.

* The author is pleased to acknowledge the thoughtful comments of László Antal, Tamás Bauer, Márton Tardos, and Ivan Volgyes, without holding them responsible for the views expressed.

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Part I presents a conceptual framework: the political economy model of Communist-led countries and their evolution through several stages. Part II applies the conceptual framework to analyze Hungary's reforms under Kadar.

I. THE CONCEPTUAL FRAMEWORK

The conceptual framework attempts to highlight the basic features of the political economy *model* of a traditional (pre-Gorbachev) Soviet-type centrally planned economy (CPE) and its transformation through various stages.

KEY BUILDING BLOCKS

The political economy model of a Communist-led country is defined by three interrelated components: (1) *Key objectives* of the political "influentials," including their tradeoffs, (2) the *strategies* pursued by the influentials, and (3) the *system*. Associated with but not strictly a part of the model are *policies*.¹

Key objectives are those goals that superimpose design upon the myriad activities that take place in a country, that deliberately choose the direction in which the country should be moving. In brief, the "grand design."

"Political influentials" are those who "operate" the model. They vary in number depending on the style of leadership, ranging from the nearly unlimited power of a single despot to a large number of party or party-affiliated individuals sharing in the exercise of power as well as competing for influence. The population is passive; its independent interest accumulation and articulation are not permitted.²

Strategies are those basic policies that implement the grand design. They are concerned with long-term developments that endure over relatively long periods. Actions that are customarily labeled policies are divided into two categories: strategies, which are fundamental, long-term policies and are considered basic building blocks in the model; and policies proper, which are of shorter duration, more easily reversible, and are not considered separate building blocks in the model.³

System refers to the institutional framework and the instruments available to implement goals, strategies, and policies. It is defined by six components: (1) Basic institutional arrangements (ex: the political and economic bureaucracy, ownership); (2) location of the authority to make specific decisions (e.g., the sphere of authority of the party bureaucracy, central planning agencies, ministries, enterprises, workers, households); (3) the information system (ex: plan directives, prices); (4) the incentive system (ex: bonus maximization, profit sharing); (5) the instruments available to implement decisions (ex: mandatory plan targets, the *nomenklatura*); and (6) the

¹ Many works deal comprehensively with economic systems and reform issues. For example, J.M. Montias, *The Structure of Economic Systems* (New Haven: Yale, 1976); Alan A. Brown and Egon Neuberger, "The Traditional Centrally Planned Economy," in Morris Bornstein (ed), *Comparative Economic Systems: Models and Cases* (Homewood, Ill: Richard D. Irwin, 1989).

² Ivan Volgyes, *Politics in Eastern Europe* (Chicago: Dorsey, 1987).

³ Where to draw the definitional line between objectives and strategies and policies, and giving these terms practical meaning, involves judgment, just like distinguishing the short run and the long run.

formal and informal "rules of the game" (ex: laws and regulations and routine behavioral patterns that enforce, hinder, or complement the formal structure).

STAGES

A typical CPE goes through three stages: mobilization, consolidation, and modification.

The *mobilization stage* occurs immediately or soon after the Communist leaders assume political power. It thrives best in a political environment in which the country is surrounded by real or perceived enemies, and in an economic environment in which there are large resources that can be mobilized to build new capacity.

The *consolidation stage* emerges, gradually, as tensions with the rest of the world subside and as fewer new domestic resources are available to be redeployed. During this stage, the basic political objective becomes that of preserving the status quo, especially political stability. Instead of massive and rapid transformation, the task becomes "maintenance" of the structure that has been created. Mobilization gives way to preservation through redistribution.

The *modification stage* appears some time after the leader and the elite turn dissatisfied with the performance of the model and become convinced that tinkering will not bring about the improvements desired for the sake of political stability. At that point the political economy model will be "modified" in some ways, that is, one or more of the essential features of the model will be altered, creating what is called in the literature a "modified" CPE, or MCPE for short.

CONTRIBUTIONS OF THE MODEL

This conceptualization of the political economy model of a Communist-led country is believed to be useful because it

- integrates economic and political variables;
- allows ideology, historical experience, the internal and external environment, and the leader's personal values to influence basic objectives, strategies, system features, and policies, and thus to determine significant, country-specific deviations from the standard model;
- explicitly includes key objectives and strategies; trying to infer them from outcomes can be misleading because outcomes are often quite different from those that the influentials intended;
- suggests that five variables—the goals and the strategies of the influentials, the system they have created, the policies they have pursued, and the environment—jointly determine economic and political outcomes; and
- suggests a definition of reform: qualitatively significant modifications in key elements in the model. If only one or a few elements are modified, the change is called partial reform; if a significant number of elements are modified, the reform is comprehensive.

II. APPLYING THE CONCEPTUAL FRAMEWORK TO HUNGARY

Three main issues are examined: (1) What was the nature of the reform associated with the rule of Kadar? More specifically, in

which respects did Kadar alter significantly the "traditional" model of a Communist-led country and in what respects did the model remain essentially similar to a so-called (before Gorbachev) Soviet-type economy (ST or STE)? (2) What was the impact of the Kadar model on Hungary's economic performance and political stability? (3) What relevant lessons can we learn from the Hungarian reform experiment for other countries?

To identify the areas where Kadar had introduced significant reforms and where he did not, the discussion of each element of the model begins with a brief statement of its essential features in a traditional, Soviet-type system. It, then, is used as a yardstick to judge whether there were significant changes.⁴

KEY OBJECTIVES

Kadar and his group of influentials had two fundamental and unchanging objectives: (1) To maintain their monopoly of political power and (2) to build and consolidate a socialist economic system.

Monopoly of Political Power

Although Kadar made significant changes in the *strategy* of exercising political power, power remained firmly the monopoly of the party or, more accurately, those self-selected to exercise it. The goals and tasks of state organizations were defined outside the organizations; their interests were in carrying them out. Power flowed from top to bottom. Those who wanted it had to gain support from above rather than mobilize a constituency from below. In this respect, Hungary remained a traditional, ST country.

Socialist Economic System

In a ST model, a socialist economic system is defined by the following subgoals of its influentials: (1) Predominantly socialist ownership of the means of production; (2) a forced rate of economic growth (and during the mobilization phase, also rapid economic transformation); (3) full employment; (4) a quasi-welfare state; (5) eliminating extreme disparities in income and wealth; and (6) consumer price stability.

1. *Socialist Ownership.* In a STE model, the authorities view ownership hierarchically: state ownership is preferred over cooperative ownership, which in turn is superior to private property. Private enterprise is tolerated as a transitory concession, prompted by economic necessity. Under Kadar, the hierarchy of ownership was maintained. More accurately, sometime during the 1960's large co-operatives were declared to be of equal rank with state ownership. But "socialist" was consistently considered superior to private property. Although in 1957, in 1968, and again in 1981, the scope of second-economy activities was expanded, no constitutional protection was granted to private ownership, ambivalent and frequently changing stop-and-go policies were pursued toward the sector, and the preferential allocation of capital, inputs, and subsidies to state-

⁴ János Kornai, "The Hungarian Reform Process: Visions, Hopes, Reality," *Journal of Economic Literature* (December 1986) presents comprehensive analysis of reform ideas and policies in Hungary.

owned firms and large cooperatives continued. Thus, this objective of a CPE was not really altered. This created great hardship and uncertainties for private activities, which limited greatly their scope and effectiveness, and gave rise to a whole set of new and complex problems, as will be indicated. Furthermore, the predominance of socialist ownership prevented the establishment of markets for factors of production, especially for that of capital. That, in turn, impaired greatly the efficient operation of the economic system.

2. *Forced Economic Growth.* This means pushing the tempo of growth beyond the capacity of the economy to achieve it without disruptions. The influentials are motivated by a desire for their economy to catch up with those of the advanced countries and to demonstrate a Soviet-type system's claimed advantage over market economies. Forced growth means emphasis on quantity over quality, expanding capacity rather than its efficient use, and (for the heavily trade-dependent countries of East Europe) tensions in the convertible balance of payments. In Hungary, Party resolutions announced repeatedly that growth must be accelerated; the latest such Party declaration was in April 1984. Notes Tamás Bauer: "Those resolutions (meant) the green light for increased investment and public expenditure."⁵ While the push for growth under Kadar was not as extreme as under his predecessor, or that taking place, say, in Romania, this feature of a Soviet-type model was not eliminated. Similar, too, were the consequences.

3. *Full Employment.* The preservation of full employment is both a short-term and a long-term goal in a Soviet-type model, for ideological as well as political reasons. It is not the goal itself, which after all is a worthwhile objective of political leaders in any country, that is problematic, but the way it is interpreted in practice. In the interest of full employment, the authorities allow labor to be hoarded by enterprises, and provide that practically all jobs become permanent entitlements to their holders, largely irrespective of need or the individual's performance. This, of course, limits structural change and weakens labor discipline. The preservation of full employment remained a basic objective under Kadar. One evidence of this is the 1984 Directive of the Party Congress, which reiterated that the assurance of full employment is the responsibility of the state. Further evidence is that (until recently) there was no system of unemployment compensation. Thus, in this respect, too, Hungary remained a Soviet-type economy.

4. *Quasi-Welfare State.* ST systems may be called quasi-welfare states because access to most of the benefits the state provides (e.g., health care, housing, social security, subsidized basic foods and services) is tied to employment, not country of residence or citizenship. The rapid deterioration in Hungary's medical, social, educational, and cultural infrastructure during the last decade suggests that making good on this aspect of socialism had become, in recent years, a lower priority than implementing other goals and objectives.

⁵ Tamás Bauer, "Economic Reforms Within and Beyond the State Sector," *American Economic Review*, vol. 78, No. 2 (May 1988).

5. *Overcoming Extreme Income and Wealth Inequalities.* Contrary to impressions, an egalitarian distribution of income and wealth is neither a basic objective nor a practice in an STE model. Rather, the goal is to eliminate extreme inequalities as well as incomes based on returns on property and entrepreneurship. However, earnings differentials among workers and employees (but not between them and the nomenklatura) are kept small, not as a matter of principle but arising out of the logic of the system and from social pressures. The systemic reforms introduced under Kadar were associated with an increase in the inequalities of income and wealth. But much of it was due not to marketization per se, but to the glaring imperfections in the market mechanism (taking the form, for example, of niche monopolies for a significant number of participants in the second economy, who thereby reaped large, unearned incomes). The authorities' response has been periodically to clamp down on all private activities rather than to strengthen market forces. Thus, in this area, too, the goals and behavior of the authorities had much in common with those of STE's.

6. *Consumer Price Stability.* This objective of an STE was pursued in Hungary vigorously until 1979, that is, even after the introduction of the NEM. Its main instrument was administered price determination or rules enterprises had to follow that achieved the same thing. This made it all the more difficult both to adjust relative prices to scarcities, to allow market forces to operate, and to let enterprise profits to serve as true indicators of their performance. That, in turn, contributed to the maintenance of paternalistic relations between enterprises and the authorities. After 1979, the authorities in Hungary were compelled to give up price stability, for a time being, in order to hold down domestic consumption and thereby improve the balance of payments. As a byproduct, relative prices did improve, but the practice of cost-plus pricing had continued. After 1979, the goal of price stability is revealed to have had lower priority than certain other objectives.

STRATEGIES

The following strategies are identified: (1) On exercising political power; (2) on the standard of living; (3) on resource mobilization; (4) on resource allocation; (5) on foreign economic relations with the CMEA; (6) on foreign economic relations with the West; (7) on foreign borrowing and debt management; and (8) on economic reform design and implementation.

1. *Exercising Political Power.* Several years after the ruthless suppression of the Revolution of 1956, Kadar changed his strategy of exercising political power. After 1963 he instituted, gradually, a set of policies, often referred to in the West as political liberalization (but would be called more accurately enlightened absolutism) that increased the personal security of the citizenry and made life in Hungary much more tolerable than in all other STE's, with the possible exception of Poland. This strategy (together with that on the standard of living) was, in Kadar's judgment, the best way to ensure that 1956 would not be repeated.

Kadar, in effect, told the Hungarian people: "The Soviet Union and its basic policies are here to stay. Cooperate with me by not

challenging the political system and I'll make life as tolerable for you as it can possibly be under our geopolitical circumstances." At the same time, Kadar said to the Soviet leaders: "Hungarians are unhappy with your rule, as you saw in 1956. If you give me a free hand in domestic affairs, I can calm this explosive situation and my management will thus be to your advantage."

Kadar's great historical merit is his skill in designing and managing this grand compromise. But its successful implementation ultimately rested on two pillars: steady improvements in the standard of living and the Brezhnev Doctrine. The combination of a carrot and a stick made the Hungarian people willing to tolerate a situation that, fundamentally, was not acceptable to them. Once the two pillars collapsed, more or less simultaneously in the late 1980's, so did also the great Kadar compromise and the regime's stability.

2. *Standard of Living.* As mentioned, Kadar gave high priority to steady improvements in the citizenry's material well-being. When this could no longer be assured from domestic resources (after 1972), Kadar resorted to large foreign borrowing to maintain the expansion of both consumption and investment. After 1980 this strategy could no longer be implemented, owing to the large inefficiencies of Hungary's economy and the huge debt-service burden. That, in turn, gradually eroded the implicit compromise between the regime and the population (the social contract, as it is often called), helping to undermine political stability.

3. *Resource Mobilization.* A hallmark of a STE is that resource mobilization is forced and highly centralized. By and large this continued after the introduction of the NEM, but with one (not very important) difference: Whereas before the NEM was introduced, resources were mobilized through mandatory directives and campaigns, after the NEM was put in place, resources were mobilized by manipulating a variety of "regulators." During the first half of the 1980's, taxes and other levies still centralized, on average, more than 80 percent of enterprise incomes and about 60 percent of GNP.⁶ Thus, there does not seem to be a fundamental difference in this area between Kadar's Hungary and the more traditional CPE's.

4. *Resource Use.* This strategy refers to decisions on investments and to the size and purposes of state budget expenditures. The NEM envisioned giving enterprises substantial autonomy only regarding replacement investment plus "small" new investment, and to retain for the center the strategic decisions on expansion. Even when enterprises could, formally, initiate a project, since they were left with meager resources after taxation, and were also limited as to the purposes for which after-tax incomes could be spent, they had to rely on the authorities for grants, subsidies, and imports; on the monobank for credits; and on the state budget for grants. Investment projects of significance were determined by the preferences of top policymakers and by the interests of powerful lobbies, not by market forces. Their revealed preferences show that the strategy of investment did not depart very far from those of the

⁶ The World Bank, *Hungary* (Washington DC: 1985).

more traditional CPE's: basic and heavy industries (e.g., coal, steel, petrochemicals), selected branches of manufacturing, projects to increase exports to the CMEA or to replace convertible imports, and projects that were huge. The revealed dispreferences included infrastructure, the services, light industry, project to increase exports to the West (except for periodic campaigns), environmental protection, and projects in the second economy.

Regarding state budget expenditures, there was no fundamental change. The huge subsidies and the purposes for which they were spent continued: (1) To maintain and expand the operation of practically all large state enterprises and cooperatives, largely irrespective of profitability; (2) to finance investment projects often of dubious economic value (ex: Nagymaros—on the Danube—energy plant; the Yamburg pipeline); (3) to subsidize the prices of many basic goods and services; and (4) to provide for other welfare-type expenditures; and (5) since 1979, for debt service. Insufficient long-term improvements in the economy's performance made the sum total of these resource uses greater than the economy was able to carry. Instead of making the strategic choices, the short-term "solutions" were: to tax enterprises to the hilt (thereby choking off much of whatever modest supply responses the reforms could have triggered); (2) borrow money from abroad; and (3) run large domestic budget deficits, letting the central bank finance them. In combination, these strategies of resource use undermined macroeconomic equilibrium, as detailed in the contribution by Schwenk.

5. *Foreign Economic Relations: CMEA.* The foreign economic strategy of a typical East European country after about 1950 was to maximize the growth of imports of energy, basic materials, and intermediate products ("hard goods") and to pay for them by shipping (mostly or increasingly) "soft" manufactured products. Each East European country could, of course, realize such a strategy only vis-a-vis the U.S.S.R. The strategy's rationale was that it facilitates rapid economic growth, provides economies of scale and full employment, and makes possible the production of intermediates that are nonexpendable hard-currency earners. However, the long-term consequence of pursuing such a strategy was to build, expand, and maintain an industrial structure not in accordance with comparative advantage. It made the East European economies extremely vulnerable to Soviet ability and willingness to continue this pattern of trade, and contributed to continued loss of export-competitiveness on the world market. In all these respects, Hungary did not appear to have pursued a fundamentally different strategy than the other, less reform-minded countries of Eastern Europe.

6. *Foreign Economic Relations: West.* A typical STE's foreign economic strategy vis-a-vis the West is one of extreme inward orientation: incentives biased in favor of production for the domestic or CMEA market and against both export and import trade with the world market. If the purpose of convertible imports—and this is where strategy comes into play—is (1) to purchase technology and inputs to produce exports to the CMEA, where payment is not in convertible currency; (2) to alleviate bottlenecks created by overambitious investment drives, poor investment projects, planning mistakes, and inefficiencies at the micro level; and (3) to sustain, with the help of foreign loans, domestic absorption above the level of

production, then the resulting increase in convertible imports cannot be taken as evidence of "openness." By contrast, if the strategy of imports from the West is to lower the cost of production and to generate competition, then one can speak of an economy opening up to foreign markets. On the export side: if too much of the wrong kinds of imports, plus debt-service, is paid for by exports that are generated with large subsidies (much greater than needed to offset the protection on inputs) and with short-term export incentives that undermine the sustained expansion of exports, then such trade, too, does not evidence "openness."

Hungary's strategy was essentially that just indicated and it had two main consequences. One, paradoxically, was a very substantial increase in dependence on the West for essential imports (there were also other contributing causes), making the economy highly vulnerable to import-supply disruptions. The other consequence is that a significant part of Hungary's trade is not in accordance with the country's long-term comparative advantage. Therefore, its gains from trade have remained much smaller than the volume and relative importance of exports and imports in its economy would suggest. One modestly significant difference between Hungary and the other East European countries: it was the first to liberalize—half heartedly to be sure—joint ventures with Western partners. But through the Kadar years, the number of joint ventures and the total inflow of capital and export earnings linked with them have remained modest.

7. *Foreign Borrowing and Debt Management.* During the last two decades, Hungary's debts to the West increased rapidly not because of a strategic decision to tap the long-term inflow of foreign resources for development (as Poland and Romania did during the 1970's), but to finance time and time again the unplanned excess of imports and shortfalls in exports. But Hungary did make a strategic decision in the late 1970's not to reschedule. This was a factor in the austerity program that is still underway, now for about a decade. In the 1970's, Kadar borrowed to increase the standard of living, to pay for the import costs of misguided investments, and to buffer the country from the effects of a large deterioration in its terms of trade. In the 1980's, Kadar borrowed to refinance the payment of principal and a portion of the interest on the foreign debt. Since there is no CPE strategy on foreign borrowing and debt management, the analogy here is best made with countries, not necessarily CPE's, where the authorities and foreign lenders bear joint responsibility for taking and providing excessive amounts of credits.

8. *Economic Reform.* Strategic issues on reform involve decisions on when to initiate it, what kind of reform should be introduced, whether to put it in place experimentally or broadly, and how to sequence its implementation.

As background for discussing the kinds of reforms Kadar supported, let us divide the economy into two sectors: ⁷ (1) State firms and large cooperatives (the first economy) and (2) private and semi-private firms and activities (the second economy). The two sectors

⁷ The distinction between the two sectors and the classification of the periods is based on Bauer, *op. cit.*

have different relationships with the authorities. Reform strategy during the Kadar era can be divided into four periods: 1956-64, 1965-72, 1973-78, and 1979-88.

1956-64: Immediately after 1956 a reform commission prepared a blueprint that was very close to that of the NEM of 1968, but the reform was not introduced. Instead, a series of politically motivated, ad hoc concessions were made to the second economy, which turned out to be significant building blocks for subsequent reforms.

1965-72: Prompted by growing tensions in the first economy and by the success of reforms in the second economy, the NEM was introduced to improve the first economy. Central planning was retained, but mandatory plan targets to enterprises and central resource allocation were replaced by financial and administrative regulators, i.e., by indirect planning. The NEM did not plan to enlarge the second economy. But the combination of allowing workers to change jobs and giving greater autonomy to cooperatives actually brought about that result. Agricultural and retail trade cooperatives established subsidiaries in industry and construction. Those ventures became the first important forms of semiprivate activity, characterized by strong profit orientation and de facto independence from the authorities. Because many aspects of the NEM were introduced at once, it is called a comprehensive reform. This is not a fully accurate term because a great deal was not touched (ex: economic institutions and the political superstructure). Nevertheless, on balance, the reforms implemented through the NEM were sufficiently wide ranging, in terms of changes in the economic system, to warrant the conclusion that it transformed Hungary from a Soviet-type economy into an MCPE.

1973-78: The reform was "frozen" for about 6 years because of a domestic backlash by union leaders and managers of powerful enterprises, antireform trends in the U.S.S.R., and to protect Hungary from the adverse impacts of the world energy crisis.

1979-88: Increasingly acute tensions, especially in the convertible balance of payments, prompted Kadar once again to turn to reform. But the suggestion of economists to create a real market mechanism was rejected. Instead, a series of partial reforms were implemented over a period of a decade, both in the first and in the second economies (summarized below). However, owing to lack of a clear concept of what model was desired, and the many constraints imposed by the simultaneous pursuit of a CPE's fundamental objectives as well as strategies that were enumerated, the reform steps were full of contradictions.

THE SYSTEM: INSTITUTIONS AND INSTRUMENTS

A great deal has been written about systemic reforms in Hungary, so this section can be brief.⁸

Political System. There was no significant change in the political system. The fact that many actions and activities were permitted,

⁸ Bauer, op.cit.; Kornai, op. cit; Gábor Révész, *Perestroika in Eastern Europe: Hungary's Economic Transformation: 1945-1988* (Boulder, CO: Westview Press, 1989); and Paul Marer, "Economic Reform in Hungary: From Central Planning to Regulated Market," in *East European Economies: Slow Growth in the 1980's*, vol. 3, Country Studies on Eastern Europe and Yugoslavia (Washington DC: 1986).

not as constitutionally guaranteed rights but as an aspect of exercising political power (ex: publishing articles critical of some aspects of the regime or its policies; travel to the West; tolerance of second-economy activities) brought about an improvement in the quality of life. But, at the same time, such privileges became a corrupting influence in society. This was so because many of those who enjoyed its benefits became regime supporters to protect their "privileges." Just like many activities in the second economy (i.e., the privileged money-making opportunities through bribery, monopoly, access to information, connections), it created supporters of the prevailing undemocratic political and corrupt economic arrangements.

Economic System. The most important reform measures were the following:

1. Reduced the scope and rigidity of the central plan.
2. Changed the plan instruments: plan directives and material allocation through the system of material balances were replaced with indirect regulators.
3. Increased, in a limited way, the autonomy of enterprises (for certain categories more than for others), in most cases creating dual dependence for them: vertically on the authorities and horizontally on suppliers and customers. This established, in Bauer's phrase, an economy that was neither fully centrally planned nor anywhere near fully a market system.
4. Enlarged the second economy, but in a way that simultaneously promoted and constrained it. On the one hand, the austerity program in place since 1979 put great pressure on the work force to have two jobs (one in the first economy, for the sake of security and its entitlements; and one in the second economy, for money, and in some cases for creative satisfaction). It also gave opportunities, selectively, to engage in them. (Selectively because one had to have the right marketable skills or access to a plot of land.) But, at the same time, the expansion of the second economy contravened with many other objectives (ex: social ownership of the means of production, price stability, successfully competed for the first economy's most productive labor). For this reason, actions toward the second economy were schizophrenic and of Rube-Goldbergian complexity, with the design changing frequently as the authorities attempted to reconcile so many contradictory objectives. As a consequence, the efficiency of the second economy has remained low and the cost to its participants high. About half of the work force had to have two jobs, so that Hungarians, on average, are reported to work longer hours than any other nation's work force, leading to stress and to a significant deterioration in health and demographic indicators. The relationship between the first and second economies was full of bureaucratic irrationalities (less so in agriculture). This has contributed greatly to the corruption that has mushroomed during the last decade. It is also a factor in the growing cynicism on the part of the population against a "model" that not only tolerates but seemingly encourages all kinds of inefficiencies. But in spite of all these negatives, reforms in the second economy were

sufficiently important to generate all of the economy's modest growth in the 1980's.⁹

5. A series of reforms created, since 1979, some of the institutional preconditions of a market system. Specifically: the authorities began to break up some of the large trusts in production and distribution and introduced legal provisions for establishing subsidiaries and new ventures (1979); combined three industrial sector ministries into a single ministry, putting it in charge of industrial policy (1980); decentralized more and more of foreign trade decisionmaking (since 1980); eased and then eliminated production profile restrictions (1982-85); introduced a system of tenders for managerial positions (1983); introduced the right of enterprises to issue bonds (1983) and established a "stock market," where the bonds could be traded for an hour or so once a week; set up enterprise councils to elect and "supervise" the director (1985); enacted a (weak) bankruptcy law (1986); and created a two-tier banking system, without, however, all the conditions that would make it possible for commercial banks to be largely profit driven (1987).

REFORMS AND ECONOMIC PERFORMANCE

While one should not minimize the importance of the many reform steps taken between 1979-88, they did create an exaggerated impression in the West of what was taking place: "Hungary's reforms always going further and further." (It is only fair to admit that the author himself, in his previous writings, was much more taken by the apparently significant extensions of the reforms than he is today, in 1989. One useful purpose of the conceptual framework is that it provides a perspective not only on what has been changed but also on what has remained unchanged. At the same time, one must not go too far in the other extreme and dismiss as insignificant the reform steps taken and what they have accomplished.)

The importance of the institutional changes made between 1979 the 1988 for the economy's performance lay not mainly in improving contemporary performance but in their future potential. That is, these measures signaled the direction Hungary appeared to be moving and held out the hope that the fundamental problems would also be tackled.

The fundamental and mutually reinforcing problems that remained were these: Ill-defined ownership, no market for the factors of production, weak financial discipline on enterprises and for the state budget, no clear criteria for investment decisions other than the interests of the lobbies (partly a consequence of the ill-defined ownership structure), exceedingly heavy taxation, and an incredibly complex and continually changing system of administrative and financial regulation that has tried, unsuccessfully, to reconcile a series of incompatible objectives, strategies, and system features.

None of the reforms introduced till the end of the Kadar era had solved the fundamental question of ownership. As of 1988, the reforms did not yet succeed in designating an individual or an institution to have full property rights, that is, with full responsibility

⁹ Bauer, *op. cit.*

for and the right to appropriate the returns on productive assets. In the final analysis, the authorities remained owners and regulators of state enterprises. Regulation was often enterprise specific to achieve economic and social objectives, e.g., domestic supply, exports, employment, and price stability.

These unsolved problems in large part explain the Hungarian economy's unsatisfactory performance. They were compounded by a number of major mistakes in economic policy. The most significant policy mistake was allowing foreign credits to rise much too rapidly. Warnings about the dangers given by professionals in the West in the late 1970's were dismissed (for example, by leading officials of the Hungarian National Bank). Also important were a series of unfavorable developments in the external environment, East as well as West.

At the same time, however, the reforms did yield significant results, especially in agriculture and in the second economy. Living standards improved considerably in the 1960's and early 1970's (thereafter the improvement was based on foreign credits). Hungary was able to move away from the classical shortage economy. The supply, assortment, and quality of food and many other consumer and industrial products became significantly better than in most other CPE's. Queuing in retail stores was eliminated (but continued for a segment of the housing market, cars, and major repairs). For tourist purposes within the CMEA, the forint became practically a convertible currency. Many of these improvements cannot be captured readily in standard economic statistics, such as the growth rate. Also, Hungary's economic statistics are considered by experts to be much more reliable, much less subject to exaggerations and distortions, than those of a number of East European countries against which its performance is often juxtaposed. Thus, there are these two reasons at least that a comparison of standard performance indicators will make Hungary's performance appear weaker than it really is.

III. SOME LESSONS FROM HUNGARY'S EXPERIENCE

One lesson of the Hungarian experience is the often painful tradeoff between benefits in the short run and costs in the long run. Although this is basic in the science of economics, it is often disregarded by politicians and their all-too-ready-to-serve advisers. The key lessons for Hungary were in foreign economic relations with the U.S.S.R. and the West, in relation to excess domestic and foreign borrowing, and in not imposing financial discipline on firms.

In the mistakes that were made in economic strategy, reform design, and policy, insufficient intellectual understanding of cause and effect relationships in economics probably played a role, as is stressed in the comment by Gomulka. (If this was indeed a significant problem in Hungary, this must be all the more important in the U.S.S.R. and in the other CPE's undertaking reforms.) Moreover, could key advisers exercise independence of judgment in a system in which there is only one career path: to serve the political influentials?

The experience of Hungary under Kadar reveals both the possibilities and limitations of economic reforms in a "traditional" Communist-led country. Such a political system forces the architects of the reform to try to reconcile design variables that have not proven to be reconcilable: on the one hand, pervasive and unchecked control by the party of the political and economic life, which was synonymous with the preservation of a series of ideologically and politically driven economic objectives, strategies, and system features; and, on the other, rapid progress in improving economic efficiency, export competitiveness, and the standard of living.

Although many countries, irrespective of their economic and political system, pursue fundamental objectives that are not fully compatible, pay little attention to feasible tradeoffs, make major errors in economic strategy and policy, and face daunting problems of system inefficiency, the main difference between many of them and a monolithic Communist country like Hungary is the unchecked power of the authorities. Often absent is any meaningful debate, checks and balances, political accountability, and professionalism in decisionmaking. These probably mean that the mistakes are likely to be greater and persist longer than in societies where the ruling party does not have unlimited power.

Hungary's experience suggests, further, that reform is given serious consideration whenever the economy is performing poorly and political instability is feared. In such situations a political compromise is usually struck between those who support reform on the grounds that it would help maintain the political system, and those who oppose it, fearing that economic reform would sooner or later destroy or transform the system.

Concerning the design of economic reforms, there is a great deal that must be learned still; there are no ready-made recipes. Hungary's experience suggests that simulating how a market would work if it existed will not do. Unless the frequency and intensity of intervention by the authorities into market processes falls below a certain critical level, the market never "takes hold," remains emasculated, as Kornai noted.¹⁰ During Kadar, intervention had remained considerably above the critical level. Hungary had (and still has) an economy that an enterprise manager characterized as a "jungle of regulators, most of them inconsistent." At the same time, the authorities did not intervene sufficiently to create the institutional preconditions for effective market competition; the informational, financial, and physical infrastructure; commercial laws, strong antitrust protection, and so on.

Further concerning the reform design, another lesson of Hungary is that if increased autonomy is given to enterprises before imposing on them financial discipline and exposing them to competition, then rapid increases in wages and prices are much more likely than the expected supply improvements.

Whether a market economy can be created while the means of production remain predominantly nonprivate is one of the main unsolved questions as yet of reform design and implementation.

¹⁰ Kornai, *op. cit.*

Perhaps the main conclusion is that a CPE needs a truly comprehensive reform, one that modifies—simultaneously, significantly, and consistently—all the main variables in the model of political economy. The fundamental issue then becomes: how large must be the economic and political problems before a truly comprehensive reform will be placed on the agenda? And what modifications will be required in the political system to come up with a good reform design and to manage successfully the transition?

COMMENT

By Stanislaw Gomulka*

I find Paul Marer's paper a very helpful application of a fairly general analytical framework to the study of a particular reform. Given the large measure of agreement, I comment only on a few selected issues. My comments are not related specifically to Hungary's reforms, but rather to the conceptual framework for thinking about economic reforms in Communist-led countries.

1. HOW TO EVALUATE CHANGES IN MAJOR OBJECTIVES

Marer proposes to define a model of the political economy of a Communist-led country in terms of fundamental (political-economic and socioeconomic) objectives or ends of the leadership, the long-term political and economic strategies of pursuing the ends, and the systems of institutions and (economic, legal, and administrative) instruments designed to implement the final ends through the means of broad strategies and any short-term, detailed policies. The definition is useful. My comment concerns the selection of objectives. The author notes that *"to try to infer objectives and strategies from outcomes can be misleading because outcomes can be very different from those that policymakers intended."* (See Paul Marer's preceding paper.)

The problem begins when intentions differ from outcomes. For example, it is still the intention of Communist leaders, in Hungary as well as in Yugoslavia, in 1950-80 as well as in the 1980's, to maintain low inflation, high growth rate of output and low unemployment. Yet we know that outcomes can be persistently different, partly as a result of systemic changes which Hungary, China or Yugoslavia have introduced. Should we then infer that these three goals have become less important? Probably. If so, the mere list of important goals is not a very sharp analytical device, since what really matters is their ranking and strength. But this ranking of all goals and the strength of each are revealed perhaps more by actual outcomes of actual policies than by declared intentions. Only when the policies are chosen by mistake, or when the circumstances change unexpectedly, the policymakers being unaware of some of the policies' important consequences, the outcomes would be a poor indicator of the values attached to the various goals.

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2. ON THE SO-CALLED SHIFT FROM EXTENSIVE TO INTENSIVE GROWTH

My second comment is more specific. It concerns the proposition, which has apparently become fairly widespread, that economic growth under the TCPE model was never particularly intensive and that the pressures to reform it necessarily mount when the scope for extensive growth begins to decline and the need to activate intensive sources of growth increases. The origin of this proposition may well be in the policy declarations of the leaders in CPE's, who have during the last decade or so emphasized with greater force than ever before the need to increase the rate of innovation and productivity growth, the key indicators of "intensive growth." However, the policymakers usually bring to public attention things which need more of such attention. For example, they emphasize the need to reduce the construction timelag more strongly when it gets longer, to increase quality when it is poor or gets poorer, etc. In the case in hand, the alarm bells have been triggered by a substantial decline in productivity growth since the mid-1970's. In terms of the joint factor productivity residual, Soviet economic growth was, in the years before 1975, quite intensive by international standards and more intensive than it has since been. There has therefore been a shift, in the U.S.S.R. and Eastern Europe, from more to *less* intensive growth.

May I also note that the purpose of reforms is not necessarily to restore productivity growth to the pre-1975 rates. Although probably lower than in Japan and Western Europe, these rates were apparently higher than the U.S. rate and therefore not sustainable in the long-run under any system. The growth rate of Soviet capital stock, an extensive factor of growth, is now smaller than in the days of rapid industrialization. However, the rate is smaller not because of a lower share of investment in national product, which is in fact high, but because lower productivity growth of inputs translates into lower growth of national product and, therefore, lower growth of investment. Less intensive Soviet growth is thus also a cause (one of several) of the less extensive growth which we now observe.

The productivity slowdown in CPE's, as well as in Western Europe and Japan, was inevitable sooner or later. The problem is therefore not the slowdown as such, but its timing; it came at about the right time for Western Europe and Japan but too soon for the CPE's. If things were left as they are, the relative productivity gap between the U.S.S.R. and the world's Technology Frontier Area (TFA) would increase or remain permanently at the present fairly large level.¹ As far as growth is concerned, the strategic purpose of the reform must therefore be to lift productivity growth rate only somewhat above the TFA's rate, so that the catching-up can be resumed, and to maintain it there only for as long as is needed to bring Soviet productivity levels close to those prevailing in the TFA. This purpose is clearly independent of the growth rate of the labour force, and this independence is an additional reason why the second half of the proposition spelled out at the beginning of this section is false.

¹ See S. Gomulka (1988a), for estimates of the gap.

The proposition may be defended only on the grounds that, while the contributions to growth of intensive and extensive factors are both lower than they used to be, the contribution of extensive factors may have declined more. However, such a shift, even if it did occur, and I doubt that it did, would be of no significance for our evaluation of alternative economic systems.²

3. INTELLECTUAL LIMITS TO, AND THE SPEED OF, THE REFORM PROCESS

In his paper Marer notes that reforms represent a process, possibly a long one, in which all kinds of resistance to change is bound to play a role. The usually stressed sources of such resistance are: the keepers of socialist ideology, the power holders concerned to preserve the political *status quo*, and the population at large worried by the possible social costs of any major systemic change. The limited economic knowledge of the leaders and their experts, as well as the lack of an enterprise culture, has also been noted, but the potentially major significance of this factor has rarely been suggested.³ This topic deserves a separate treatment. Here I would only like to suggest that what I call "intellectual limits" to reform may have to be given much more weight than we usually do in our analysis of the history of attempts at economic reforms in Communist-led countries. Such limits may be said to be operating if and when certain reforms are opposed, while others are advocated or actually implemented, by mistake, due to the limited economic knowledge of the relevant policymakers at the time. In other words, I propose a thought experiment in which we ask what the choice of a system, or a reform of it, would have been if the policymakers remained faithful to their ideology and political interests, but had the benefit of knowing beforehand the experimental results for all alternative economic systems, designed to give them complete description of the systems' quality. If system B would be in such circumstances be judged superior to A, but the latter was chosen and kept nonetheless, then reasons for "limits to reform" in this case are certainly not intellectual. Therefore to pronounce that ideological, political or other nonintellectual limits operated, and in many situations they clearly did operate, we *must have evidence that proposed systemic reforms were judged superior in purely economic terms, but were not adopted for the reasons of ideology or political self-interest of the ruling group.*

The intellectual limits appear to be of two categories. The first is related to the economic skills and habits which are needed in any market-based system, are actually present in developed capitalist economies, but were destroyed or lost in the Communist countries under their traditional system. These skills and habits are now becoming an essential asset to have in those countries as well. Given the low starting point, in particular the lack of business expertise and primitive state of university economics, the accumulation of this asset is bound to be slow.

The intellectual limits of the second category relate to the fact that modern economies are so complex that it is not possible for

² For a more extensive discussion of this topic, see S. Gomulka, 1988b.

³ For an exception, see Ed. Hewett (1988). For an excellent review of Soviet economic ideas since the Revolution, see Brus (1988).

any economist to make estimations of the consequences of various reform measures of a desirable accuracy. Given internal consistency requirements it would be desirable to move quickly from a TCPE, one such consistent system, to a competitive market socialist (CMS) economy. However, the problem is that even in the absence of resistance to reform on political, ideological and social grounds, the political leaders would be confused by the variety of expert advice about the likely costs and benefits of the systemic change. They would therefore be tempted, for these "intellectual" reasons in addition to other possible reasons, to move in small steps rather than attempt a big jump with unknown consequences. Such an evolutionary reform process may be preferred particularly by risk-conscious policymakers. This may be so even if the accumulated resource cost of the systemic change is known to be greater the slower the transition (as the intermediate stages along the process involve efficiency losses due to the presence of elements of internally incompatible systems), provided the short-term cost is lower. In such mixed, intermediate, systems the allocative and disciplinary roles of central authorities are already substantially reduced, but competitive market pressures are yet not developed. Consequently, during the transition the macroeconomic control may deteriorate, resulting in high inflation and balance of payments problems, before static efficiency and innovation rate begin to increase.

REFERENCES

- Brus, Włodzimierz, "Utopianism and Realism in the Evolution of the Soviet Economic System", *Soviet Studies*, vol. XL, No. 3, July 1988.
- Gomulka, Stanislaw, "The Gerschenkron Phenomenon and Systemic Factors in the Post-1975 Growth Slowdown," *European Economic Review* 32 (1988a).
- Gomulka, Stanislaw, "Soviet Equilibrium Gap and the Post-1975 Productivity Slowdown," *Economics of Planning* (1988b), forthcoming.
- Hewett, Ed A., "Economic Reform in the Wake of the XIX Party Conference," *Plan Econ Report*, vol. IV, No. 29 (July 22, 1988).

HUNGARY: ECONOMIC PERFORMANCE IN THE 1980's, PROSPECTS FOR THE 1990's

By Analyst, Central Intelligence Agency

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SUMMARY ASSESSMENT

The Hungarian economy has struggled with sluggish growth, stagnant living standards, an increasingly obsolescent and uncompetitive industrial base, and an ever heavier foreign debt burden in the 1980's. Excessive reliance on administrative measures, such as import and investment controls, to cope with recurring balance-of-payments problems and inconsistent implementation of economic reforms have slowed the economy's adjustment to adverse external developments and to increasingly competitive world markets. While such policies, with the help of two IMF standby arrangements, enabled Hungary to weather a severe liquidity crisis in 1982, they failed to address the fundamental systemic changes needed to lay the basis for an expanded export potential and a sustainable economic recovery. Thus, serious payments imbalances reemerged after 1984 when the leadership decided, in part for political reasons, to ease austerity. In 1987, the prospect of a new financial crisis finally forced policymakers to respond with a series of stopgap austerity measures, but the current account deficit was still larger than planned and Hungary's foreign debt continued to rise sharply.

Rising debt service, inadequate hard currency earnings, and the need to devote more resources to modernizing industry and improving export competitiveness have narrowed the leadership's policy options and will force them to make difficult choices among increasing exports, investment, and consumption for years to come. A 3-year austerity program introduced in January 1988 tried to steer a middle course by calling for an annual decrease in consumption

of about 2 percent, moderate increases in enterprise investment and hard currency exports, and greater attention to restructuring the economy along more competitive lines. Economic performance in 1988 showed that Hungarian authorities were making a determined effort to improve the hard currency trade balance, but that restructuring necessary for a sustainable recovery was still proceeding at an unsatisfactory pace. In the first half of 1989, structural change continued to proceed slowly, and Hungary's balance-of-payments situation deteriorated because of heavy spending on foreign travel by Hungarians taking advantage of relaxed travel rules and by a surge in Western imports following the lifting of import restrictions on many types of goods.

In response to these developments, Hungarian policymakers have repeatedly expressed concern that more drastic action is needed to speed up restructuring and assure an economic turnaround in the medium term, but they have had a hard time reaching a consensus on how far or fast to proceed toward a more market-oriented economy. Moreover, the rapid pace of political change in Hungary appears to be diverting leadership attention from the hard economic policy choices that need to be made.

A faster restructuring program would entail high social costs in terms of inflation and unemployment and could increase the risk of debt servicing problems in the short term. On the other hand, it has greater potential to improve Hungary's economic outlook in the long term than a more gradual approach to adjustment.

Whatever policy option the leadership chooses, the medium-term outlook is difficult, and Hungary will continue to struggle with slow growth and foreign payments problems well into the next decade. Planners will also be forced to hold down living standards for at least the next 3 years to meet Hungary's debt servicing schedule and to slow the growth of outstanding debt. Hungary will, however, remain vulnerable to a new liquidity crisis—particularly after 1989 when debt service costs begin rising rapidly—should adverse external developments, such as higher commercial interest rates or a sharp deterioration in the terms of trade, worsen the country's balance-of-payments situation and cause a loss of banker confidence.

I. INTRODUCTION: GROWING SENSE OF CRISIS

The Hungarian economy has struggled with sluggish growth, stagnant living standards, an increasingly obsolescent and uncompetitive industrial base, and an ever heavier foreign debt burden in the 1980's. Excessive reliance on administrative measures, such as import and investment controls, to cope with recurring balance-of-payments problems and inconsistent implementation of economic reforms have slowed the economy's adjustment to adverse external developments and to increasingly competitive world markets. While such policies, with the help of two IMF standby arrangements, enabled Hungary to weather a severe liquidity crisis in 1982, return the hard currency current account to a large surplus by 1984, and regain access to commercial bank loans, they failed to address the economy's fundamental problems, which are largely systemic in nature. As a result, there is still little market pressure

or incentive in the economic system to promote the industrial restructuring necessary to make Hungarian industry more competitive and to support a sustainable recovery. (See next chapter, "Hungary's Political and Economic Transformation (1988-89) and Prospects after Kadar," by Paul Marer.)

Hungarian policymakers, anxious to ease austerity for political reasons, nonetheless, concluded in 1985 that they could shift priorities back to economic growth and loosened controls on domestic credit, government spending, and imports. Economic performance fell far short of plan, however, and serious payments imbalances quickly reemerged. In retrospect, the Central Committee in April 1988 acknowledged—

without changing the (production) structure, an acceleration of growth leads to a deterioration in the terms of trade, a loss of economic equilibrium, and growing foreign debt.¹

Although Hungary has avoided a debt rescheduling and the supply and variety of consumer goods is arguably the best in Eastern Europe, many Hungarian economists and party officials have pointed to the economy's deep-seated structural problems as signs that the economy is in a crisis. The most reform-minded among them used the concept of crisis to try to spur the party under former General Secretary Janos Kadar to address these problems with more decisive action on reform. In 1986, for example, a group of leading reform economists in an influential paper—"Turnaround and Reform"—directed to the top party leadership warned that Hungary faced a deepening economic crisis without an acceleration and broadening of its long-running reform efforts.

Despite such warnings, the leadership initially took little corrective action. A further marked deterioration in economic performance in the first quarter of 1987 and the prospect of a new financial crisis finally forced policymakers to respond with a series of stopgap austerity measures, including reductions in consumer and producer subsidies, tighter domestic credit, and two devaluations of the forint. These steps raised the cost of basic consumer items, such as meat, bread, gasoline, and heating, by an average of 20 percent. The government also launched a reassessment of economic policies under the Seventh Five-Year Plan (1986-90) and put together, under the direction of former Premier Grosz, a new austerity and reform program for 1988-90 to supercede the plan. The new program provoked an unprecedented level of debate in Hungary's parliament before winning final approval in September. It was controversial because it abandoned some goals of the social contract, most notably price stability and a real increase in the standard of living, in order to place greater emphasis on halting the growth of foreign debt and on restructuring the economy along more competitive lines.

Uncertainties about the impact of the new program on living standards and lingering questions regarding responsibility for the earlier misguided policies clouded the popular mood. Surveys by the Hungarian Public Opinion Research Institute indicate the pub-

¹ MSZMP CC Policy Statement to the MSZMP National Conference (Draft) Budapest Nepszabadsag Supplement in Hungarian, Apr. 1, 1988.

lic's perception of the economy's health and their own personal financial situation hit a low in September 1987 and remained at similarly low level through the first quarter of 1988.² Such negative evaluations added to growing pressures for political change and led some members of the party leadership to push for a special party conference. The conference, eventually held in May 1988, was supposed to examine the status of economic and political reforms, but quickly turned into an open succession struggle. In evaluating the party's draft position paper on reform for the conference, the presidium of the Academy of Sciences claimed that "crisis symptoms are multiplying at an accelerating pace" and that the lack of a "unified reform program" has deepened the "crisis of confidence" between the leadership and society.³ Premier Grosz picked up on such sentiments and used the crisis theme effectively to challenge party leader Kadar. Kadar, in contrast, lost credibility by denying the existence of crises in Hungarian society and the economy. The dramatic turnover in the leadership at the conference—which resulted in his ouster and the ouster of seven of his old-guard associates from the Politburo—revealed the depth of dissatisfaction among the party rank and file with the top leadership's failure to come to grips earlier with the economy's declining performance.

The post-Kadar leadership has inherited an exceedingly difficult economic and social situation. Their greatest challenge will be to maintain stability while implementing austerity measures needed to cope with growing financial pressures and carrying out reforms essential to long-term growth. Sharp cutbacks in investment and Western imports, which enabled Hungary to weather its 1982-83 financial crisis, cannot be repeated without further undermining long-term growth prospects. Yet the leadership must also be cautious about forcing deep cuts in consumption because stagnant living standards, rising inflation, and widening income disparities have already heightened social tensions.

To better understand the problems the new Hungarian leadership faces, this paper will examine the main indicators of economic performance for Hungary between 1980 and 1987. Emphasis will be given to hard currency foreign trade performance and debt because Hungary's financial situation will largely dictate economic policy into the 1990's. This background will lead to an examination of the government's 1988-90 austerity program and 1988 results, which indicate restructuring was still proceeding at an unsatisfactory pace. Lastly, the paper will compare the alternative policy options the leadership was contemplating in mid-1989 given the continued lack of structural adjustment and their likely implications for economic growth, consumer welfare, and financial recovery.

II. ECONOMIC PERFORMANCE, 1980-87

A. SLOW GROWTH, LOW PRODUCTIVITY

The price of adjusting to external financial constraints has been a more severe slowdown in economic growth than the leadership

² Unattributed report, "The Public Economic Mood in June 1988," *Nepszabadsag*, Aug. 13, 1988, p. 4.

³ Budapest radio, Apr. 19, 1988.

bargained for. After a relatively healthy rate of growth through 1977, the tempo of growth by all standard measures—official national income statistics both in net material product (NMP) and gross domestic product (GDP) and Western recomputations of gross national product (GNP)—slowed dramatically. (See table: Alternative Estimates of Production and Utilization.) GNP growth registered only an average annual 0.9 percent increase in 1978–87 compared with a 3.2 percent average annual increase during the 1970–78 period. Official estimates of NMP and GDP exhibit a similar trend, but place growth in both periods slightly higher.⁴

ALTERNATIVE ESTIMATES OF PRODUCTION AND UTILIZATION

[Percent change over previous year]

	1981	1982	1983	1984	1985	1986	1987
Hungarian official data:							
NMP produced.....	2.5	2.6	0.3	2.5	-1.4	0.9	4.1
NMP used.....	.7	-1.1	-2.7	-6	-6	3.9	3.2
Consumption (material).....	3.0	1.4	.6	.9	1.2	2.0	3.1
Net capital formation.....	-8.6	-12.4	-20.4	-11.3	-15.0	21.4	2.7
GDP.....							
Industry.....	2.9	2.8	.7	2.7	-.3	1.5	3.2
Agriculture and forestry.....	5.0	4.7	1.8	2.5	-2.1	-.5	3.2
Construction.....	3.3	11.6	0.1	4.6	-4.1	3.5	3.0
Final domestic demand.....	1.3	-.7	2.8	-5.3	-4.6	.1	7.8
Consumption.....	1.4	-.1	-1.7	.3	.4	3.9	3.2
Gross capital formation.....	2.9	1.2	.5	1.2	1.7	2.4	3.2
	-2.2	-3.5	-7.3	-2.4	-3.5	8.6	3.2
Western calculations:							
GNP.....	.7	3.6	-1.0	2.6	-2.6	2.1	1.2
Industry.....	1.0	1.2	1.0	3.5	.1	1.1	2.6
Agriculture, forestry.....	-.8	13.0	-5.8	6.4	-8.6	4.1	-.9
Construction.....	-2.9	-2.8	-.1	-3.5	-10.0	1.8	2.5
Transport.....	2.0	-1.5	-1.7	.8	-.8	.9	.5
Trade.....	2.5	1.1	-1.0	-.2	.4	2.0	2.2
Housing.....	1.6	1.6	.8	.8	1.6	1.1	1.4
Government.....	1.7	.9	1.9	1.7	1.0	2.4	2.0
GNP by final use, total.....	-.7	.7	-3.4	.3	-2.1	4.4	1.0
Consumption, private.....	2.1	.5	-.7	.3	.4	1.4	1.5
Investment.....	-5.5	.9	-9.3	-.4	-7.8	11.5	-.5

Source: Statisztikai Évkönyv 1987, p. 62, 64; L.W. International Financial Research, Inc., Occasional Paper No. 100 of the Research Project on National Income in East Central Europe, 1988, p. 12, and Occasional Paper No. 102, 1988, p. 11.

GNP estimates by Alton et al. indicate that the Hungarian economy has been the third slowest growing economy in Eastern Europe in the 1980's.⁵ This ranking should be treated cautiously, however, because international comparisons of economic growth encounter serious methodological problems and the reliability of

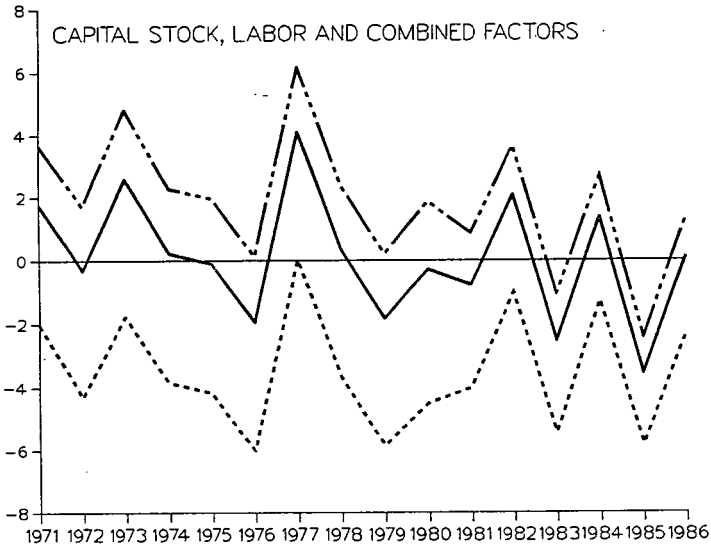
⁴ The differences in the growth rates are explained largely by the fact that none of these measures are directly comparable. GNP measures the value of all final goods and services produced by domestically owned factors of production, whereas GDP measures the value of all final goods and services produced within the country. Both measures include depreciation, which, along with services, is excluded from NMP. The growth rates may also differ because of biases—NMP estimates tend to contain a modest upward bias, whereas Western recomputations of GNP may understate real growth—although these biases are considered to be less significant in Hungary than in other East European countries. (See PlanEcon Report, Vol. IV, No. 7, Feb. 18, 1988 and L. W. Financial Research, Inc., OP-100, "Economic Growth in Eastern Europe, 1970 and 1975–87," New York, 1988.)

⁵ L.W. International Financial Research, Inc., OP-100, "Economic Growth in Eastern Europe, 1970 and 1975–87," New York, 1988.

country data varies widely. (See "Alternative Measures of Growth and Development Levels: Comparisons and Assessment," by Gerhard Fink and Peter Havlik, vol. 1.) Nonetheless, it is clear, especially since Hungarian data are among the most detailed and reliable in Eastern Europe, that the Hungarian economy has not achieved the rate of growth one might expect of the region's foremost reformer. Growth would have been even lower if Hungary had not allowed expansion of the private and small cooperative sectors, which have performed much better than the state enterprise sector that dominates the economy.

The principal causes for the slowdown in growth appear to be the impact of austerity measures, particularly investment and import cuts, and a fall in total factor productivity. Planners have sought to move the economy from an extensive to a more intensive pattern of growth by increasing the contribution of total factor productivity growth to economic growth, but combined capital, labor, and energy productivity growth was lower in the 1981-86 period than in 1976-81. (See graphic: Conventional Labor, Capital, and Combined Factors Measures of Productivity Change.)

Hungary: Conventional^a Labor, Capital and Combined Factor^b
Measures of Productivity Change
(percent)



Legend

- Conventional Capital Productivity Change
 Conventional Labor Productivity Change
 Conventional Combined Factor Productivity Change

^aThe productivity calculations presented here use a conventional formulation for output. It measures output as GNP or the sum of value-added production in the 36 domestic sectors of the economy.

^bA Cobb-Douglas production function is assumed. Ordinary least squares estimation of the equation: $\frac{\text{GNP}}{\text{CAPITAL}^\alpha \cdot \text{LABOR}^{(1-\alpha)}}$ yields an estimate of 0.33 for α .

Source: L.W. International Financial Research, Inc., Research Project on National Income in East Central Europe, various issues of the Occasional Papers.

Capital productivity.—Import controls on Western capital goods and investment cuts that slowed the modernization of industrial facilities do not fully explain declining capital productivity in the 1981–86 period; capital productivity actually fell more in 1976–81 when investment was higher. Limited factor market reform in Hungary's long-running reform program offers a better explanation for such an extended period of uniformly negative capital productivity. Failure to end the subsidization of ailing enterprises, to allow more prices to be market-determined, and to enhance the role of profits in decisionmaking has precluded a more efficient allocation of capital and other resources in the economy. (See next chapter, "Hungary's Political and Economic Transformation (1988–89) and Prospects after Kadar," by Paul Marer.)

Labor productivity.—Lower labor productivity can be traced mainly to the impact of tighter wage regulations in state enterprises and the expansion of the private sector in the 1980's. Firms have had few incentives to use labor efficiently because centrally determined wage schedules have kept labor costs artificially low. Workers have also lacked incentives for greater effort on their state jobs because declining real wages have forced nearly three-fourths of the work force to seek part-time employment in the private sector to maintain their standard of living. Widening income differentials between state and private jobs have aggravated social tension and hurt productivity in the state sector. The personal income tax introduced in 1988 is supposed to narrow these differentials, but additional planned cuts in real wages and consumption mean enterprise managers will probably continue to have trouble commanding stricter labor discipline and higher productivity.

The need to retrain and relocate workers has further slowed efforts to boost labor productivity and to restructure industry. In 1986–87, about 70 percent of job applicants were unskilled laborers, whereas 83 percent of the reported vacancies called for special skills. Hungarian state industry is unable to fill vacancies for skilled labor because many workers with advanced technical training can earn more in private sector pursuits such as cab driving. According to Hungary's National Technical Development Board, every third technical university graduate earns a living in a nonrelated profession. Workers' attachment to their places of residence and serious housing shortages have been additional obstacles to labor mobility. To encourage more mobility, policymakers must eventually lift wage controls, expand retraining programs, and improve the housing supply.

Productivity increases may also have been hampered by the population's declining health. The deteriorating economic situation, which has forced more people to work longer hours to make ends meet, and crowded living conditions have taken their toll. Statistics show increasing incidences of heart disease and alcoholism as well as a sharp rise in the mortality rate of men between the ages of 40 and 59. Moreover, the decline in the health of the population has not been matched by a corresponding improvement in state health services. Thus, the cost to the economy of absenteeism and lengthy illnesses is likely to rise in coming years.

Energy productivity.—Substantial energy investments in recent years have neither increased production—with the exception of nu-

clear power, which accounted for less than 15 percent of domestic energy production in 1987—nor improved efficiency significantly.⁶ Investment in oil and gas production has had limited payoff because of the small size of reserves, complex geological conditions, a shortage of hard currency to acquire modern technology for deep drilling, and restrictions on the export of advanced Western technology. Coal production has also suffered from difficult geological conditions and poor quality reserves. Hungarian planners expect only a slight increase in natural gas extraction and the leveling off of petroleum and coal output in the next decade.

Policymakers have thus tried to encourage conservation with preferential loan programs, but growth in energy productivity has slowed since 1982 and efforts to conserve energy have been less effective than in the West (although more successful than in most of the other CEMA countries). Easy conservation gains may have been exhausted in the early 1980's and energy productivity has probably suffered from the increasing obsolescence of Hungary's industrial base. Greater conservation savings could have been achieved if more investment had gone toward modernizing production facilities and restructuring the economy away from energy-intensive sectors, such as metallurgy, and if policymakers had stopped subsidizing energy prices.

B. STAGNATING STANDARD OF LIVING

GNP domestically used—the share of output devoted to consumption and investment—has increased little in the 1980's because of the need to transfer resources abroad to service Hungary's foreign debt. Personal consumption was checked mainly by curtailing growth in real wages, which were 2.7 percent lower in 1987 than in 1980, and by reducing consumer price subsidies, which contributed to inflation. The annual increase in the consumer price index ranged between 6.5 and 8.5 percent during most of the 1981-87 period, according to official statistics. Prices have been allowed to increase even more sharply since 1987, and inflation, which topped 18 percent in 1988, has become the prime economic concern of most Hungarians. (See table: Real Wage, Income, and Consumption Growth.) If the official cost of living index understates the true rate of inflation—which many economists believe it does by at least a few percentage points—than the fall in average real wages could have been 5 percent or more over the 1980-87 period.

HUNGARY: REAL WAGE, INCOME, AND CONSUMPTION GROWTH

[Percent change over previous year]

	1981	1982	1983	1984	1985	1986	1987
Real wage per earner.....	1.1	-0.7	-3.2	-2.4	1.3	1.9	-0.4
Real income per capita.....	2.9	.9	1.1	1.1	1.9	2.3	.7
Per capita consumption.....	2.6	1.3	.7	1.4	1.5	2.2	3.9
Consumer price index.....	4.6	6.8	7.4	8.2	6.9	5.4	8.5

Source: Statisztikai Evkonyv 1987, p. 229, 232.

⁶ Statisztikai Evkonyv 1987, pp. 81, 175.

Despite declining real wages, per capita consumption increased each year in real terms, or a cumulative 14.4 between 1980 and 1987. Growth in personal consumption was particularly strong in 1987 because consumers went on a buying spree in anticipation that large subsidy cuts and the introduction of a value-added tax in January 1988 would cause prices to rise sharply. Nonfood retail sales, for example, were up 9.2 percent—the largest such increase since 1974.

Consumption has been supported by the rapid growth of earnings from private sector activities, large drawdowns in savings, and growing transfer payments, such as pensions and social welfare assistance. Some Hungarians have profited immensely from expansion of the private sector as evidenced by the growing number of lavish, newly constructed homes in the Buda hills and expensive Western automobiles bearing Hungarian license plates. Conspicuous consumption is common among the nouveau rich because of limited investment opportunities and high inflation. In contrast, many of those who lack the skills or the drive to participate in the private sector have found they can barely make ends meet on a full-time state job.

Although the Hungarian Statistical Office does not publish data on income distribution, official income statistics and press reports suggest that poverty has spread to widening segments of the population and that income distribution is becoming more unequal. In July 1988, the Hungarian Statistical Office publicly disclosed for the first time that 18 percent of the population, or nearly 2 million people, lived below the "socially accepted subsistence level" in 1987 and that of these people, some 600,000 persons, or 6 percent of the population, lived below the "subsistence level."⁷ Most of those living below the subsistence level were large families and pensioners. The Ministry of Health and Social Affairs is working out a long-term welfare program and a new pension system, but the authorities lack the funds to assure adequate assistance to all those needing help. The leadership's inability to fulfill the social contract and provide steadily improving living standards to all segments of the population is for most Hungarians the most visible aspect of the perceived economic crisis.

C. MISALLOCATED INVESTMENT AND LIMITED RESTRUCTURING

The planners' decision to make investment bear the burden of domestic adjustment appeared prudent initially, but the way investment cuts have been carried out has slowed efforts to restructure Hungarian industry along more competitive lines. Investment spending, both including and excluding depreciation, was cut much more than consumption for reasons of social policy and for faster improvement in the trade balance given investment's higher import content. Excessively high rates of investment in the 1970's had resulted in a lot of wastage, aggravated trade imbalances, and

⁷ The Statistical Office terminology defines "subsistence level" as the lowest level of income needed to cover the barest daily needs. The "socially accepted subsistence level" is about 20 percent higher, but does not include the resources needed to buy a home. An urban couple had to earn at least 3,850 forints a month in 1987 to reach the former level and 4,590 forints in the later. The corresponding levels for rural couples were 3,020 and 3,780 forints. From the Weekly Bulletin, Aug. 5, 1988, p. 4.

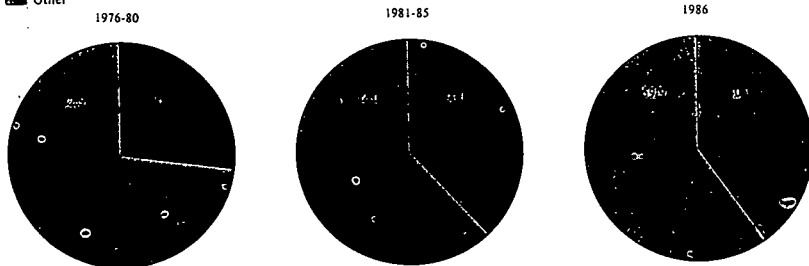
contributed to the sharp rise in foreign borrowing. Hungarian data show that gross fixed investment in real terms tapered off in 1978-79 and declined each year from 1980 to 1985. By yearend 1985, the volume of investment was 14.7 percent lower than in 1980. The share of investment (including stockbuilding) in gross domestic product, meanwhile, fell from 34 percent in 1978 to 23 percent in 1985.⁸

While the decline in investment, coupled with controls on capital goods imports from the West, helped improve the trade balance in the short term, it held back the establishment of new ventures and the modernization of potentially dynamic enterprises. Modernization efforts were aggravated by the fact that an increasing share of resources was allocated to inefficient enterprises in the heavy industry and energy sectors. (See graphic: Share of Energy in Industrial Investment.) The cost of these investments has been high since they are industries where Hungary does not have a comparative advantage. The lack of structural adjustment during this period is illustrated by the limited change in the structure of industrial output, employment, and capital stock since 1975. (See table: Branch Structure of Industry.)

Hungary: Share of Energy in Industrial Investment

Percent

■ Energy
■ Other



Source: Statisztikai Évkönyv, 1986.

BRANCH STRUCTURE OF INDUSTRY

[Percent share]

	Output		Employment		Fixed assets	
	1975	1987	1975	1987	1975	1987
Mining.....	9.2	6.9	7.2	7.7	9.0	10.8
Electric energy.....	5.1	6.0	2.2	2.9	15.2	19.9
Metallurgy.....	10.0	8.0	6.0	5.7	10.8	9.0
Engineering.....	24.0	25.9	31.6	32.2	17.6	17.0
Machinery.....	6.1	5.8	8.4	8.3	4.0	3.8

⁸ Statisztikai Évkönyv 1987, p. 76.

BRANCH STRUCTURE OF INDUSTRY—Continued

(Percent share)

	Output		Employment		Fixed assets	
	1975	1987	1975	1987	1975	1987
Vehicles.....	6.9	7.1	6.2	6.4	55.6	5.0
Electrical engineering.....	3.1	3.3	3.4	3.8	2.1	2.0
Telecommunications.....	2.7	4.7	5.6	6.5	2.6	3.0
Precision engineering.....	1.7	22.5	3.3	3.6	1.3	1.5
Metal products.....	3.4	2.4	4.4	3.5	2.0	1.6
Building materials.....	3.2	3.3	4.8	4.5	6.9	5.3
Chemicals.....	16.3	19.5	6.8	7.5	15.9	15.2
Total heavy industry.....	67.8	69.6	58.6	60.6	75.4	77.7
Light industry.....	14.4	12.7	26.4	22.7	12.2	9.9
Miscellaneous.....	1.0	0.9	3.6	2.5	1.1	.6
Food.....	16.8	16.6	11.4	14.2	11.3	12.3

Source: Statisztikai Évkönyv, 1988, p. 94.

The Seventh Five-Year Plan (1986–90) envisaged a resumption of investment growth with greater emphasis on projects that would promote structural change. Gross fixed investment increased 2.9 percent in 1986 and 5.5 percent in 1987, but efforts to shift resources away from slumping sectors, in particular steel and coal mining, proceed slowly and only two state enterprises were forced into bankruptcy. Moreover, state subsidies to troubled enterprises increased sharply, pushing the state budget deficit to 2.9 percent of GDP in 1987. Such support also reduced financial discipline and insulated enterprises from international market signals and the limited market-oriented reforms introduced into the domestic economy.

D. LAGGING COMPETITIVENESS IN FOREIGN TRADE

A major disappointment for the Hungarians has been their inability since 1980, despite devaluations and export incentives, to increase hard currency export earnings. A vicious cycle emerged as poor export performance forced planners to repeatedly rein in Western imports, which, in turn, further weakened the competitiveness of many export industries.

Between 1980 and 1986, Hungary's nonoil export earnings remained relatively stable despite a double-digit increase in export volume. (See tables: Value, Volume, and Price of Hard Currency Exports as well as Foreign Trade and External Financial Indicators.) Earnings did not follow volume trends, largely because about 70 percent of Hungarian goods exported for hard currency consist of primary products whose prices were declining in world markets. Since the mid-1970's, the volume of primary product exports has increased faster than the volume of manufactured exports for which world market demand and price trends have been more favorable. Hungary has lost considerable market share to developing countries (primarily the Southeast Asian exporters) in the export of industrial goods to the OECD, although it has managed to hold its own against the other CEMA countries. The loss of market share extended to all industrial sectors, with the smallest loss in the

chemical sector and the greatest in engineering products and manufactured consumer goods.⁹

HUNGARY: VALUE, VOLUME, AND PRICE OF HARD CURRENCY EXPORTS

(Percent change over previous year)

	1980	1981	1982	1983	1984	1985	1986	1987
Value:								
Energy products.....	23.3	-3.8	51.1	43.6	-8.0	-44.9	-19.2	11.4
Raw materials.....	13.6	-11.8	-7.0	5.6	6.2	-4.1	4.6	17.6
Machinery and equipment.....	7.2	7.7	25.4	-14.9	-17.5	12.8	4.1	.0
Consumer durables.....	10.8	-5.9	-12.4	-1.7	-2.0	-2.7	19.4	18.8
Food and agricultural products.....	23.8	14.1	-3	-10.0	-3	-11.9	-7.6	4.8
Total.....	15.7	-0.7	2.2	.4	-1.7	-9.8	1.1	11.6
Volume:								
Energy products.....	-8.9	-14.8	70.9	58.1	.3	-45.0	41.7	.0
Raw materials.....	.8	-5.1	-.1	15.4	9.8	-2.9	-.7	9.6
Machinery and equipment.....	-2.0	10.6	30.1	-9.8	-12.9	12.1	-8.3	-7.3
Consumer durables.....	-1.8	-2.7	-6.3	7.1	3.1	-1.6	1.7	10.3
Food and agricultural products.....	8.4	11.8	10.7	2.7	10.3	-3.2	-11.9	1.1
Total.....	2.2	1.7	10.7	10.8	4.7	-6.6	-3.8	4.7
Price:								
Energy products.....	35.2	12.9	-11.6	-9.2	-8.3	.0	-43.0	11.4
Raw materials.....	12.8	-7.1	-7.0	-8.5	-3.4	-1.2	5.3	7.3
Machinery and equipment.....	9.4	-2.6	-3.6	-5.6	-5.2	.6	13.5	7.9
Consumer durables.....	12.8	-3.2	-6.5	-8.2	-4.9	-1.1	17.4	7.7
Food and agricultural products.....	14.1	2.2	-10.0	-12.4	-9.6	-9.0	4.9	3.7
Total.....	13.3	-2.3	-7.6	-9.4	-6.1	-3.4	5.1	6.6

Source: Various issues of Statisztikai Évkönyv.

FOREIGN TRADE AND EXTERNAL FINANCIAL INDICATORS

(In millions of dollars)

	1981	1982	1983	1984	1985	1986	1987
Trade (customs basis):							
Exports, total.....	4,890	4,997	5,015	4,931	4,448	4,496	5,019
(Of which nonenergy).....	4,564	4,505	4,308	4,280	4,087	4,206	4,696
Imports, total.....	4,973	4,536	4,478	4,323	4,333	4,940	5,390
(Of which nonenergy).....	4,752	4,070	3,856	3,800	3,843	4,583	5,067
Balance.....	-83	459	533	604	114	-444	-370
Trade (balance of payments basis):							
Exports.....	4,877	4,876	4,847	4,965	4,475	4,136	5,078
Imports.....	4,432	4,110	3,970	3,729	4,180	4,675	5,075
Balance.....	445	766	877	1,236	295	-539	3
Current account balance.....	-727	-92	296	330	-457	-1,418	-847
Terms of trade (percent change).....	2.2	-1.1	-2.5	-2.3	-1.1	-6.9	-2

Source: PlanEcon Report No 7, Feb. 18, 1988; National Bank of Hungary, Quarterly Review, various issues.

Trade developments with the CEMA countries, particularly with the Soviet Union, have also had negative effects, both direct and indirect, on Hungary's dollar trade. Since 1982, Hungary has

⁹ Dr. Andras Inotai, "Reflections on the International Competitiveness of the Hungarian Economy," Hungarian Business Herald, 1988/1.

gradually lost two key props of its hard currency exports—the re-export of Soviet oil for hard currency and a special hard currency trade arrangement with the Soviet Union.¹⁰ The near stagnation of traditional energy and raw material imports from the Soviet Union that could be purchased for rubles disrupted Hungary's long practice of converting a portion of ruble imports of oil into dollar exports. Because lower world oil prices have limited Soviet hard currency receipts, the Soviets have also become increasingly reluctant to purchase specific Hungarian goods, mostly grain and meat products, for hard currency and have required Hungary to pay for more of its crude oil imports with hard currency.

Hungary's hard currency surplus with the socialist countries thus steadily declined from a peak of about \$800 million in 1982 to about \$6 million in 1987. Without a large hard currency surplus with the Soviets, Hungary has found it difficult to offset its chronic trade deficits with the West. Moreover, ruble export volume has grown so much faster than ruble import volume in the 1980's that Hungary has been forced to devote production capacity and dollar imports to support production for CEMA, resources that otherwise probably could have been devoted to increasing dollar exports.

In 1985 and 1986, higher-than-planned growth in consumption and investment, coupled with pent up demand for Western capital and consumer goods, led to a rapid deterioration in Hungary's external accounts. Hard currency imports surged, while hard currency exports fell, in part to meet the stronger domestic demand. The depreciation of the dollar in this period and declining commodity prices, especially the rapid decline of meat and wheat prices, contributed to a large terms of trade loss—6.9 percent in 1986 alone, which probably cost the trade balance over \$400 million. The hard currency trade balance on a payments basis swung from a \$1.2 billion surplus in 1984 to a \$540 million deficit in 1986, and, along with rising interest charges on debt, pushed the current account deficit to a record \$1.4 billion.¹¹

In 1987, Hungary's trade balances with both hard currency and ruble markets improved. Hungary reduced its hard currency current account deficit by almost \$550 million, to \$847 million thanks to higher export earnings, import controls, and the near doubling of tourism revenues. Hard currency export earnings increased for the first time since 1984 and nonruble terms of trade fell only 1.4 percent. A more active exchange rate policy and a change in the domestic pricing system increased the profitability of exports and contributed to the increased volume of sales. The improvement in the current account was not as great, however, as planners had expected and the deficit remained excessively large. At the same time, Hungary ran a ruble surplus even though ruble export volume growth was slower than in 1980–85 thanks to a nearly 4-

¹⁰ Paul Marer, "Ungarns Aussenhandel, Zahlungsbilanz und Schuldenentwicklung 1970–1990" in *Europäische Rundschau*, No. 3, Vienna, 1988.

¹¹ The trade balance on a payments basis—reported in the Hungarian National Bank's *Quarterly Review*—is generally more favorable to Hungary than the trade balance on a customs basis, which Hungary reports in its *Statistical Yearbooks* and *Foreign Trade Yearbooks*. In most years the payments accounts show exports are modestly lower and imports substantially lower than on a customs basis because customs, insurance, and freight costs are reported separately in the former case. Discrepancies may also arise due to the timing of recording the transactions.

percent improvement in the ruble terms of trade—the first improvement since 1974. (See table: Ruble Trade.) The prices of many key Hungarian export commodities stabilized or increased after several years of decline, while Soviet energy and raw materials prices declined. A ruble surplus is not, however, necessarily desirable from Hungary's perspective due to the nonconvertibility of the ruble.

RUBLE TRADE

(Percent change)

	1981	1982	1983	1984	1985	1986	1987	1988
Export volume	3.9	3.3	7.7	7.0	8.3	-0.2	2.6	0.6
Import volume	-3.4	2.8	1.5	-4	-4	3.7	4.0	3.9
Terms of trade	-3.9	-3.0	-2.7	-1.8	-7	-1	3.9	3.3
Trade balance (millions of rubles)	-449.0	-662.0	-529.0	-221.0	328.0	35.0	165.0	167.0

Source: PlanEcon Report No. 18, May 5, 1989; Statisztikai Évkönyv 1997.

E. RISING DEBT BURDEN

Repeated doses of austerity stabilized Hungary's gross hard currency debt during the 1980-84 period, but since then debt has risen rapidly from \$8.8 billion at the end of 1984 to \$17.7 billion by December 1987. (See table: Foreign Debt and Reserves.) Net debt—measured as gross debt less financial assets and gold—rose at an even faster rate over this period from \$4.1 billion to \$10.9 billion.¹² That net outstanding debt is very large is underscored by its size relative to exports of goods and services. This ratio rose from 66 percent in 1984 to an estimated 152 percent in 1987. Among the East European countries, only Poland has a higher ratio. Other key indicators of creditworthiness, such as net debt to GDP and the debt service ratio also deteriorated in 1985-87.

HUNGARY: FOREIGN DEBT AND RESERVES

(In millions of dollars)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Foreign debt:									
Convertible currencies	9,090	8,697	7,715	8,250	8,836	11,760	15,086	17,739	17,349
Short term	3,347	2,848	1,764	2,123	1,421	1,705	2,422	1,954	2,136
Long term	5,743	5,849	5,951	6,127	7,415	10,055	12,664	15,785	15,213
Nonconvertible currencies	1,224	1,327	1,274	1,367	1,260	1,230	1,109	1,026	638
Reserves:									
Convertible currencies	1,652	1,154	1,564	2,109	3,119	3,062	2,194	2,194	2,194
Gold (national valuation)	381	146	346	466	640	751	525	525	510

Source: National Bank of Hungary, Quarterly Review, various issues.

The rapid rise in foreign debt stems in part from the financing of large current account deficits, but the cumulative current account deficit between 1984 and 1987 was about \$3 billion, while gross debt rose by almost \$9 billion. The discrepancy is explained by several

¹² Financial assets include foreign currency reserves and other liquid assets as well as accounts receivable, which are mostly trade credits to other countries.

factors, including exchange rate effects and the use of borrowed funds to pad foreign exchange reserves and to finance export credits.

Exchange rate effects.—According to PlanEcon estimates, close to \$4 billion of the increase in debt was due to exchange rate effects.¹³ Since 1985, the Hungarian National Bank has increasingly relied on loans denominated in West Germany marks and Japanese yen and has also converted a part of Hungary's debt into these currencies. The switch in currency composition to appreciating currencies has inflated total debt reported in U.S. dollars and also increased Hungary's dollar liabilities. Because at least 50 percent of Hungary's hard currency export earnings are denominated in dollars and yen earnings are negligible, Hungary needs to exchange dollars, and an increasing amount of them, to service its outstanding yen debt.

Reserves.—In 1985, Hungary probably devoted about \$1 billion to rebuilding its foreign exchange reserves to improve its creditworthiness. Hungary, however, had to draw about \$850 million from reserves in 1986 and 1987 because of larger than planned current account deficits.

Export credits.—Total outstanding credits to Third World countries, which primarily represent export financing, exceed \$2 billion, according to PlanEcon. Some of these loans are overdue and some may have been supported by medium- and long-term credits.

With the increase in foreign debt, Hungary's annual financing burden has grown significantly. Although principal repayments on many of these new loans will not begin until the end of the decade, interest payments have risen with the increase in debt and are a severe drain on the economy. Between 1980 and 1987 net interest payments, which contributed about \$700 million to \$1.1 billion to the current account deficit, were only covered by a trade surplus once, in 1984. Moreover, annual debt service costs have exceeded 40 percent of hard currency earnings since 1985.

In contrast to its large hard currency debt, Hungary's gross ruble debt stood at \$1,026 million at the end of 1987, having declined from a high of \$1,367 million in 1983. Net debt figures are not published. The ratio of ruble debt to ruble current account receipts is estimated by Paul Marer at around 0.1 percent, about one-twentieth of that in dollar trade.¹⁴

III. RETURN TO AUSTERITY, 1988-90

A. NARROWING POLICY OPTIONS

Hungarian policymakers, having failed to invest wisely money borrowed from the West, now face a policy dilemma in trying both to stabilize Hungary's foreign debt and to lay the basis for improved economic performance in the medium term. On the one hand, Hungary needs to devote more resources to modernizing industry, increasing capital, labor, and energy productivity, and improving export competitiveness. On the other hand, rising debt

¹³ PlanEcon Report, No. 7, Feb. 18, 1988.

¹⁴ Paul Marer, unpublished paper, "Hungary's Dollar and Ruble Trade and Payments and the Domestic Economy," 1988.

service and inadequate hard currency earnings limit the resources available for meeting these needs and will force policymakers to make difficult choices among devoting resources, exports, investment, and consumption for years to come.

Some possible policy tradeoffs underscore how little maneuvering room Hungarian policymakers have, especially if halting the growth of the foreign debt remains a top policy priority:

- Restoring faster growth in investment and shifting resources toward processing industries to support an export drive would accelerate hard currency imports and undermine efforts to improve Hungary's trade balance in the short term. Except for the period of tight import controls in 1979-84, Western imports have accounted for about one-fourth of all investment. Between 1985 and 1987, imports of Western capital goods grew rapidly in response to eased import and investment controls, while the share of imported Western machinery and equipment in investment and GNP increased.
- Hard currency imports would also rise if in response to increasing social tensions the leadership abandoned efforts to contain consumption. Unlike capital goods imports allocated by strict market criteria, consumer goods imports would not help improve energy efficiency nor help speed up the restructuring of Hungarian industry.
- The most substantial short-term improvement in the trade balance probably could be achieved by drastically slashing both consumption and investment, thereby curtailing import demand. Taking this step would only postpone a debt crisis, however, because Hungary's industrial base would become even more obsolete and uncompetitive. Moreover, such an approach would probably provoke much social unrest.

The 3-year austerity program that Budapest introduced in January 1988 seemed to be an attempt to steer a middle course between these options, calling for an annual decrease in consumption of about 2 percent and moderate increases in enterprise investment and hard currency exports. It aimed to balance the budget and generate a hard currency current account surplus by 1990 with, among other measures, reduced subsidies to loss-making enterprises, tighter and more selective credit policies, import controls, and the granting of direct export rights to enterprises. This program differed from previous adjustment efforts by calling for a drop—on the order of 6 to 8 percent over 3 years—in consumption rather than just a slowdown in its growth. Government planners hoped lower consumption would free resources for investment, reduce demand for imports, and encourage domestic producers to pursue foreign sales more aggressively.

In contrast to previous adjustment efforts, Hungary also has been more actively seeking to promote technological development and industrial modernization necessary for longer-term growth. These goals are being promoted through a major tax reform and a restructuring program supported by the World Bank. The new tax system is supposed to be used to abolish the many exemptions riddling the old system and thereby place insolvent firms under greater pressure either to shape up or to close. It is also supposed to encourage profitable firms to invest by reducing the heavy tax

burden that weighs on Hungarian enterprises. The restructuring project loans from the World Bank provide funding for the implementation of economywide reforms, such as the tax reform, as well as for modernization in specific sectors, including plastics, rubber processing, and the agricultural and food processing machinery sectors. These projects are small in relation to the economy's needs, but policymakers hope they will serve as examples for enterprises in other sectors of how to evaluate their operations, target export markets, and devise strategies for becoming more competitive.

Furthermore, Hungary plans to consolidate other recent reforms that were introduced to ease capital constraints on growth by tightening financial discipline and by increasing capital mobility. In September 1986, Hungary adopted a bankruptcy law and in January 1987, reorganized the banking system, spinning off five independent, commercial banks from the central bank. In addition, a new enterprise law, effective January 1, 1989, would place state, cooperative, and private enterprises on a more level regulatory playing field. It would also allow state enterprises to become joint stock companies with stockholding by Hungarian individuals and foreign companies as well as the establishment of wholly foreign-owned ventures. These legislative and institutional changes, together with the creation of a bond market and limited equity share trading are supposed to encourage the phasing out of unprofitable activities, promote greater private saving, and help channel savings to their most productive uses.

B. 1988 RESULTS

Economic performance in 1988 showed that Hungarian authorities were making a determined effort to curb domestic demand and improve the hard currency trade balance, but little was done to shift resources from ailing industries to more competitive sectors. With higher-than-projected consumer price inflation of 15.7 percent, real wages dropped 6 to 7 percent, leading to a sizable and larger-than-planned 4 to 4.5 percent drop in private consumption, according to the National Bank of Hungary. Gross fixed investment fell even more sharply by more than 7 percent.¹⁵

The sharp cut in domestic demand, coupled with stronger than projected export earnings due to favorable market conditions for Hungary's traditional exports, produced a \$670 million trade surplus, a \$667 million improvement compared with 1987. Export earnings increased 14.1 percent on a payments basis and some goods normally destined for the domestic market were probably devoted to Western sales as retail trade volume fell almost 7 percent. As a result, the current account deficit narrowed to \$592 compared with \$847 million during the previous year. The yearend current account target of \$500 million was overshot somewhat because of higher than planned interest payments on the foreign debt and large travel expenditures following the January 1, 1988, liberalization of passport regulations.

In contrast, Hungary made little progress in shifting resources from heavy industry to more competitive sectors. Industrial output

¹⁵ National Bank of Hungary, *Quarterly Review*, December 1989.

declined 0.4 percent in 1988, but output in the energy-intensive and inefficient metallurgy sector increased 2.7 percent. Subsidies to unprofitable enterprises are being reduced only slowly, and state enterprises, especially major industrial ones, which absorb the bulk of subsidies, are largely immune to the bankruptcy threat. In contrast to the moderate growth in metallurgy, output in machine building, important to modernizing Hungary's industrial base, grew only 1.0 percent. Performance also continued to lag in potentially dynamic export sectors, such as food processing—whose output declined by 2.4 percent—and in light industry. The lack of structural adjustment led former Deputy Premier Marjai to downplay the positive trade results and sum up performance as follows:

The major problem remains that this result is not associated with structural changes and transitory factors, such as a boom in the world economy and favorable shifts in the terms of trade, play an important role. This means we have not attained the means of sound stabilization.¹⁶

IV. MEDIUM-TERM PROSPECTS

A. THE RESTRUCTURING DEBATE

In response to economic developments in 1988, Hungarian policymakers repeatedly expressed concern that more drastic action was needed to speed up restructuring and assure an economic turnaround in the medium term. If little progress is made in restructuring and improving productivity, more material and energy resources will be needed, and Hungary will either have to face lower consumption than otherwise would be the case or increase its foreign borrowing.

On July 13, 1988, the Central Committee met to consider alternative options for future economic policy in view of the continuing lack of structural adjustment. Two economic policy alternatives were presented, the so-called "Plan A" for faster restructuring and "Plan B" for a more measured approach. The key elements of each plan have been described in the Hungarian press.¹⁷

Plan A.—Plan A calls for radical changes to turn the economy into a "socialist market economy," one more sensitive to market influences. It envisages a broader opening of the economy to the West to expose it to greater foreign competition, faster restructuring of industry, and a significant expansion of the private sector. A major element of Plan A would be the loosening of import restrictions to promote greater competition in the domestic market. The plan also calls for more quickly freeing prices and wages from administrative controls, drastically reducing subsidies, and relying much more heavily on private and foreign capital to promote modernization.

Plan B.—Plan B represents a more cautious approach to adjustment and would basically be a continuation of the policy path followed during the 1980's. Economic policy would focus first and foremost on the stabilization of Hungary's foreign debt, and efforts to restructure the economy would be less aggressive than under Plan

¹⁶ Budapest MTI in English, Sept. 13, 1988.

¹⁷ For a summary of the policy options and Central Committee discussion see Radio Free Europe Situation Report 11, Aug. 5, 1988, "CC Endorses Drastic Economic Proposals," by Karoly Okolicsanyi, p. 3.

A. Subsidies would not be reduced as quickly, prices, import, and wage controls would be lifted more gradually, and the private sector would expand more slowly. Plan B would cause fewer conflicts in relations with CEMA member countries and less social tension in the short run; unemployment would number only 30,000 to 50,000 persons.

While 104 out of the 108 Central Committee members endorsed Plan A, it was agreed that both plans needed be worked out in more detail before a final decision could be made. Some key policy-makers spoke out, however, against the more radical plan. The new President of the National Bank, Ferenc Bartha, and other senior officials of the National Bank questioned foreign lenders' willingness to provide the financial backing needed to carry out Plan A.

Such debates were still going on in mid-1989 as the leadership sought to develop a new economic program in response to further deterioration in Hungary's economic performance. Structural change has continued to proceed slowly, and Hungary's financial situation became more precarious in the first half of 1989 because of heavy spending on foreign travel by Hungarians taking advantage of relaxed travel rules and by a surge in Western imports following the lifting of import restrictions on many types of goods. By the end of June, the hard currency current account deficit had reached \$971 million, according to preliminary figures released by the National Bank of Hungary.¹⁸

Hungary's most reformist leaders, including party chairman Rezső Nyers, are pushing for greater integration of the Hungarian economy into world markets, a goal that would be achieved by establishing closer relations with the European Community, reducing trade with Eastern Europe, and gradually phasing in the use of convertible currency to replace rubles in trade with the Soviet Union. A new 3-year economic program that Premier Nemeth plans to present to the National Assembly in the fall may draw on this theme. Other details of the new program are not clear and the leadership does not yet seem to have agreed on a comprehensive strategy that balances competing macroeconomic goals. There has been much discussion in the Hungarian press, for example, over whether Hungary can best preserve its solvency and promote an economic recovery through austerity measures or through a selective growth strategy.

Moreover, the sweeping political changes taking place in Hungary, including the sprouting of new political groups and movement toward multiparty parliamentary elections, are diverting attention from the hard economic policy choices that need to be made. The leadership is obviously reluctant to take measures that could increase inflation or unemployment before the elections, which are planned for no later than June 1990. The situation led Politburo member and State Minister Imre Pozsgay to remark in July 1989 that "the rate of political change must be accelerated since the rate sustained so far is paralyzing the economy."¹⁹

¹⁸ Financial Times, "Lifting Curbs Costs Hungarian Economy Dear," July 27, 1989.

¹⁹ Madrid ABC in Spanish, interview with Imre Pozsgay by Agnes Koroncz, July 18, 1989.

B. DIFFICULT ROAD AHEAD

The economy's fundamental weaknesses are so deep seated, that whether the leadership chooses a Plan A- or Plan B-type option, Hungary will not be able to achieve sustained economic growth and stabilize the growth of its foreign debt by 1990—the original goals of the 3-year austerity program. Given Hungary's large foreign debt burden and heavy dependence on western imports, hard currency shortages will limit prospects for improved economic performance and living standards into at least the mid-1990's. After becoming General Secretary, Grosz has tried to lower public expectations for rapid improvement in the economy and has acknowledged that it would take 10–15 years to turn the economy around. Prime Minister Miklos Nemeth has also publicly admitted that even sweeping reforms and more rapid restructuring cannot bring spectacular results in a short time. A program like Plan A would, however, lay the groundwork for increasing use of market forces and has greater potential to improve Hungary's economic outlook in the long term than the Plan B approach.

On the one hand, should the leadership move full speed ahead with a program like Plan A, the social costs would be high. For example, wide-scale closures of insolvent companies would throw thousands out of work, while cuts in price subsidies, a devaluation of the forint, and the freeing of many prices would push inflation to much higher levels. According to Nemeth, unemployment could top 100,000 people—actually only 2 percent of the work force—and inflation could reach 30 percent.²⁰

Unskilled workers would be among those most adversely affected by the measures, and social tensions would undoubtedly rise, increasing the probability of at least localized strikes and demonstrations. Moreover, a rapid opening of the economy to foreign competition, even with a substantial devaluation of the forint, would probably lead to higher imports and increase the risk of debt servicing problems.

On the other hand, should Hungarian policymakers stick with a more gradual approach to adjustment to avoid the short-term social and financial risks of a more radical program, they might not be able to bring about a sustainable recovery in the medium term. In the past, consumption has consistently overshot targets as the leadership's and the system's legitimacy has rested largely on steadily improving living standards. Should concern about instability lead policymakers to temper planned reductions in consumption and instead cut back on investment and capital goods imports—as they did in 1979–84—the economic situation would deteriorate even further, significantly reducing the prospects for a turnaround in the 1990's. Such short-term fixes as tighter credit and import controls would slow industrial modernization and undermine the economy's capacity to achieve higher growth rates and to balance its external accounts.

No matter which approach to restructuring planners chose, they will probably continue to try to hold down living standards and investment for at least the next 3 years in order to meet Hungary's

²⁰ See RFE Situation Report 11, Aug. 5, 1988.

debt servicing schedule and to slow the growth of outstanding debt. Hungary will probably also try to reduce the volume of ruble exports, given further expected improvements in the ruble terms of trade and the undesirability of a large surplus in ruble trade. Unless Hungary is successful in diverting these exports to other markets, this could limit growth in certain machinery branches. In any case, foreign payments problems undoubtedly will persist. Hungary would need annual trade surpluses approaching \$1 billion between 1989 and 1992 to meet its existing debt service obligations and to prevent a further increase in its debt. Hungary achieved surpluses of this magnitude in 1983 and 1984, but increasingly competitive global markets and Hungary's own lagging export sector make a repeat performance unlikely. Large borrowing needs will leave Hungary dependant on the goodwill of commercial banks—especially West German and Japanese banks, which have become Hungary's major lenders—if it is to avoid a debt rescheduling.

Hungary should be able to avoid a financial crisis in the short term because it has raised a significant share of its external financing needs for 1989. Hungary also intends to seek additional IMF assistance in 1990 and the current leadership appears just as vehemently opposed to a rescheduling as the previous leadership.²¹ The later secured bridge financing from Western governments and financial institutions to avoid a rescheduling in 1982 because they feared a rescheduling would damage the national Bank's image as an astute financial manager, discredit Hungary's long-running reforms, and result in a long-term cutoff of Western credit. A rescheduling would also probably have necessitated a reduction in imports and tougher austerity. The new leadership undoubtedly has the same concerns; in an August 1988 interview in the government daily, "Magyar Nemzet," a senior National Bank official rejected debt conversion schemes involving foreign investment capital. Such schemes, he charged, "reek of bankruptcy," and would call into question Hungary's ability to service its debt.²²

Hungary may, however, eventually be forced to reschedule its foreign debt or seek some type of debt relief. Its high annual debt service payments leave it vulnerable to debt servicing problems, particularly after 1989 when debt service costs begin rising rapidly. Banker concern about Hungary's creditworthiness has already been reflected in a hardening of terms on syndicated loans. One cannot foreclose the possibility of a new liquidity crisis should adverse external developments, such as higher commercial interest rates or a sharp deterioration in the terms of trade, worsen Hungary's balance-of-payments situation and cause a loss of banker confidence.

²¹ Budapest MTI in English, Oct. 3, 1988.

²² In any case, such schemes would probably not bring too much capital into the economy. The 288 joint ventures formed by the end of 1988 have made commitments to supply about \$320 million worth of Western capital. This sum is dwarfed when compared to Hungary's gross hard currency debt and even to its annual debt repayment obligations.

HUNGARY'S POLITICAL AND ECONOMIC TRANSFORMATION (1988-89) AND PROSPECTS AFTER KADAR

By Paul Marer*

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INTRODUCTION

Janos Kadar died on July 6, 1989, just about a year after the end of the 32-year-long Kadar era (1956-88). During the last year of Kadar's life "the world of Hungary had become topsy-turvy, the process of change outpacing our greatest expectations." This was the summary comment of a Western expert upon returning from a recent visit to Hungary.¹ The statement sums up well the situation in Hungary since the end of the Kadar era and Western reaction to it.

Questions about the Hungarian situation are many. What has happened in that country in the year since the May 1988 Party Congress when Kadar was replaced? Has the process of reform and transformation, occurring at such breakneck speed, become irreversible? How likely is it that we will witness in Hungary something similar to what had happened at Tiananmen Square? If the transformation will continue, where is Hungary going? Will its economic problems then be solved? What is the United States' interest in the events in Hungary? What are the policy implications for the West?

No one can pretend to have the definitive answers to these questions. But a few observations and interpretative comments on them may be helpful in sorting out the issues.

POLITICAL DEVELOPMENTS

A plausible interpretation of recent political changes in Hungary is as follows:² In the jockeying for power that preceded the Party

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¹ Ivan Volgyes, in his letter to the author.

² This is based on the lecture given by one of Hungary's leading intellectuals, Márton Tardos, at the Adenauer Stiftung in Bonn, on June 2, 1989.

Congress of May 1988, the younger and more energetic Károly Grosz replaced the frail and ailing Janos Kadar as Party First Secretary.³ It was Grosz' full intention to continue Kadar's policy of geopolitical balancing and domestic compromise. However, the new leaders did not realize that the two pillars that supported Kadar's policies—the Brezhnev Doctrine and steady improvements in the standard of living—have crumbled in the meantime.

Gorbachev and his influential advisers in effect repudiated the Brezhnev Doctrine. From this, Hungary's leaders could infer that they are on their own and should not count on Soviet troops under any circumstances.⁴ The repudiation of the Brezhnev Doctrine made it possible for Hungary's politically attuned population to express long-suppressed views and desires. The other pillar of the Kadar policy was steady improvements in the standard of living. The previous essay by the author showed why and how during the 1980's this pillar, too, has crumbled. There were no more reserves, under the prevailing model of political economy, for Mr. Grosz to tap.

Given the extremely high dependence of the Hungarian economy on imports from the West, the distaste of Hungary's military leaders for using troops against their own people, and the absence of a Zomo-type political police,⁵ Grosz probably concluded that his best course was to make whatever domestic political concessions he thought would be sufficient to keep the lid on, given the potentially explosive situation in the country. Thus, he made concessions to (or allowed concessions to be wrung from him by) the liberal-reformer wing of the Communist Party, the rapidly organizing political opposition, and the population.

Many of the political liberalization measures introduced or accepted by the Party were intended as lightning rods for the pent-up tensions of the population. The examples include: taking down the barbed wire fortifications on the border with Austria; allowing unlimited travel to that neighboring country; giving Hungarians the right to have a valid global passport; permitting substantial press freedoms; revising the Party's previous condemnation of the events of 1956; and reinterring Imre Nagy, the Communist Prime Minister during the Revolution of 1956. (It was then that Nagy declared the country's independence, for which he was put to prison, tried, executed, and his body buried secretly in a forest by Hungary's post-1956 leaders, allegedly on Soviet orders. What role Mr. Kadar had played in these events was not clarified before Kadar died in July of 1989.)

As events prompted Grosz to make concession after concession, he faced increased opposition from the conservative wing of his Party. (The Party's left wing is a coalition. Some still believe, dogmatically, in the fundamental political and economic objectives of a 1950's-type socialism, having devoted their lives to their realiza-

³ Details about the dramatic events that led to the dismissal of Kadar are recounted in George Schopflin, Rudolf Tokes, and Ivan Volgyes, "Leadership Change and Crisis in Hungary," *Problems of Communism*, September-October 1988.

⁴ Charles Gati, "Eastern Europe on Its Own," *Foreign Affairs*, vol. 68, No. 1.

⁵ One difference between Poland and Hungary is that to underprop the regime, Kadar had relied not on a large secret police but on the people's memory of 1956 and its consequences, on improvements in the population material well-being, and on cultural liberalization.

tion, who were now seeing the imminent discrediting of what they worked for. Many are old who are not particularly dangerous or active. More important is the other group who are simply afraid of losing their power and position, knowing full well that there would be no privileged place for them in a society based on merit.) These people have felt betrayed by Grosz and have accused him of using discredited Stalinist tactics: making important decisions (i.e., the concessions) without consulting the Party's conservative apparatus and rank and file.

The attempt by Grosz to pacify the conservatives while making concessions to the reformers and the opposition caused him "to speak from both sides of his mouth," depending on the audience he was addressing. In the process, Grosz blurred his political identity and diminished his credibility within the Party and with the population.

The Party's disintegration, that began earlier, continued. The issue became: should the Party's reform wing, led by Imre Pozsgay and Rezső Nyers, leave and organize a social-democratic-oriented new Communist Party? Or should the conservatives leave, or be pushed out, and form a new party? Or should an attempt be made to patch up the differences and face the danger of further loss of identity and organizational effectiveness? Since one of the main concessions the Party already made was to hold free elections in 1990 and abide by the results, making the Party politically effective became essential. At the time of writing (July 1989), it appears that the reformers are well on their way to capturing the Party, telling the conservatives to fall in step or to leave the organization. In June 1989, the Party formed a new, four-member Presidium, consisting of three reformers—Nyers, Pozsgay, and sitting Prime Minister Miklós Németh—plus the by-now-difficult-to-label Grosz. Nyers became President of the Presidium, and thus effectively the Party's new leader.

The conservatives are small in number but are a force to reckon with because their members possess a large number of weapons (many are members of the Worker's Guard, created by Kadar after 1956) and have close links with like-minded individuals in the army and on the police force. Although members of this group are capable of provocation and intimidation, it does not appear likely that they would attempt a Tiananmen Square type solution in Hungary. For one, the situation in Hungary is different than in China or even in Poland. Partly because Kadar did not rely (since the mid-1960's) on a visibly-oppressive apparatus, Hungary's organized political opposition is much more moderate, much less explosive, than that of China's or even that of Poland's. The Hungarian army's prestige, role, and preparation are different also. Thus, both the conservatives and the opposition are less ready and poised to do battle than was the case in China and is the case in Poland. And the brains in the conservative camp must also be thinking that although they might be able to take power by force, would they be able effectively to govern?

To continue this line of speculation: what would happen if Gorbachev changed his policies or were replaced by a more conservative leader? The Soviets face such tremendous internal problems that—it would seem—maintaining a strong, military hold on Hungary

would not likely to be a high priority for Soviet leaders. Hence, the most likely scenario is that the political and economic transformation of Hungary will continue.

TRANSFORMATION OF HUNGARY'S POLITICAL ECONOMY MODEL

Employing the conceptual framework presented in the author's preceding contribution, here is a brief sketch of the transformation that is currently under way in the political economy model. Some elements of the transformation have already occurred. On certain other issues, a firm commitment has been made by the government that the promised reforms will be introduced. And on still others, substantial reforms are being recommended by one or another of the government's reform commissions. The full implementation of this third group of reform measures is of course the least certain.

KEY OBJECTIVE NO. 1: POLITICAL POWER

Given the enormous economic and political problems that the "influentials" in the Communist Party and in the government must deal with, and considering the growing weakness of the "center" to effectively exercise power, the leaders of the Communist Party appear to have discarded the objective of maintaining their monopoly of political power. They are now willing, if not in fact anxious, to share it. They gave the green light to the formation of alternative political parties; nearly a dozen have been established quickly. Free elections and a promise to abide by the results were promised. The most likely date of the elections is around June 1990, when Parliamentary elections are scheduled.

The new situation suggests that it is no longer sufficient to understand the basic objectives of the influentials in the Communist Party and in the government; we must now also seek to understand the goals, the internal stability, and the political strengths of the opposition parties. This is too complex a matter to discuss here. Suffice it to say that in several of the main opposition parties—as in the Communist Party itself—there is a clash between forces that are tolerant, patriotic, and democratic, and forces that are intolerant, chauvinistic, and demagogic. The political transition thus holds great promise but also large dangers.

The Communist Party and the government would like to enter into a coalition with the opposition parties to gain sufficient strength to implement a difficult economic program. But the opposition—some of whose leaders may privately agree that something like the program the government is proposing is necessary—does not wish to join a coalition. The opposition prefers, instead, for the government and the Party to implement an unpopular program and become politically even more vulnerable, thereby increasing the chances that the opposition will gain power. Under these circumstances, it is not in the interest of the government and the Party to propose, much less to implement, a necessarily tough economic program. Thus, the temptation is great all around to make promises, however unrealistic or damaging they may be, just to get elected. It is with this caution and proviso that the enumerated economic reform proposals should be considered.

KEY OBJECTIVE NO. 2: SOCIALIST ECONOMIC SYSTEM

None of the parties are committed any longer to the hierarchy of ownership forms. The new constitution being drafted by a commission will guarantee the equality of state, cooperative, and private ownership firms; some implementing legislation has been introduced already. All the other precepts of what were identified as defining a socialist economic system are now being modified: desirability of forced economic growth, absolute full employment, a quasi-welfare state, no significant income from property and entrepreneurship, and consumer price stability. However, one factor to take into account is this: even though socialism as practiced has been discredited, there is strong support on the part of the population for socialism's economic goals. Today, politicians in Hungary cannot disregard this when it comes to reform implementation.

STRATEGIES

Exercising Political Power. All parties are committed to democratization as a political strategy. The main questions are these. Will the conservative wing of the Communist Party remain committed to the elections and their results if the Party, or this particular group within it, faces the prospect of the loss of power? Will demagogic political forces gain power, or sufficient power, to prevent desirable political action? We see that even in Poland, where the opposition is much stronger and more united (under the banner of Solidarity) than in Hungary, how difficult it is to find a workable compromise on economic issues. In Hungary, where the opposition is much more splintered and also has had no preparation on how to govern, the effective exercise of political power to solve economic problems remains highly problematic.

Standard of Living. This is perhaps the toughest issue. Since the standard of living of a large segment of the population is lower today than it was 10 or 15 years ago, promising more austerity and hardship runs the large risk of loss of voter support. One reason this is such a tough issue is that the level of consumption that the population believes to be socially legitimate exceeds the level warranted by the productivity of its work force. The critical and inter-related issues are these: How quickly can changes in policies and new reforms trigger a sufficiently large supply response on the part of producers? What to do about Hungary's exceedingly high foreign debt, since servicing it fully is a huge burden on current as well as future consumption?

Resource Mobilization. The government's program promises a substantial reduction in subsidies, in defense, and in inefficient investments. How much will be—can be—implemented is difficult to predict.

Foreign Economic Relations: CMEA. A government reform commission is recommending what appears to be the most far-reaching reform proposal as yet in the CMEA. The new proposal was prompted (1) by the inability and/or unwillingness of the Soviets to continue the pattern of trade expansion that had characterized Soviet-East European relations through the 1970's and (2) by the reduced gains (some say, absolute losses) from trade that the East European countries suffer under existing arrangements (for the

reasons elaborated in the author's previous essay). Hungary wants to switch its trade to a current world market price base and to settle all transactions in convertible currency. This would be done first, or only, with the U.S.S.R. Informal discussions have been under way with the Soviets. If implemented, Hungary expects to derive several strategic benefits. The arrangement would discontinue the "softness" of the Soviet market. Hungarian firms would have to compete with Western suppliers for Soviet orders. It would make it easier for Hungary to reduce its growing surplus with the U.S.S.R. or to obtain convertible currency for it. The arrangement would reduce its dollar debt-service ratio (since dollar trade would be added to the denominator while the numerator would change little), thereby presumably improving its creditworthiness. And it would suddenly make Hungary a much more attractive partner for Western firms since Hungary could then serve as a bridge to the Soviet market, sidestepping the problem of ruble inconvertibility.

The cost to Hungary is the expected substantial deterioration in its trade balance with the Soviets. Hungary's exports are comprised mainly of manufactures whose prices would decline more than the prices of its imports, dominated by fuels and raw materials. No one knows for sure how much Hungary would lose since the quantities to be traded as well as their prices would be bargained, but now on a different basis. Hungarian estimates of the annual loss range from a couple hundred million dollars to upwards of a billion or more dollars. The high estimates are by those who oppose the proposed arrangement. In any event, some or all of the loss would have to be financed, in part or in full by the Soviets. There is also the possibility that the Soviets would decline to buy a portion of Hungary's manufactured exports, causing a decline in trade and some unemployment.

Assuming that Hungary would formally propose the arrangement, would the Soviets accept it? In an interview with the Deputy Director of IMEMO, V. Shastitko, the following exchange took place:⁶

Q: "There is much talk about switching in the CMEA to world prices and convertible currency."

A: "We have had visits from Hungarian colleagues to discuss this. I think the switch to convertible currency could be useful, but there are also difficulties. Trading in convertible currency could lead to a further drop in mutual trade. Would it be desirable for Hungary that its capacity would not be fully used and unemployment may occur? At first one should perhaps use convertible currency and world market prices for commodities that are in greatest shortage, since this is already a practice [in intra-CMEA trade]. As the output of competitive products increases, more and more goods could be added to convertible currency trade. . . . An alternative of course would be to make the ruble convertible."

The Soviet decision on this would have to be made at a high political level. One may speculate that the leaders will weigh, on the one hand, the benefits: (1) higher initial dollar earnings (the amount depending on the outcome of the new bargaining and on

⁶ *Izvestiya*, June 27, 1989, p. 7.

how much of Hungary's loss the Soviets would finance); (2) progress on reforms in the CMEA; and (3) the improved bargaining position the arrangements would give to the Soviets vis-a-vis the other East European countries by holding out the "threat" of switching all trade to a dollar basis. Against this are the political costs of an open admission that the transferable ruble is not a usable currency and that CMEA members are openly pulling in different directions.

Foreign Economic Relations With the West. Restrictions on foreign direct investment have been eased and the trend will continue. Hungary also announced a three-year import-liberalization program that began on January 1, 1989. Its main provision is that in the first year 35 percent, in the second year another 35 percent, and in the third year 20 percent of imports would be liberalized (the remaining unliberalized 10 percent is comprised of energy and raw materials). Licensing the import of the liberalized commodities would be discontinued so that enterprises possessing the forint equivalent would be able to import freely. Import demand was not expected to increase rapidly owing to the restrictions on investments and other aspects of the austerity. In any event, safeguards are available to limit imports for balance of payments reasons, and they were invoked early on in the program. If the program could be implemented approximately as planned—and supported by a major overhaul of the foreign trade apparatus, since the present apparatus is riddled with people who are not qualified, in part because they have other tasks to fulfill also—that would represent a major step in opening up the economy to freer imports and to import competition and in increasing the gains from trade. There is discussion also of applying for membership in the EFTA some years down the road.

Foreign Borrowing and Debt Service. Hungary must spend considerably more than half of its dollar export earnings to service its foreign debt. Without additional borrowing, 17 percent of GNP would have to be used each year for debt service; the annual interest alone is \$1.2 to \$1.3 billion. Therefore, servicing the debt requires between \$2.5 to \$3 billion in new loans. How long it remains a possibility for Hungary to refinance the principal when due and a portion of the interest, and whether it will be forced or should elect to reschedule are important strategic issues. Public discussion on them in Hungary has begun. The authorities argue that instead of giving Hungary breathing room, asking for rescheduling would trigger a large-scale withdrawal of short-term bank deposits and would depress the prices of Hungarian bonds, creating new financial problems instead of solving old ones.⁷ As with other heavily indebted countries, managing the large debt is one of the toughest strategic issues. There are no easy solutions.

Economic Reform. "Mainstream" proposals agree that Hungary must move further toward a market orientation. But there is no agreement as yet on the best strategy and on sequencing the necessary steps.

⁷ Figelö, May 18, 1989, p. 10.

THE SYSTEM

The key issue is how to move rapidly toward marketization and privatization. There is agreement that much greater scope should be given to the second economy and that it should be allowed to operate in a much better institutional and political environment, one that has fewer contradictions and is closer to what is "normal" in the West. To attain this, many problems remain to be solved in accounting, taxation, access to information and inputs, in infrastructure (office space, telephones, computers), the availability of risk capital, and a stable environment of regulation, to mention just some of the issues.

An even more difficult problem is the ownership of state firms. The government seems to lean toward accepting a proposal made, among others, by Márton Tardos, Director of the Financial Research Institute.⁸ Direct reprivatization on a large scale is out of the question, not only for political reasons but because there is insufficient private capital in the economy to acquire many state firms. Foreign capital can make a contribution but could not be the full solution. The main avenue for creating meaningful ownership—defined by Tardos as a situation in which the prime aim of the owners is to increase the discounted present value of their assets—would be to distribute the shares of state enterprises to municipalities, nonprofit organizations (hospitals, schools), the social security fund and other pension systems, insurance companies and like organizations. The revenues of the owners would depend upon the returns from their investments, making them independent of the state budget. The ultimate owners would, in turn, hire and fire professionals to manage their portfolios. Since the shares would be traded freely, a market for them would be created, irrespective of whether the participation of domestic and foreign private investors would be allowed. Although even the proponents of the plan admit that it is not without problems, the expectation is that the scheme would work much better than the prevailing ill-defined system.

In sum, if all or most of the reforms outlined here were implemented, the political economy of Hungary would be transformed into a predominantly market-type system. Generally, there is a willingness on the part of the body politic to move in this direction (notwithstanding short-term jockeying for political advantage). Whether Hungary will be able to design and implement a well-thought-out and feasible program of transition is an open question.

OPTIONS FOR WESTERN POLICY

Developments in Hungary, as in other Communist-led countries, are fundamentally driven by internal forces. At the same time, both Soviet and Western policies are very important. The interest of the West lies in seeing that a country like Hungary moves, with all deliberate speed, toward a democratic and market-oriented country in which human rights are respected and international obligations are observed. None of these goals, individually or in combination, is incompatible with truly socialist values: equal opportu-

⁸ Márton Tardos, "A tulajdon" [Property], *Közgazdasági Szemle*, XXXV:12 (December 1988).

nity to pursue one's interests and talents, the mitigation of extreme inequalities of income and wealth, a commitment to reasonable full employment, a welfare state (at a level commensurate with the ability of the economy to pay for it), and substantial scope for industrial policy and macroeconomic stabilization. In brief, there is no reason why Hungary (and eventually the other East European nations) cannot become a Finland, an Austria, or a Sweden.

More specifically, it is in the interest of the West to see that Hungary (and also Poland) become increasingly and successfully integrated with the economies of Western Europe. There is no other way for the reforms to succeed. While integration with the West is a necessary, it is not a sufficient condition for the reform to succeed; that depends, most fundamentally, on Hungary (Poland) creating the reform's essential domestic preconditions.

The successful integration of the reforming East European countries with the West is in the vital interest of the West, first and foremost to prevent undesirable outcomes, such as (1) Hungarian (Polish) emigrants flooding Western Europe through by now practically open exit borders and (2) strengthening the bonds of conservatives in all Communist-led countries who would like to turn the clock back, which could only lead to more tensions and confrontation. The successful integration of Hungary (Poland) with the West is also attractive for the business and professional opportunities that would create; without integration, Hungary (Poland) would not be in a position to finance the huge pent-up demand for Western imports.

What can the West do to nudge this process along? Perhaps the most significant contribution the West can make in the long run is to help these countries establish—or reestablish—their economic, financial, managerial, administrative, political, technical, and cultural infrastructures. Their efficient functioning is absolutely essential for making the societies successful, an attractive place to live. The best investment the West can make is to help educate, train, and apprentice the best young minds of a country like Hungary in all aspects of how societies that are reasonably efficient must function. But, in addition, the West must make it possible, and to some extent promote, the reintegration of Hungary (Poland) into the regional and global economic framework.

A more immediate task is to help (if requested) with the design and implementation of the extremely difficult problem of transition from a modified CPE to a more open, pluralistic, and market-driven society. The problem of transition is intellectual, financial, and political. The intellectual task is to help design, with sufficient sensitivity to the local environment, a transition program: what needs to be done, why, how, and in what sequence? The financial dimension is also important, but is particularly tricky: how to ensure that any debt relief or new credits that may be granted would be used productively and for the right purposes, rather than for postponing the changes that are needed, or simply piling more debt on an already high debt mountain. Therefore, the financial aspects of the problem, too, are in part design issues. The political aspect is again difficult but important: how to strengthen the forces of democracy, tolerance, and professionalism over the ascending forces of demagogy.

The urgent task for Western policy vis-a-vis Hungary is thus to design and implement, cooperatively and coherently, an intellectual-financial-political program that can effectively assist the transition of this East Central European country toward a more viable political and economic system.

YUGOSLAVIA: ENDURING CRISIS AND DELAYED REFORMS

By Dennison Rusinow*

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I. INTRODUCTION

Yugoslavia's deep economic crisis, which began in 1979, is unabated in 1988 and in some views has not yet reached its lowest point. Triggered by external events,¹ it has been sustained and often deepened by domestic structural and systemic defects, by the incapacity of political systems and leaderships to implement even formally agreed remedies for these, and by mismanagement in the conception and/or execution of stopgap measures adopted in lieu of reforms and often under pressure from foreign creditors. In the process the economic crisis has become a social and political crisis as well—a "crisis of the system"—which by general agreement requires a major reform of political and constitutional as well as economic arrangements.

The dynamics of this deepening, spreading crisis have created a fateful nexus of mutual frustrations, in which interdependence among its economic, political, and social dimensions seems to preclude an effective macrosolution of any one of them without a prior solution of the others—or a package on that is elusive because of its size and complexity. Thus implementation of the market-oriented reform of the economic system that was accepted in principle by all political leaderships in 1982-83,² or of later and current versions of it, is now widely regarded as impossible without prior reforms of the political system and the Party (the League of Communists of Yugoslavia). But the latter have so far been equally impossible because conflicting economic interests as well as national sensitivities among eight republican and provincial leaderships, each with a de facto veto over any major and many minor reforms, have precluded agreement on amendments to the Constitution and

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¹ As described by John Burkett in his contribution to this volume, and in greater detail by Laura Tyson, "Yugoslav Economic Performance in the 1980's: Alternative Scenarios," in *East European Economies: Slow Growth in the 1980's*, Vol. III, U.S. Congress, Joint Economic Committee (Washington, DC: GPO, 1986).

² See p. 62, footnote 30.

Party reforms that would diminish their veto rights in what all regard as an interregional economic zero-sum game.

On the other hand, by 1988 there are some signs that the cumulative effect of two continuous developments since 1980 may be reaching a critical mass that could break the political deadlock that has frustrated each of what are now referred to as "the three reforms." If this proves to be the case, it might happen suddenly, either within the framework or in defiance of current constitutional procedures and political norms, perhaps violently, and in either of two directions: toward significant and possibly even dramatic economic and political liberalization, or toward what alarmed Party leaders of liberal persuasion are calling "neo-Stalinism," and/or "fratricidal war."³

Declining living standards in all but 2 of the preceding 8 years and corresponding erosion of confidence in political and economic systems and elites have finally produced an accelerating upward spiral in the number and seriousness of strikes, "nationalist excesses," and other manifestations of both social unrest and worsening relations among Yugoslavia's nations and nationalities. Coming after remarkably little action on these two inter-related fronts (except in and about Kosovo⁴) in the first 6 years of the crisis, this is apparently having a dramatic impact on elite awareness of the urgency of effective action, which has been rhetorically proclaimed at two Party congresses and on numerous other occasions since 1982 but with little effect until now.⁵

Second, 8 years of equally continuous and evolving academic and political debate and critical analysis of earlier blueprints for reform have clarified a number of issues, choices, and the political as well as cost-benefit ratios of the latter. This is reflected in the latest (1988) blueprints,⁶ which have shed most but not all of the contradictions in basic orientations and ambiguities in specific proposals that marred and supported contradictory interpretations and nonimplementation of earlier ones. It is also reflected in amendments to the Constitution, adopted with the required consensus of all the Federal units in November 1989, which appear to endorse these blueprints on the key issues of marketization, deregulation, and a general dismantling of the "contractual economy" normatively described in the Constitution of 1974 and elaborated in the Law on Associated Labor (LAL) of 1976.

For the moment, however, the race is still undecided between meaningful systemic reforms and a political explosion at the end of a long fuse of rising interethnic and other social tensions fueled by economic woes; and enough improvement in muddling through to avoid both of these is still present as a third contender.

³ BBC and *New York Times* report on a Jan. 30-Feb. 1, 1989, meeting of the Party Central Committee, Feb. 1-2, 1989.

⁴ Where the local Albanian majority (80 percent of the population of the Autonomous Province) has been in a state of simmering rebellion since April 1981, and where an ongoing exodus under pressure by dwindling South Slav minorities has provoked an escalating Serbian nationalist backlash. This last has lately assumed broader dimensions, greatly complicating the political crisis in Yugoslavia as a whole.

⁵ Details in Dennison Rusinow, "Yugoslavia's First Post-Tito Party Congress," *UFSI Reports* (Hanover, N.H.), 1982, Nos. 39 and 40, and Yugoslavia's 1986 Party Congress—Did Anything Happen?, *ibid.*, 1986, No. 21.

⁶ Described in Part IV of this chapter and in part in John Burkett's contribution to this volume.

II. THE LEGACY OF EARLIER PHASES AND "MODELS"

Along with other burdens of the past—in particular the political and economic consequences of separate national and regional histories and cultures—Yugoslavia's current economic problems are weighted with the baggage of accomplishments, failures, accommodations, and theoretical underpinnings left behind by a succession of postwar economic systems and policies. The same is true of the attitudes and behavior of elites and the general population, including economic behavior and reactions to present conditions and proposed reforms, which incorporate diverse memories and evaluations of past phases.

It has become traditional in the literature to divide postwar Yugoslav economic history into four "systemic periods," roughly corresponding to the lifespans of the constitutions of 1946, 1953,⁷ 1963, and 1974. In the first of these, which the Yugoslavs call "the period of administrative socialism" (1945–52), the Soviet model TCPE was transplanted to Yugoslav soil with no significant modifications. The second and third, usually described as the periods of "administered market socialism" or limited self-management (1953–63) and "market socialism" (1963–73), were marked by the incremental dismantlement of most of the normative and institutional characteristics of a TCPE and by a corresponding modification of many of the attitudes and behavior patterns these characteristics engender in economic actors. The fourth or "contractual economy" period (1974 to the present) has seriously impaired the still limited role of "market forces" that the two preceding periods had encouraged, but it has done so in favor of negotiated prices and markets for outputs and factors of production, ad hoc regulation by the state, and "informal" political controls rather than resurrected TCPE mechanisms.

All four of the "basic reform concepts" in this volume—administrative decentralization, indirect regulation, a substantial role for market forces (economic decentralization), and self-management—were already represented in the reforms of the second and third periods. The Yugoslav system was thus already "a 'hybrid' resource-allocation model, in which elements or legacies of the TCPE model and two or more 'decentralization' models exist side by side,"⁸ in the 1950's and before more of the latter were added to the mix by the further liberalizing and marketing reforms of the 1960's.

In principle (frequently more violated than honored in practice), the Yugoslavs also explicitly shift from an "extensive" to an "intensive" development strategy as early as 1965, arguing that they had become a "medium-developed" rather than a "less-developed" country, and that crossing this threshold required such a shift.⁹

Salient legacies of this systematic history include but are not limited to the following list:

⁷ Formerly a constitutional law rather than a new constitution.

⁸ Marer's "Conceptual Framework," pp. 13–15.

⁹ Rudolf Bičanić, "Economics of Socialism in a Developed Country," in *Foreign Affairs* (July 1966), is a clear and early explication of this argument (and others supporting the 1965 Reform) in English; also Dennison Rusinow, *The Yugoslav Experiment* (Berkeley: University of California Press, 1977), p. 127f.

One crippling bequest from Yugoslavia's brief period as a TCPE and the continuation of state control (and therefore primarily political allocation) of most investments in the second period is an intimidatingly large number of industries, plants, and plant locations that can neither survive under genuine market conditions nor be closed down without social and political costs that have so far been regarded as prohibitive. In some estimates more than one-third of all Yugoslav enterprises are in this category.¹⁰ In many places and groups the first two periods have also left a legacy of nostalgia, which can translate into a preference, for a CPE's traditional dedication (as "socioeconomic objectives" or SOE's) to full employment, regional planning and investment strategies that favor less developed regions, and degrees of income equality (*uravnilovka*) and "socialization" of risks and losses that have survived in subsequent periods to a greater degree than most people apparently believe.¹¹

Two cardinal features of the decentralizing and quasi-marketizing reforms of the 1950's have similarly survived all subsequent reforms and counterreforms:

(1) State ownership has been formally transformed into "social ownership," an insidiously amorphous concept except in its negative denotations: whatever it is, it is neither state nor private. The first of these negatives is arguably more significant than is acknowledged in most current criticism of the concept (on valid grounds described in the following section). Because the state does not own Yugoslavia's enterprises, the government cannot directly command (e.g., the production of output x with v inputs) but must seek to induce the performance that policymakers desire. To this end it must employ the kinds of instruments, usually indirect and macroeconomic in nature, on fiscal and tax measures, subsidies, tariffs and price controls, et al., along with "informal" and extra-legal (or illegal) forms of governmental and Party influence.

(2) Command planning by the state was replaced by macroeconomic indicative planning and macroeconomic decisionmaking by autonomous enterprises, which were to be controlled by their workers (in theory as "self-managing" collective entrepreneurs and "trustees" for "society" as the proprietor), responsive to market indicators, and guided by a form of constrained profit maximization. The effect was to create conditions in which consumers would decide *what* should be produced, while enterprises would decide *how* to organize production and to combine productive forces.¹¹ However, savings and investment (capital), foreign exchange, and income policy—and therefore primary and a large part of secondary income distribution—continued to be functions of state organs throughout this period.

Probably the most significant legacy of the third or "market socialist" period (1965–73) is the impact of the way it is remembered on current attitudes. These are as diverse and contradictory as the performance of the economy in that period.

¹⁰ A figure already in vogue in the "economists' debate" preceding the 1965 Reform (See Rusinow, *op cit.*, in preceding note, pp. 120–137).

¹¹ Joze Mencinger, "Will Systemic Changes Help Again? The Crisis of the Yugoslav Economy in the Eighties and Its Ability to Adapt to Global Structural Change" (forthcoming as a *Carl Beck Paper in Russian and East European Studies*, University of Pittsburgh) contributes this insightful description.

The reforms of the 1960's formally also transferred decisionmaking about income distribution and most savings and investments to the enterprises and the banking system, thereby eliminating most vestiges of direct control of the economy by the state, at least at the federal level, which had survived earlier reforms. Substantial lowering of tariffs and devaluation of the dinar, along with other measures designed "to find Yugoslavia's place in the international division of labor," envisioned a meaningful role for foreign as well as domestic market forces in resource allocation. The aim was a radical "de-etatzation" (*deetatzaoiia*) of the economy; it was some time before many people, including economists, noticed that "de-etatzation" had been largely limited to the dismantling of *federal* economic powers, leaving a strong potential for continued or growing politization of economic decisionmaking at regional and local levels.

The results (or what were widely regarded as results) of this remarkable attempt to create a kind of laissez-faire market socialism included greater enterprise autonomy and more play for market forces and consumer and producer preferences than before or since; declining (but on balance probably higher productivity) investment and employment rates; reduced power and patronage for political elites (especially at the federal level); and growing differences in inter-regional, intersectoral, and inter-personal incomes. Positive or negative memories of each of these effects, and therefore attitudes to current proposals for marketizing reforms that in many respects resemble those of the 1960's, tend to vary with the personal, sectoral, class, and regional advantages and disadvantages that ensued.

One of the consequences of Yugoslavia's early abandonment of command planning and partial rehabilitation of "the laws of the market" (for commodities but not for labor and capital) may also be the most important. Since 1953 Yugoslav enterprises have been producing goods and services for "validation" on the market (however imperfectly competitive and administratively constrained) rather than to fulfill a quantitative plan, and with maximization of some definition of net income or profit¹² as a primary objective. In these circumstances many of the most notorious defects of TCPWs—e.g., producing goods that fulfill the plan but of a quality of kind that will not sell, hoarding unused resources, and fighting for higher input and lower output quotas rather than lower costs and more sales—are pointless and cease to be rational responses to the system and its instruments. Instead, enterprise attitudes to material costs and customers (but not to capital and labor costs) come to resemble those of more orthodox market economies. On the other hand, the breadth and depth of formal and informal state and Party interference and influence over the conditions and results of economic activities that survived the market socialist phase, and that has been reinforced since then, still usually makes it more important to cultivate useful friends and influence in Party

¹² Choice of definition, and between these terms, has often been a function of ideological predilections or inhibitions but has had serious practical consequences (see Deborah Milenkovitch, *Plan and Market in Yugoslav Economic Thought* (New Haven: Yale University Press, 1971), *passim*).

and government circles than to scrutinize market conditions for new or unutilized opportunities.

Economic performance during the fourth or "contractual economy" phase (since 1974), which was introduced in part because of undesirable economic trends attributed to *laissez-faire* socialism but in larger measure for political and ideological reasons,¹³ has been an almost unmitigated disaster. This was largely disguised until 1979, except in the keen vision of a few economists, by a propitious external environment that encouraged heavy foreign borrowing to support a strategy of import-led growth in production, employment, and consumption. Thus total domestic consumption (including investment) in the later 1970's averaged 110 percent of domestic production. In the agonizing reappraisal that began when this strategy was abruptly invalidated by changes in the external environment, the Yugoslavs have found it far easier to diagnose and even to prescribe remedies for the systemic and other vices of the contractual economy than to muster the political capacity to make it take the cure or more than a few aspirins.

III. SYSTEMIC VICES OF THE "CONTRACTUAL ECONOMY"

Utilizing an institutional and conceptual terminology as opaque and excessively complicated as what it purports to describe, the 1974 Constitution and 1976 Law on Associated Labor envisage an economic system based on autonomous, worker-managed Basic Organizations of Associated Labor (BOAL's) as its primary economic actors, working with "socially owned means of production" and dedicated to profit maximization to be realized in a commodity market through a vertical and horizontal "pooling of labor and resources." At the microeconomic level this last is accomplished through a dense network of legally binding contractual arrangements, called Self-Management Agreements, through which BOAL's are created and linked in "work organizations" (WO's, formerly and in the constitutional amendments adopted in November 1988 again to be known as enterprises and the system's primary actors), Composite Organizations of Associated Labor (COAL's, comprised of two or more WO's), and other forms of association for the production and marketing of goods and services. Together with governments ("sociopolitical communities") and Self-Management Communities of Interest (nongovernmental agencies through which social services are funded and administered and for employment, price setting and other economic functions), which participate at various levels as may be appropriate to the nature and scope of the subject, these economic agents also negotiate and sign Social Contracts. These have both macroeconomic and social policy functions. In addition, all of these entities are legally obliged to produce 5-year Social Plans, along with annual assessments and revisions, through a continuous process of multi/level consultation, coordination, and exchange of information. Carrying legal obligations when codified in Self-management Agreements or Social Contracts, Social Plans were supposed to reintroduce planning of a supposedly

¹³ As argued by Mercinger (among others), *loc. cit.*

new kind, appropriate to self-management and defined as neither command nor indicative, into the system.

Mandated in their present form by the 1974 constitution, all of these institutional arrangements and corresponding procedural rules are elaborated in great detail in the Law on Associated Labor of 1976. Its 671 articles also attempt to anticipate and prescribe for almost all other possible "socioeconomic" relations and practices.

The fundamental defects of this elaborate blueprint have been described and documented with increasing precision by a cohort of critical economists.¹⁴ It is now almost universally accepted that it prescribes a gross excess of institutions and rules, many of them worse than merely unnecessary, expensive, and inefficient, and that current economic problems are therefore and otherwise a manifestation of systemic failure rather than a simple matter of inappropriate microeconomic "behavior" and/or macroeconomic policies.

Conforming to all or even most of its provisions would virtually immobilize the economy while also condemning all participants to spend almost all of their time in endless "self-management decisionmaking" meetings and negotiations, leaving little or none for work, play, sleep, and other more useful or desirable activities. This is clearly impossible and does not happen.

However, the functioning of the economy is still largely determined by underlying principles and mechanisms, reinforced by less easily evaded rules, which have made the "associated labor paradigm" into a "contractual" rather than a market (or planned) economy. Empirical studies of microeconomic behavior and macroeconomic performance¹⁵ convincingly demonstrate (a) that Yugoslav firms and other economic actors are very responsive to the environmental incentives and constraints they face, (b) that these responses are "rational" in terms of economic theory, but (c) that many basic systemic "rules of the game" as well as contingent policies ensure that they will usually be "irrational" from the perspective of a market economy—i.e., that they will lead to serious macroeconomic misallocations and inefficient use of resources.

More specific undesirable consequences identified by the system's critics include the following random selection and tend to form a matrix of interconnected vicious circles:

1. Unclear ownership relations, which are inherent in the concept of "social ownership," do not locate risktakers. No one is ultimately responsible for mistaken or inefficient deployment or even the maintenance of "everyone's" capital. Although rewards for wise or lucky entrepreneurial decisions (higher earnings, prestige, etc.) are usually commensurate with those of private ownership systems, the penalties for wrong ones (especially the "exit possibility" of bankruptcy) are missing. "Socialization of losses" is a logical corollary of social ownership and becomes an incentive to irrespon-

¹⁴ A selected list (primarily of collective works and collected articles) includes Aleksandar Bajt, *Alternativna ekonomska politika* (Zagreb: Globus, 1986); Ivan Bičanić, "Systemic Aspects of the Social Crisis in Yugoslavia" (mss. 1988); Branko Horvat, *Jugoslavensko društvo u krizi* (Zagreb: Globus, 1985); Janez Jerovšek et al., *Kriza, blokade i perspektive* (Zagreb: Globus, 1986); Mencinger, op. cit. (note 12); and Zoran Pjanić, *Anatomija krize* (Belgrade: Ekonomika, 1987).

¹⁵ E.g., Janez Prasnikar and Jan Svejnar, "Economic Behavior of Yugoslav Enterprises," in *Advances in the Economic Analysis of Participatory and Labor Managed Firms*, Vol. 3 (Greenwich, CT: JAI Press, 1988).

sible risktaking, thus completing the vicious circle. In addition, ideologically motivated commitment to the "dominance of social ownership" over other forms¹⁶ has inhibited the encouragement of private, cooperative, and foreign participation in capital formation and market competition, although these have been proclaimed goals, in various forms and intensities, since the 1960's.¹⁷

2. Inelasticities of substitution among factors, leading to low factor mobility and contributing to allocative inefficiencies in general, are a major consequence of a market constrained to a very imperfectly competitive commodity market, with no markets and therefore no scarcity-value public price for labor and capital.

3. Further allocative inefficiencies arise because prices in the commodity market are more often either administratively determined or set by self-management agreements and social contracts (frequently functioning like cartels) or by market-dominating (oligopolistic or monopolistic) firms than determined by "market forces." They therefore also rarely reflect relative scarcity values.

4. Although the purported "disintegration" of the Yugoslav market into eight protectionist republican and provincial economic fiefdoms with autarkic tendencies is probably more accurately described as a lower level of countrywide integration than was predictable and is desirable for an "advanced developing country,"¹⁸ it is in either case considered a major contributor to allocative and general economic inefficiencies. The origins and strength of these fiefdoms derive from one original and two subsequent aspects of Yugoslav federalism. These are the national base and rationale of most of the federal units; "deetatization" in the 1960's that stopped with the dismantling of most federal economic powers, leaving the economy highly politicized at regional and local levels and only marginally subject to "market forces"; and further devolution of control over political and economic appointments and careers to the republics and provinces in the 1970's. Together these have generated and sustained a symbiosis between regional political elites and regional economic interests, both of which can usually be regarded as "national" and not merely regional, in an arrangement for which feudalized socialist mercantilism may be an appropriate label. The primary function of regional political leaderships becomes the promotion and protection of their respective regional (and national) economies, and they are supported and obeyed (and accorded legitimacy as national leaders, a potent substitute for election or "charisma" as a basis for authority) in accordance with how well they are seen to do it. With the national element as its strength and theirs, this is a formula that both groups will tend to defend in all of its three elements.¹⁹

5. Adaptation by the economy to these and some other consequences of the system has sustained and in some reckonings en-

¹⁶ The ideological significance of this formulation is discussed by Zoran Pjanic, *Anatomija krize* (op. cit.), p. 175.

¹⁷ Andrija Gams, *Svojina* (Belgrade: Institut društvenih nauka, 1986).

¹⁸ As argued by Ivo Bičanić ("Fractured Economy") and John Burkett and Borislav Skegro ("Are Economic Fractures Widening?") in Dennison Rusinow (ed.), *Yugoslavia—A Fractured Federalism* (Washington, DC: The Wilson Center Press, 1988), and by Frasnikar and Svejnar, art. cit.

¹⁹ As also noted in Rusinow, "Nationalities Policy and the 'National Question'", in Pedro Ramet (ed.), *Yugoslavia in the 1980's* (Boulder: Westview Press, 1985), pp. 142f.

larged a "bias to bigness" in the size distribution of firms (WO's),²⁰ in origin a legacy of Yugoslavia's TCPE and modified CPE phases and associated "socialist grandomania," which is widely regarded as more negative than positive in its consequences—e.g., promoting monopolies and oligopolies but with little benefit from economies of scale and of research and development. Bigness helps to internalize markets, providing a degree of flexibility and security in the face of an external market characterized by scarcities, capital immobility, and arbitrary administered prices. It provides greater lobbying and bargaining power vis-a-vis governments and party organs or officials whose actions may be greater determinants of business success or failure than what happens on administratively and politically distorted markets. And insofar as markets exist, but tend to be regionalized along local or republican cleavage lines, bigness of course tends to ensure a larger market share, perhaps even a monopoly, and its usual benefits in terms of greater market power and ability to manipulate prices.²¹

As one Yugoslav critic summarizes these and other defects: "In short, the blueprints of the system were either inoperative or produced undesirable results."²²

The response has taken two forms, both based on "common knowledge that, if one stuck to the rules, the economy would simply cease to function."²³ The first has been a continuous flood of diverse state interventions, designed to provide substitutes for suspended "rules of the game" and corrective for dysfunctional ones. The result has been described as "a nonmarket, nonplan, ad hoc reflexively administered economy,"²⁴ which is characterized by rigidity, slowness, and inconsistency in "administrating," distrust in the decisionmaking of economic units, and the dominance of political over economic criteria and priorities in both macro- and micro-economic policies and decisions.²⁵

Influenced by IMF constraints on policy decisions imposed prior to 1985, austerity measures imposed in this period were moderately to dramatically successful in maintaining external liquidity, reducing domestic consumption, increasing exports, and maintaining production levels. A new course introduced in 1985, including an ill-considered experiment in targeting inflation rates and tying interest and exchange rates to these targets, produced negative real interest rates, an overvalued dinar, rising inflation, falling exports, investment and productivity growth, and a surge in wages when wage policy was loosened in late 1986. Attempts to counter these developments with a succession of new "austerity packages" in 1987 were abandoned, in whole or in large part, in the face of

²⁰ With the usual caveat about the difficulty of defining a Yugoslav firm, Prasnikar and Svejnar reckon that 65 percent of Yugoslav workers are employed in WO's with more than 1,000 and only 7 percent in public or private firms with less than 125 employees (art. cit., p. 258 and Table).

²¹ Discussed in greater detail, *ibid.*, pp. 257-262, and in Ivó Bicanic, "Systemic Aspects of the Social Crisis" (op. cit.), pp. 9f.

²² Jozse Mencinger, "Will Systemic Changes Help Again?" (op. cit.), p. 9. Cf. Prasnikar and Svejnar, art. cit., pp. 254 ff., for other problems (high labor costs, capital intensiveness and low marginal productivity of capital, entry-exit programs, et al.) that are largely or partly attributable to these systemic defects.

²³ Bicanic, "Systemic Aspects," p. 11.

²⁴ *Ibid.*, pp. 1f.

²⁵ Mencinger, loc. cit. and in Jerovšek, op. cit., pp. 141f.

waves of strikes and other evidence of rising social unrest. Finally, at the end of December 1988, the government (Federal Executive Council) under Branko Mikulic, discredited by repeated *voltes faces* and invariably ineffective policies since its installation in 1985, threw in the towel and resigned—the first such event in postwar Yugoslav history. Resistance by the Federal Assembly to budgetary reductions that had been part of a June 1988 IMF package (accepted by the FEC in return for new and desperately needed standby credits) provided the occasion, but Mikulic had already lost the confidence of both party and State Presidencies, who lagged behind most of the country in this.²⁶

The second form of response has been a continuous, costly search by “economic subjects” (BOAL’s, WO’s, COAL’s, and their managers) for equally ad hoc, extrasystemic and often formally illegal ways of pursuing profit maximization and other goals that the normative system and/or their own interests prescribe and the former then frustrates. These devices are in turn linked to and often part of the “second” economy, consisting of two parts: small enterprises in both the private and social sectors (together known as the *mala privrada* or “small economy”) and “informal” economic activities, frequently in the form of noncash exchanges of intermediate or finished goods, labor, and favors.

The second of these responses has usually been more helpful than the first in circumventing the system to keep the economy functioning after a fashion.

IV. PARALYSIS VERSUS CHANGE IN THE ECONOMIC AND POLITICAL SYSTEM

A. INTERREGNUM INHIBITIONS AND DEADLOCK, 1980–87

The first year of the economic crisis fatefully coincided with Tito’s death in May 1980. State and Party presidencies with 9 and 23 members respectively, headed by annually rotating presidents from each Republic and Province in turn, became his unwieldy collective successors. Despite early recognition of the need by influential economists and politicians, reforms of the system and its mechanisms to cope with the crisis in its early years were precluded, and even changes in policies were strictly limited, by the overriding reluctance of these collective leaderships to touch the basic political and economic arrangements that Tito had proposed or endorsed in his final decade. This was because they feared that any changes in these would open a Pandora’s box of related and extraneous demands for more, inevitably leading to disputes among them as delegates of republics and provinces and of national constituencies with frequently conflicting interests and views, which might get out of hand without Tito’s authoritative mediation and final word.²⁷

²⁶ Noted in advance of the resignation (inter alia) by *Danas* (Zagreb), Jan. 3, 1989.

²⁷ Examinations of successive phases and aspects of political deadlock since 1980 include the *Fieldstaff Reports* cited in note 5; Stephen L. Burg, “Elite Conflict in Post-Tito Yugoslavia,” in *Soviet Studies* (April 1986); Charles Bukowski, “Politics and the Prospects for Economic Reform in Yugoslavia,” in *Eastern European Politics and Societies* (Vol. 2, No. 1, Winter, 1988); and Burg, Vojislav Koštunica, Zvonko Lerotić, et al., in Dennison Rusinow (ed.), *Yugoslavia—A Fractured Federalism* (Washington, DC: The Wilson Center Press, 1988).

As the crisis deepened and expanded into a crisis of confidence and self-confidence in leaderships and the regime, these inhibitions gradually gave way to acceptance that systemic reforms and not merely policy changes were indeed urgently needed. But the fears that had inspired hesitation proved to be well founded. Inability to achieve interregional consensus (required by the Constitution) on the precise nature and scope of an expanding menu of political as well as economic reforms duly ensured, aggravating relations among the regions and within the leadership and thereby compounding the difficulty of reaching agreement on anything.

In June 1982 the first post-Tito congress of the LCY formally endorsed the need for far-reaching political as well as economic reforms. It also called on the Central Committee and Party Presidency "to assume political responsibility" for the prompt completion and uncompromising implementation of "A Long-Term Program of Economic Stabilization," a multivolume comprehensive blueprint for economic reforms written by a commission of prominent federal and regional politicians and economists and formally adopted the following year. Although later criticized for ambivalence on many specifics that reflected compromises among its army of authors (and for eclecticism and contradictions in its use of economic theories),²⁸ the Long-Term Program (LTP) was unambivalent in its advocacy of a "depoliticized" barrier-free market economy and the elimination of unnecessary and encumbering mechanisms and institutions introduced in the 1970's.²⁹

The LTP, never implemented and never formally abandoned, has been effectively superseded by a sequence of other blueprints. The mandate to the authors of the first of these, "A Critical Analysis of the Functioning of the Political System" (CA) published in 1984 and the product of another high-level commission of federal and regional politicians and social scientists, was to propose reforms of the political system which would complement the Long-Term Program. However, its vision of the economic system frequently contradicts the LTP's and is more loyal to the deductive principles underlying the associated labor paradigm of the 1970's, which the LTP had usually managed to ignore. Where the Long-Term Program emphasized the role of the whole enterprise (WO), for example, the CA continued to stress the role of the BOAL. The LTP stresses the all-encompassing nature and importance of markets as a permanent feature of a socialist economy that aspires to efficiency, but the Critical Analysis sticks to Marxist tradition by stressing their temporary (and implicitly undesirable) nature. And where the LTP uses prices the CA offers no a priori valuation for calculating factor costs.³⁰ It was clear that there were still basic disagreements about even the orientation of reforms supposedly accepted with the LTP.

²⁸ Mencinger, in "Will Systemic Changes Help Again?" (loc. cit., p. 10), describes it as "containing all schools of economic thought from extreme monetarism to orthodox Keynesian, often nicely cloaked in Marxian terminology."

²⁹ More detailed discussions of the LPT include John P. Burkett, "Stabilization Measures in Yugoslavia: . . ." in *East European Economies: Slow Growth in the 1980's*, Vol. III, U.S. Congress, Joint Economic Committee (Washington, DC: GPO, 1986).

³⁰ Ivo Bicanic, "System Aspects of the Social Crisis," loc. cit.

B. TOWARD A BREAKTHROUGH IN 1988?

More recent blueprints, produced as pressures for reform were further magnified by the continuing failure of stopgap measures and administrative interference and by alarming manifestations of growing popular anger and national tensions, have been marked by an increasingly clear return to and refinement of the LTP's basic orientation: "depoliticized" and comprehensive market mechanisms with some strengthening (to a degree still to be determined) of federal capacity to hold the ring and determine some macroeconomic parameters. The "Theses for the Further Development of the Economic System" of 1987, which focused on means of attracting foreign capital, introducing money markets, and encouraging mixed forms of ownership, were a harbinger confirmed on a more comprehensive scale in draft amendments to the Constitution published in January 1988 and the proposals produced for the Federal and Serbian governments in mid-1988 (discussed as "the Mikulic Report" and "the Milosevic Report" by John Burkett in the preceding <?> chapter).

At the end of November the Federal Assembly, keeping to a timetable many had regarded as wildly unrealistic in the face of an increasingly tense and confrontational political atmosphere, formally adopted a package of 39 amendments that have changed or abolished one-third of the text of the 1974 Constitution. The amendments directly concerned with the economic system, nn of the 39, are notably more radical in nature (or at least in intent) than those concerned with the political system, where many contentious issues (in particular federal-regional relations and distribution of powers) have clearly been adjourned for another day.

Addressing almost all of the systemic vices of the contractual economy enumerated in Part III of this chapter, the "economic amendments" in the package include the following provisions:

—Elaborate prescription of the forms of organization of "economic subjects" has been abolished. The enterprise (company), a term significantly restored to authorized use as an alternative to Working Organization (WO), is once again defined as "the basic economic subject" (in place of the discredited BOAL) and will have full autonomy to organize itself as it deems appropriate. BOAL's within WO's have become optional, along with all except the most basic organs and supervisory powers of "self-management."

—Self-management and managerial functions will be separated. Workers Councils will decide only on key issues concerning business and development policies, once a year and without interfering in the Management Board's full powers to run business operations.

—Enterprises may now be founded by groups of workers and/or "citizens" as well as by other enterprises and "sociopolitical communities" (governments), previously the only entities entitled to do so.

—Profit (sic) is to be the basic motivating factor and criterion of enterprise operations. "Exit possibilities" for firms (bankruptcy) and their employees (termination) are to be expanded and strengthened.

—The amendments firmly establish pluralism and equality of ownership—public, private, mixed, or cooperative. All must be

treated equally and without discrimination in legislation and are to be ensured the same position in matters of pricing, exports, imports, customs and other duties, credits, and taxation.

—Mixed companies will be jointly managed by their founders—public and private, domestic and foreign—and voting power will be commensurate to shares in invested funds.

—These enterprises may be shareholding or joint-stock companies, with limited or unlimited liability.

—The Constitution itself now guarantees full transfer of profit and repatriation of capital to foreign investors. Joint venture contracts are protected against future changes in legislation, and there is no ceiling on the share of foreign investors in joint ventures. Additional facilities will be granted to joint or foreign firms, including a variety of “tax breaks” or total tax exemption for a prescribed period.

—The same principles and guarantees apply to joint venture banks and other financial institutions, which foreign and domestic banks can also establish.

—Wholly owned foreign firms are permitted and will have “national” treatment, operating under equal conditions with Yugoslav enterprises. Approval may be denied only if warranted by defense, security, or environmental considerations.

—With one important exception, limitations on private property rights, including ownership of houses, apartments, and business premises, have been abolished. The exception concerns individual and family ownership of arable land, which has a new upper limit of 30 hectares—tripling the 10-hectare maximum guaranteed in all constitutions since 1953. Apparently the most contentious issue addressed by the draft amendments concerned with the economic system, which contained a 15-hectare limit when published in January 1988, the 30-hectare maximum represents another compromise between advocates of no limitations and a coalition of political and agrarian interests and ideologies that has stubbornly defended the 10-hectare limit since it was introduced, as a similar compromise after collectivization was abandoned, in 1963.

—Banks are to become fully autonomous, profit-oriented financial institutions and cannot be subject to any territorial limitations in their operations.

—The position of the National Bank of Yugoslavia as a central monetary power has been significantly strengthened.

Changes in the *political* system mandated by the amendments are significantly more modest, as noted. Probably the most significant in its potential effect on macroeconomic policymaking is abolition of interregional consensus as a requirement for decisionmaking by the executive branch in its areas of autonomous competence, which appear to have received some marginal enlargement. The right to strike is constitutionally guaranteed for the first time, although it has been a *de facto* reality for more than 20 years.

In the summer of 1988 the Federal Executive Council, anticipating adoption of these amendments on schedule, began drafting 43 implementing “systemic laws”, 23 of them supposedly (and optimistically) to be ready for consideration by the Federal Assembly before the end of the year and the rest in early 1989. The list includes new laws on the banking and credit system, on foreign and

private domestic investments in Yugoslav enterprises, on foreign credits and other forms of international economic relations and foreign operations by Yugoslav firms, on the foreign currency regime, on monopolies, on internal trade and measures to ensure a unified countrywide market, on bankruptcy, on depreciation, on public accounting, on "social control of prices," on obligatory "association" of (Republican) firms in the railroad, electrical production, and postal sectors, on the fundamentals of the tax system, and others.³¹ Those concerned with the status of enterprises and foreign investment were first off the drawing board and in process of adoption before sanctioned by passage of the amendments.

As described below, the prospects for further and positive changes in the political system and reform of the Party, which are even officially regarded as a necessary but insufficient condition for implementation of the "economic amendments" in the November 1988 package, are still highly uncertain. However, the following list of apparently firm or qualified current points of agreement and still open and disputed questions, extrapolated from the November 1988 amendments and the debates they have engendered,³² appears to represent a significant clarification of issues and choices and more tangible progress toward meaningful economic reforms during 1988 than in the preceding seven lean years.

1. Commodity market imperfections and lack of markets for capital and labor have been more clearly isolated as the principal sources of most of Yugoslavia's diverse forms of economic inefficiency, carrying costs that are now universally regarded as politically and socially as well as economically unbearable. This clarifying perception has intensified emphasis, but is certainly placing excessive demands, on markets as a multiuse solution to most of the country's endogenous economic problems.

2. Nobody now pretends (as Yugoslavs have often tended to pretend) that words are deeds, even when enshrined in the Constitution, or that the economic reforms they proclaim have much prospect without the other two and more difficult of the promised triad: political and Party reforms.

3. Decisionmaking and influential elites now appear to agree that the LAL, the capstone of the 1970's system, is too riddled with defects to be amendable to amendment. It is therefore increasingly probable, and can be interpreted as mandated by several of the November 1988 amendments, that it will simply be scrapped and replaced by one or more of the new "systematic laws" described above, or others, which will save whatever is regarded as savable.

4. There is little or no disagreement that the 1974 Constitution's drastic limitation of federal economic powers and consensus rules for the exercise of what is left have dictated that countrywide macroeconomic policies and their implementation are almost invariably either (a) too little and too late (i.e., delayed and compromised until they are either irrelevant or dysfunctional) or (b) impossible.

5. However, the weakness of the "political system amendments" in the 1988 package again demonstrates that there is no agreement

³¹ "Koliko su čvrsta sidra," in *Ekonomška Politika* (Belgrade), Sept. 19, 1988, p. 15.

³² As these last have been reported in this observer's sampling of the Yugoslav press (primarily dailies and weeklies published in Belgrade and Zagreb) during 1988.

on just how serious the costs of (4) have been, and how much and what kinds of strengthened federal economic power are both necessary and desirable.

6. For skeptics and minimalists on the subject of strengthened federal powers, the history of this multinational community abundantly demonstrates that there are also costs of economic and especially political kinds, which can also become unbearable, in centralized powers and decisionmaking which may be controlled by a numerically or by a numerically or otherwise predominant nation or alliance. The code word for this concern is "hegemonism," which refers to Serbia and the Serbs.

7. The issue is therefore how many or few "recentralizing" measures are actually necessary to reduce the current costs of radical macroeconomic policy decentralization to tolerable levels without raising the future (and historically known) costs of centralized authority to levels regarded as unacceptable by most politically mobilized members of most of the Yugoslav nations.

C. CURRENT OBSTACLES AND CONSTRAINTS

Pessimism at home and abroad about Yugoslavia's prospects, deepening with the crisis and further manifestations of the incapacity of current systems and leaderships, has often had a radical "either/or" quality: asking whether revolutionary or cosmetic change is more likely and ignoring or discounting intermediate questions and possibilities. These last include the distinction, in kind or in degree, between (i) constraints on the scope and content of reforms and (ii) obstacles which may simply preclude their adoption and/or implementation.

(i) Sources of resistance which have constrained current blueprints for reform, and which can become obstacles frustrating their implementation, roughly correspond to and arise from four basic goals of the blueprints: decisive depoliticization of the economy and perfection or introduction of markets for all factors, a mixed economy with far more scope for private and collective enterprises and investments, and some strengthening of federal authority over macroeconomic parameters. The nature of resistance to and constraints on the last of these is described above and under (ii) below. The others are overlapping categories, but with some distinctions.³³

Depoliticizing the economy would restrict the ability of regional and local leaderships to supply economic benefits in return for political support. Losing the protection of their political benefactors and confronting a stricter bankruptcy law and other provisions of the reforms imposing penalties for inefficiency and entrepreneurial misjudgments, less efficient enterprises would see their existence (and the jobs of their workers) threatened. Thus both beneficiaries of regional and local socialist mercantilism, the protectors and the protected, have reason to oppose or to seek to limit depoliticization.

Unless it is further restricted by implementing legislation or by local administrative nullification, a common practice, the still

³³ See Bukowski, art. cit., pp. 102-106, for a similar analysis of constraints on depoliticization and marketization.

qualified unleashing of private and collective enterprises in the mixed economy envisaged by the amendments also threatens both of these same groups. Competition by small- and medium-sized private or collective firms, unburdened by greater costs than benefits from "bias to bigness" and the ingrained inefficiency of most enterprises in the socialist sector, will challenge the latter's local or regional monopolies or oligopolies and rents. In a society with massive unemployment, expansion of the private and collective sector would also fundamentally alter local power structures by creating a network of alternative and politically un beholden employers, many expected to be *Gastarbeiter* returning from Western Europe with hard currency to invest. This would destroy a basic source of patronage, and therefore power, presently enjoyed by local political elites: their quasi-monopoly over employment opportunities in the local economy, based on their ability to ask firms that are dependent on their favors or protection to find or invent a job for a loyal client of his relatives.³⁴

Anticipation that the consequences of genuine markets and "de-tatization" would be unevenly distributed among the republics and provinces (as well as sectors and individuals), with the less developed reaping few of the benefits and most of the penalties, played a major role in the political struggles preceding the reforms of the 1960's.³⁵ That this appeared to be happening played a major role in the abandonment of market socialism and turn to the contractual economy in the 1970's, as noted above. The first of these themes is being replayed in the 1980's, as John Burkett also points out in his contribution to this volume, but with two differences. In the mid-1960's the Serbian political leadership sought to form and lead an antireform coalition of less developed republics; in the mid-1980's, if the "Milošević Report's" proposals of 1988 are to be taken seriously (which many disbelieve), Serbia's leadership has adopted a promarket stance equaled in intensity and consistency only by Slovenia's. However, constitutional changes since the 1960's have given each federal unit a de facto veto over any reforms and many policy changes. The need for allies in several republics to block reforms has consequently diminished, although the need for a coalition to carry them has not.

There may still be some genuinely devout Marxist strict-constructionists in Yugoslavia. However, it is this writer's view that what appear to be ideological constraints, because ideological arguments are invoked, are almost invariably constraints of other kinds cloaked in Marxist phrases and citations. There are one major and probably only two other exceptions. It is virtually impossible to challenge the basic ideological precepts underlying "self-management," and therefore its basic institutions (workers' councils, etc.), because these are fundamental to the legitimacy of the regime and Yugoslavia's independence of the Soviet bloc and model. It has been extraordinarily difficult to define an ideologically acceptable alternative to the concept of "social ownership" (what else is there

³⁴ A dimension of local opposition to the private sector suggested (in a Belgrade conversation in 1986) and considered highly important by Prof. Ljubiša Adamović.

³⁵ Described, inter alia, in Dennison Rusinow, *The Yugoslav Experiment* (op. cit.), chs. 4-5, passim.

except private, state, and collective?), despite its practical defects. And it has proved particularly difficult to abolish limitations on private ownership of agricultural land, imposed as a primarily ideological compromise when collectivization was abandoned, although larger holdings are no longer a matter of man exploiting man but of man exploiting tractor.

(ii) There have been two basic obstacles to meaningful systemic reforms requiring changes in the Constitution and/or legislation that similarly depends on Republican/Provincial consensus. One of them is chronic but has seemed to be in momentary remission just as the other threatens to prove fatal. The national question is an important element in both.

The first has been there since reforms of the economic system were first subject to debate in the early months of the crisis, with some strengthening of federal economic powers and corresponding diminution of regional and local ones in most of the blueprints. With all federal units enjoying a veto over changes of this kind, and with one and probably more of these certain to have reservations about any strengthening of federal and diminution of their own powers, the prospects for economic reforms with these kinds of provisions, on which others insisted, seemed bleak.

The constitutional amendments of November 1988 appear to signify a qualified and conditional breach of this obstacle. Their adoption seems to represent a compromise between those who had been insisting that marketizing and deregulatory economic reforms and centralizing political ones must be adopted as a single package and those who advocated their separation after and for the sake of a consensus on the "economic amendments" that Yugoslav media were reporting during the summer. The reasons why the former seem to have accepted less than half a pie, by apparently agreeing to postpone the most controversial of the political-system changes they sought to a second round of amendments (or a new Constitution), are speculative. It is reasonable, however, to assume that the increasing urgency of at least appearing to be doing something constructive about a desperately sick economy played a role.

Unfortunately, the forging of apparent consensus on economic reforms has coincided with an escalating political and constitutional crisis on another (and more unambiguously national and nationalist) front. Against a background of rising Serbian national passion and mass demonstrations, no longer solely focused on Kosovo and the fate of Serb and Montenegrin minorities living there, the Serbian leadership that played a key role in the November compromise has simultaneously been demanding radical changes in federal and other leaderships and in Serbia's constitutional position vis a vis its autonomous provinces (Kosovo and Vojvodina)—and by extension in the Federation. These developments and Serbian Party President Slobodan Milošević's political style, which his opponents have described as fascist or Stalinist, have contributed massively to an already poisonous political atmosphere characterized by a Zagreb newsmagazine as "verbal civil war".³⁶

³⁶ *Danas*, Aug. 9, 1988. pp. 10f.

Whether a fragile and conditional interregional consensus on economic reforms and the possibility of a coalition of key republics and intrarepublican forces to ensure their implementation can survive this war and its possible further escalation is clearly moot. The race between turning the economy around in time to avoid a political explosion and a premature detonation by quarreling politicians and inflamed national passions continues.

YUGOSLAV ECONOMIC PERFORMANCE AND PROSPECTS: AN ANALYSIS BASED ON A BAYESIAN VECTOR AUTOREGRESSION

By John P. Burkett*

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SUMMARY

From 1982 to 1987 employment grew faster than output, the shares of government expenditure and net exports in output rose, while the shares of consumption and investment fell. Using a Bayesian vector autoregression as an analytic tool, we find that most of the changes in performance can be largely explained by changes in the external environment. However, the fall in the share of consumption was largely a lagged response to preexisting conditions, while the rise in the share of government expenditure was largely autonomous.

Under a reasonable range of assumptions about future external conditions, we can anticipate that from 1987 to 1992 employment and output will grow and the share of government expenditure in output will fall. Forecasts of labor productivity and the shares of investment, consumption, and net exports are sensitive to assumptions about future world market conditions.

Proposals now under discussion to strengthen market forces are not likely to alter economic performance greatly in the next few years, but they could have an effect in the longer term.

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I. INTRODUCTION

In this paper I analyze Yugoslav economic performance with the aim of accounting for recent changes and forecasting future developments.¹ The period of focus is 1983-92—i.e., since the preparation of the last East European compendium² and before the expected publication of the next one. The emphasis is on real macroeconomic variables, although some comments are made on nominal variations and microeconomic issues.

A. HISTORICAL BACKGROUND

Yugoslavia enjoyed brisk growth of employment, output, and productivity in the 1950's under a system of modified central planning. When growth slowed in the early 1960's, Yugoslavs tried to reform their economic system so as to allocate investment more efficiently and stimulate technological progress. However, the market-oriented Economic Reform introduced in 1965 was accompanied by some undesired side effects: rising unemployment, increased difficulty in attaining macroeconomic policy objectives, and perhaps loss of status for some influential political and regional interest groups.³ In reaction to the perceived problems of a market economy, Yugoslavia moved in the 1970's to a system of all-sided bargaining known as the contractual or agreed-upon economy (*dogovorna privreda*).⁴ The contractual economy is probably less conducive to efficiency than either central planning or a market economy,⁵ but living standards continued to rise as long as the external environment was favorable. At the end of the 1970's the second oil price shock, the rise of world-market interest rates, and increased wariness of lenders forced Yugoslavia to cut absorption. Domestic dissatisfaction occasioned by falling living standards, combined with pressures from foreign lenders, put market-oriented reforms back on the agenda. A market-oriented Long-Term Stabilization Program was adopted in 1983.⁶ The period since then has been dominated by a search for policies that would minimize the pain of belt-tightening and for means of implementing market-oriented reforms without recreating the problems of the late 1960's.

¹ This paper is based on information publicly available in Yugoslavia as of July 27, 1988. I thank the Economics Institute of Zagreb for hospitality, Paul Marer, Dennison Rusinow, and numerous Yugoslav colleagues for clarifying discussions, and Borislav Skegro for helpful comments. Responsibility for errors is mine.

² East European Economies: Slow Growth in the 1980's," ed. John Hardt, U.S. Congress, Joint Economic Committee, 1986.

³ John P. Burkett, "The Effects of Economic Reform in Yugoslavia: Investment and Foreign Trade Policy, 1959-76" (Berkeley: Institute of International Studies, University of California, 1983); Andre Sapir, "Economic Growth and Factor Substitution: What Happened to the Yugoslav Economic Miracle?" *Economic Journal*, 1980, pp. 294-313.

⁴ Laura D'Andrea Tyson, "The Yugoslav Economic System and Its Performance in the 1970's" (Berkeley: Institute of International Studies, University of California, 1980).

⁵ Leif Johansen, "The Bargaining Society and the Inefficiency of Bargaining," *Kyklos*, 1979, pp. 497-522.

⁶ John P. Burkett, "Stabilization Measures in Yugoslavia," in "East European Economies: Slow Growth in the 1980's," Vol. 3, ed. John Hardt (U.S. Congress, Joint Economic Committee, 1986).

B. EXPOSITION OF THE ECONOMETRIC MODEL UNDERLYING THE
ANALYSIS AND FORECASTS

To quantitatively account for changes in performance and forecast future developments, we need an econometric model, which might be either a structural model in the tradition of the Cowles Commission or a vector autoregression (VAR) such as proposed by Christopher A. Sims.⁷ For substantive and expository reasons I have selected the latter.⁸ In accord with the focus on real macroeconomic processes, the endogenous variables are employment, real gross material product (*drustveni proizvod*),⁹ and the components of gross material product: consumption, investment, government expenditure, and net exports.¹⁰ The exogenous variables are Yugoslavia's terms of trade, a world market real interest rate, and a weighted average of industrial production by Yugoslavia's leading trade partners in the Organization for Economic Cooperation and Development (OECD). The variables' symbols and definitions are displayed in Table 1. The data are annual and the estimation period is 1954-87. Explanatory variables include all endogenous variables lagged 1 and 2 years and exogenous variables' current value and their first two lags.¹¹

⁷ "Macroeconomics and Reality," *Econometrica*, January 1980, pp. 1-47 and "Policy Analysis with Econometric Models," *Brookings Papers on Economic Activity*, 1982, No. 1, pp. 107-152.

⁸ The substantive reason for preferring a VAR is that the identifying restrictions required for a structural model are particularly hard to specify for a small economy—such as Yugoslavia—with a number of relatively large agents who should be considered as players in a game rather than individuals decisionmakers. In a game situation each player's behavior may depend on all players' preferences and information sets (Leif Johansen, "Econometric Models and Economic Planning and Policy: Some Trends and Problems," in "Current Developments in the Interface: Economics, Econometrics, and Mathematics," ed. M. Hazewinkel and A. H. G. Rinnooy Kan (D. Reidel, 1980)). Hence a regressor for any endogenous variable may be a regressor for all, precisely as in a VAR. The expository reason is that even if credible identifying restrictions were available, they would be difficult to explain concisely to a wide audience that may include noneconomists.

⁹ *Drustveni proizvod* is gross in the sense of including a capital consumption allowance, but is net of intermediate products.

¹⁰ Originally I estimated a VAR in which the endogenous variables included not only real variables but also three nominal variables: the money supply, the price level, and the exchange rate. However, I found that I could reject neither the hypothesis that nominal variables have no influence on reals, nor the hypothesis that real variables have no influence on nominals. The dichotomy between reals and nominals is confirmed by simulation experiments using a structural econometric model (Borislav Skegro, James H. Gapinski, and Zoran Anusic, "Policy Initiatives for Improving Yugoslav Economic Performance," Florida State University working paper, July 1988). Being primarily interested in the real variables, I deleted the nominals from the VAR.

¹¹ A constant and trend also appear in each equation, giving a total of 23 parameters in each equation, leaving only 11 degrees of freedom. Such a profligately parameterized model would give poor forecasts unless restricted by prior information on the parameters. Because economic time series in logarithmic and ratio form often can be closely approximated by a random walk with drift, I adopted a prior mean of 1 for own first lags, a diffuse prior for the constant, and a prior mean of 0 for other coefficients. I adjusted the prior variances to reduce root mean squared errors of out-of-sample forecasts for 1983-87. The prior information is combined with data evidence using standard Bayesian techniques. All estimation was done in RATS. Technical background can be found in Thomas A. Doan, Robert B. Litterman, and Christopher A. Sims, "Forecasting and Conditional Projection Using Realistic Prior Distributions," *Econometric Reviews*, 1984, pp. 1-100.

TABLE 1.—ALPHABETICAL GLOSSARY OF VARIABLES IN THE VECTOR AUTOREGRESSION

Symbol	Definition
C.....	Ratio of personal consumption to gross material product, both expressed in 1972 prices
E.....	Natural logarithm of employment, measured in thousands of workers
G.....	Ratio of government expenditure (rashodi za zajednicku i opcu potrosnju) to gross material product, both expressed in 1972 prices
I.....	Ratio of gross investment in fixed assets to gross material product, both expressed in 1972 prices
N.....	Ratio of net exports of goods and non-factor services to gross material product, both expressed in 1972 prices
OIP.....	Natural logarithm of a weighted average of industrial production in OECD countries
TBR.....	Difference between the interest rate on U.S. Treasury bills and the rate of inflation in U.S. wholesale prices, both expressed as percents
TOT.....	Natural logarithm of the ratio of an export price index to an import price index (TOT=0.0 in 1972)
Y.....	Natural logarithm of gross material product (drustveni proizvod), expressed in millions of dinars, at 1972 prices

Note: I—C—I—G—N—the share of inventory accumulation and statistical discrepancies in gross material product.

Sources: Yugoslav and OECD data for 1952–86 come from the data bank of EIZFSU, kindly made available by Borislav Skegro, and documented in his EIZFSU makroekonometrijski model jugoslavenske privrede (Zagreb: Ekonomski Institut, 1987). I updated the series through 1987, using data from the Savezni Zavod za Statistiku, Indeks and Statisticki kalendar Jugoslavije 1988, and OECD, Main Economic Indicators. Some of the 1987 data are tentative and approximate. U.S. data were taken from Main Economic Indicators and IMF, International Financial Statistics.

The properties of a VAR are more easily understood by examining the contemporaneous correlations of disturbances in its equations (Table 2) and the impulse functions (Table 3) than the estimated coefficients (available from the author). The most notable features of Table 2 are the strong positive correlation between E and Y and the strong negative correlations between E and N, Y and C, Y and N, and I and N. The model is uninformative about the direction of causation, but economic theory and Yugoslav institutions suggest the following interpretation. Employment growth increases output and imports, hence reducing net exports; consumption is partially sheltered from fluctuations in output; imports increase with output, thus lowering net exports; investment tends to crowd out net exports.

TABLE 2.—CORRELATION MATRIX OF CONTEMPORANEOUS DISTURBANCES IN THE VAR, ESTIMATED USING ANNUAL DATA FOR 1954–87

Variable	E	Y	G	I	C	N
E.....	1.000					
Y.....	.585	1.000				
G.....	-.212	-.275	1.000			
I.....	.318	.118	.443	1.000		
C.....	-.385	-.581	.311	-.027	1.000	
N.....	-.552	-.541	.185	-.524	.304	1.000

Note: Variables are defined and data sources are cited in table 1.

Impulse response functions (also known as dynamic multipliers) indicate the current and future effects on all endogenous variables of a shock or disturbance to any one variable. To calculate impulse response functions, one must make some assumption about the pattern of causation underlying the contemporaneous correlations among endogenous variables. Based on theoretical and institutional considerations and a decomposition of error variance, I have assumed that the causal ordering is E, Y, G, I, C, N—i.e., the order in which the variables are listed in Tables 2 and 3.¹²

¹² The order of variables is of little consequence when their disturbances are weakly correlated, as in the case of C and I.

TABLE 3.—IMPULSE RESPONSE FUNCTIONS OF THE VAR, ESTIMATED USING ANNUAL DATA, 1954–87

Impulse variable	Size of impulse	Period	Response variables					
			E	Y	G	I	C	N
TOT.....	0.041	1	-0.481	-0.093	0.241	-0.083	0.280	-0.615
		5	-.352	-.420	.004	-.159	.022	-.069
OIP.....	.099	1	.149	.816	-.069	.378	.017	.062
		5	-.008	1.469	-.045	.310	.029	.262
TBR.....	3.923	1	.411	.821	-.266	-.450	-.615	-.032
		5	-.432	-.376	-.060	-.421	-.056	.164
E.....	.018	1	1.841	1.960	-.073	.421	-.265	-.662
		5	.952	1.269	-.003	.237	-.057	.233
Y.....	.027	1	.000	2.720	-.065	-.111	-.302	-.322
		5	-.214	1.094	-.004	-.051	.029	-.018
G.....	.003	1	.000	.000	.332	.682	.106	.023
		5	.118	.449	-.007	.109	.007	-.026
I.....	.010	1	.000	.000	.000	1.049	-.018	-.577
		5	.261	.766	-.001	.218	.000	-.034
C.....	.005	1	.000	.000	.000	.000	.547	-.063
		5	-.010	.078	.000	.009	.004	-.000
N.....	.007	1	.000	.000	.000	.000	.000	.747
		5	-.076	.025	-.001	-.007	.006	-.011

Note: Entries in the "size of impulse" column represent one standard deviation in the residual from a regression for the impulse variable. In the case of exogenous variables (TOT, OIP, TBR), the regressors are simply a constant and a trend. In the case of the endogenous variables, the regressions are those of the VAR. Entries in the "period" column represent years elapsed since the impulse, counting the year of the impulse as year 1. Entries in the "response variables" columns represent 100 times the response. Entries for E and Y can be interpreted as the percentage change in employment and gross material product. Entries for G, I, C, and N can be interpreted as changes in the percentage shares of government, investment, consumption, and net exports in gross material product.

The quantitatively most important features of the impulse response functions shown in Table 3 are the following. Improvements in Yugoslavia's terms of trade have a negative impact on its real net exports. Increases in OECD industrial production have a positive effect, which grows over time, on Yugoslav gross material product. Increases in world-market real interest rates have a negative impact on the share of consumption in gross material product. Positive shocks to employment have a positive impact on gross material product. Positive shocks to the share of government expenditures in gross material product have a positive impact on the share of investment. Positive shocks to investment have a positive effect, which grows through time, on gross material product and a negative impact on the share of net exports in gross material product.

II. ECONOMIC PERFORMANCE IN 1983–87

A. DESCRIPTION OF PERFORMANCE AND THE EXTERNAL ENVIRONMENT

The movements of the endogenous and exogenous variables over the last 10 years are shown in Table 4. From 1982 to 1987 employment grew steadily at an average rate of 2.37 percent per year, while gross material product fluctuated, growing at an average rate of 0.89 percent, resulting in a cumulative 7.04 percent fall in output per worker. The share of consumption in gross material product fell from 50.6 percent to 48.7 percent; the share of fixed investment fell from 26.5 percent to 19.8 percent; the share of government rose from 11.6 percent to 13.6 percent; the share of net exports rose from -3.5 percent to 0.2 percent.

TABLE 4.—DATA ON VARIABLES IN THE VAR, 1978–87

Year:	Endogenous variables						Exogenous variables		
	E	Y	G	I	C	N	TOT	OIP	TBR
1978.....	8.591	12.76	0.1111	0.3467	0.5369	-0.08299	-0.02694	4.546	-0.618
1979.....	8.633	12.83	.1178	.3447	.5293	-.09395	-.06440	4.596	-2.491
1980.....	8.665	12.85	.1169	.3170	.5210	-.06481	-.06755	4.605	-2.560
1981.....	8.694	12.86	.1108	.2818	.5091	-.03844	-.08329	4.591	4.977
1982.....	8.717	12.87	.1158	.2651	.5058	-.03548	-.03504	4.564	8.694
1983.....	8.736	12.86	.1187	.2425	.5034	-.00928	-.05811	4.571	7.393
1984.....	8.757	12.88	.1127	.2143	.4874	.00875	-.13894	4.609	7.204
1985.....	8.782	12.88	.1143	.2055	.4849	.02189	-.17201	4.642	7.941
1986.....	8.812	12.92	.1250	.2053	.4891	.00684	-.08112	4.664	8.858
1987.....	8.834	12.91	.1363	.1979	.4867	.00157	-.05703	4.686	3.206

Note: Variables are defined and data sources are cited in table 1.

Yugoslavia's terms of trade (TOT) declined 12.8 percent between 1982 and 1985 but rose 12.2 percent between 1985 and 1987. A weighted average of industrial production in Yugoslavia's leading Western trade partners (OIP) rose from its 1982 trough to 1987 at an average annual rate of 2.47 percent. A world-market real interest rate (TBR) hovered around 8 percent in 1982–86 and then dropped to 3.2 percent in 1988.

B. DECOMPOSITION OF CHANGES IN PERFORMANCE INTO EFFECTS OF CHANGES IN THE EXTERNAL ENVIRONMENT AND INNOVATIONS IN ENDOGENOUS VARIABLES

To account for economic performance in 1983–87 we perform two simulation experiment with the VAR. First, we calculate the course of endogenous variables under the counterfactual assumption that exogenous variables were frozen at their 1982 values and there were no disturbances to the endogenous variables. Second, we calculate the course of endogenous variables conditional on the actual course of exogenous variables, but still assuming no disturbances. The difference between the values of variables in the two simulations can be attributed to changes in exogenous variables—i.e., the external environment. The difference between the value of variables in the second simulation and their actual values can be attributed to disturbances in the equations for the endogenous variables. To the extent that the exogenous variables are an adequate summary of the external environment, the disturbances in the equations for endogenous variables represent innovations of domestic origin—e.g., policy changes.

For each endogenous variable Table 5 reports the two simulated series followed by the actual series. The series for E and Y are in logarithmic form; hence the difference between two values can be interpreted as a percentage change. Changes in the exogenous variables tended to increase employment, raising it in 1987 by 3.1 percent over its value in simulation 1. Disturbances in the endogenous variables had only a minor effect on employment. Changes in the exogenous variables tended to increase gross material product, raising it 4 percent in 1987; shocks to the endogenous variables had scant effect on gross material product.

TABLE 5.—DECOMPOSITION OF CHANGES IN PERFORMANCE, 1983–87

Variable	Series	1983	1984	1985	1986	1987
E	Sim 1	8.733	8.750	8.766	8.783	8.803
	Sim 2	8.733	8.760	8.790	8.817	8.834
	Actual	8.736	8.757	8.782	8.812	8.834
Y	Sim 1	12.87	12.89	12.89	12.89	12.88
	Sim 2	12.87	12.89	12.90	12.91	12.92
	Actual	12.86	12.88	12.88	12.92	12.91
G	Sim 1	.1205	.1222	.1255	.1293	.1337
	Sim 2	.1201	.1167	.1181	.1262	.1338
	Actual	.1187	.1127	.1143	.1250	.1363
I	Sim 1	.2433	.2112	.1841	.1603	.1392
	Sim 2	.2454	.2170	.2075	.2021	.1937
	Actual	.2425	.2143	.2055	.2053	.1979
C	Sim 1	.5019	.4898	.4877	.4830	.4790
	Sim 2	.5026	.4837	.4842	.4873	.4936
	Actual	.5034	.4874	.4849	.4891	.4867
N	Sim 1	-.0070	-.0023	-.0014	-.0037	-.0069
	Sim 2	-.0034	.0127	.0168	.0092	-.0022
	Actual	-.0093	.0087	.0219	.0068	.0016

Note: For each variable listed in the first column, sim. 1 is the simulated value under the counterfactual assumption that the exogenous variables were frozen at their 1982 values and there were no disturbances to the endogenous variables. Sim. 2 is the simulated value conditional on the actual values of the exogenous variables and zero disturbances to the endogenous variables. Actual is the true value of the variable.

The series for G, I, C, and N represent fractions of gross material product; thus differences in these series can be interpreted as changes in fractional shares. Both exogenous variables and disturbances tended to lower the share of government expenditure in gross material product in 1983–86 but raise it in 1987. The exogenous variables tended to raise the share of investment in gross material product; the effect in 1987 was substantial: 5.45 percentage points. Disturbances to endogenous variables had little effect on the share of investment. Neither exogenous variables nor disturbances had substantial and consistent effects on the share of consumption in gross material product. (The fall in the actual consumption share is largely accounted for by lagged adjustment to conditions prevailing at the beginning of the period.) Changes in exogenous variables consistently raised the share of net exports in gross material product; the effect in 1987 was 0.47 percentage points. Disturbances to the endogenous variables had a fluctuating effect on net exports. In short, except for the case of government expenditure, shocks to endogenous variables play a minor role in explaining changes in performance in 1983–87.

Because shocks to endogenous variables are relatively important in explaining the changes in the share of government expenditure, I examined these shocks in more detail. Still assuming the above-mentioned causal ordering underlying contemporaneous correlations among residuals, I found that shocks to G contributed more, by an order of magnitude, to changes in G than did shocks to any other endogenous variable. Thus movements in G appear to have been relatively autonomous.

III. ECONOMIC PROSPECTS FOR 1988–92

To forecast the exogenous variables we must make some assumption about the future course of the exogenous variables. The assumption underlying our baseline forecast is that TOT and TBR

will remain at their 1987 values (-.0570 and 3.206 percent), while OIP will grow 2.5 percent per annum. We also consider three variants from the baseline. Variant 1 is a rosy scenario in which TOT rises, TBR falls, and OIP grows more rapidly than in the baseline. Variant 2 is a gloomy scenario in which TOT falls, TBR rises, and OIP grows less rapidly.¹³ In the baseline forecast and variants 1 and 2, predicted net exports are negative. But if foreign lenders impose credit rationing and gasarbeiters cease to send remittances, Yugoslavia may be unable to finance a trade deficit. We explore the consequences of an external financial constraint in variant 3, where net exports are constrained to be zero and exogenous variables take the same values as in the baseline forecast.¹⁴ The baseline forecast and three variants are shown in Table 6, followed by the standard error of the forecast. The standard error reflects the size of innovations but not uncertainty about the parameters.¹⁵

TABLE 6.—CONDITIONAL FORECASTS AND THEIR STANDARD ERRORS

Variable	Series	1988	1989	1990	1991	1992
E	Baseline	8.867	8.894	8.930	8.971	9.013
	Var. 1	8.864	8.889	8.924	8.965	9.009
	Var. 2	8.869	8.899	8.936	8.976	9.018
	Var. 3	8.867	8.893	8.923	8.955	8.989
	Sef	.018	.025	.030	.032	.034
Y	Baseline	12.96	12.98	13.01	13.06	13.12
	Var. 1	12.96	12.98	13.03	13.10	13.19
	Var. 2	12.96	12.97	12.99	13.02	13.06
	Var. 3	12.96	12.98	13.02	13.07	13.14
	Sef	.03	.04	.05	.05	.06
G	Baseline	.1351	.1366	.1367	.1357	.1338
	Var. 1	.1372	.1386	.1392	.1385	.1370
	Var. 2	.1330	.1345	.1342	.1330	.1307
	Var. 3	.1351	.1361	.1347	.1330	.1307
	Sef	.0035	.0042	.0043	.0043	.0043
I	Baseline	.1735	.1826	.1999	.2212	.2452
	Var. 1	.1772	.1899	.2176	.2532	.2945
	Var. 2	.1698	.1753	.1822	.1892	.1958
	Var. 3	.1735	.1820	.1974	.2179	.2412
	Sef	.0132	.0169	.0183	.0189	.0193
C	Baseline	.4775	.4929	.4960	.4989	.5011
	Var. 1	.4819	.5012	.5126	.5218	.5308
	Var. 2	.4731	.4847	.4793	.4759	.4714
	Var. 3	.4775	.4916	.4907	.4938	.4961

¹³In variants 1 and 2 the exogenous variables move away from their baseline values at a rate of one-half of a standard deviation per year. The standard deviations—computed using residuals from regressions of the exogenous variables on a constant and a trend—are shown in Table 3 in the column labeled "size of impulse." If the disturbances to a variable are independently and normally distributed, the chance of a disturbance exceeding one-half of a standard deviation in any one year is 0.309, but the chance of a unidirectional sequence of such disturbances sustained for 5 years is only 0.003. The chance of such sequences of disturbances to 3 independently distributed variables is a mere 0.00000002.

¹⁴More precisely, real net exports (net exports at 1972 prices) are constrained to be zero. Yugoslavia's terms of trade fell from 1.0 in 1972 to 0.94 in 1987. Hence if the terms of trade remain at their 1987 level, the assumption that real net exports are zero entails a nominal deficit, albeit smaller than if real net exports were negative. I have also simulated a scenario (not shown) in which the share of net exports is constrained to rise to 3.9 percent in 1992, as now indicated in forecasts for Project Link. Comparing the outlook for 1992 in this fourth scenario to that in variant 3, we find that gross material product is unchanged, while employment and the shares of government, investment and consumption are slightly reduced.

¹⁵The standard errors would be enlarged by consideration of parameter uncertainty. If the innovations are normally distributed, a 95 percent confidence interval is the range from 1.96 standard errors below to 1.96 standard errors above a forecast.

TABLE 6.—CONDITIONAL FORECASTS AND THEIR STANDARD ERRORS—Continued

Variable	Series	1988	1989	1990	1991	1992
N.....	Sef .....	.0069	.0072	.0073	.0073	.0073
	Baseline.....	-.0171	-.0745	-.0942	-.1006	-.1030
	Var. 1.....	-.0197	-.1072	-.1481	-.1743	-.1962
	Var. 2.....	-.0144	-.0418	-.0403	-.0269	-.0098
	Var. 3.....	.0000	.0000	.0000	.0000	.0000
	Sef .....	.0120	.0128	.0133	.0136	.0138

Note: The baseline forecast rests on the assumption that TOT and TBR will not change from their 1987 values and that GIP will grow at 2.5 percent per annum. Variants 1 and 2 are conditional on alternative assumptions (described in the text) about these variables. In variant 3 the trade balance is constrained to be zero. Sef is the standard error of the forecast, which reflects the size of innovations but not uncertainty about the parameters.

A. EMPLOYMENT AND GROSS MATERIAL PRODUCT

From 1987 to 1992 employment grows in the baseline forecast at an average annual rate of 3.6 percent and gross material product at 4.3 percent, implying resumed growth of output per worker, at a rate of 0.7 percent.¹⁶ (A 95 percent confidence interval for employment in 1992 is consistent with employment growing at any rate from 2.3 percent to 5.0 percent. The analogous range for gross material product is 1.8 percent to 6.8 percent.) In variant 1 employment again grows 3.6 percent per annum but gross material product grows at an accelerated rate of 5.8 percent per annum. In variant 2 employment growth inches up to 3.7 percent while growth of gross material product falls to 3.0 percent. In variant 3 employment growth falls to 3.1 percent while growth of gross material product rises to 4.7 percent.

B. ALLOCATION OF GROSS MATERIAL PRODUCT

The share of government expenditure in gross material product was 13.6 percent in 1987. In the baseline forecast this share fluctuates between 13.4 percent and 13.7 percent throughout the forecast period. (Within a 95 percent confidence interval for the baseline forecast, the share of government expenditure could be as low as 12.5 percent or as high as 14.2 percent in 1992.) All variants are similar to the baseline.

The share of investment in gross material product was 19.8 percent in 1987. In the baseline forecast investment's share dips to 17.4 percent in 1988 and then rises to 24.5 percent in 1992. (A 95 percent confidence interval for the baseline forecast for 1992 runs from 20.7 percent to 28.3 percent.) In variant 1 investment's share falls to 17.7 percent in 1988 before rising to 29.5 percent at the end of the forecast period. In variant 2 investment's share drops to 17.0 percent in 1988 before rising to 19.6 percent in 1992. In variant 3 this share drops to 17.4 percent in 1988 and then rises to 24.1 percent in 1992. Thus an unfavorable external environment or an external financial constraint would tend to lower investment's share relative to the baseline.

¹⁶ Table 6 contains forecasts for the logarithms of employment and gross material product. An approximate forecast of the levels of employment and gross material product can be obtained by simply exponentiating the forecast logarithms. To be precise we should multiply an exponentiated forecast by $\exp((\text{sef}^2)/2)$, where sef is the standard error of the forecast of the logarithm. However, in our case the multiplier is so close to one as to be of negligible importance.

The share of consumption in gross material product was 48.7 percent in 1987. Along the baseline, this share dips to 47.8 percent in 1988 and then rises to 50.1 percent in 1992. (Within a 95-percent confidence interval for the baseline, consumption's share in 1992 could be as low as 48.7 percent or as high as 51.5 percent.) In variant 1 consumption's share drops to 48.2 percent in 1988 before rising to 53.1 percent in 1992. In variant 2 this share fluctuates between 47.1 percent and 48.5 percent. In variant 3 it fluctuates between 47.8 percent and 49.6 percent. Like investment's share, consumption's share would be reduced by adverse movements of the exogenous variables or imposition of an external financial constraint.

The share of net exports in gross material product was 0.16 percent in 1987. By 1992 this share falls to -10.3 percent in the baseline forecast. (A 95-percent confidence interval for the 1992 value of the baseline forecast runs from -13.0 percent to -7.6 percent.) In variant 1 the share of net exports falls to -19.6 percent in 1992. In variant 2 it falls to -4.18 percent in 1989 before rising to -1.0 in 1992. In variant 3, by definition, it is constrained to be zero throughout the forecast period.

IV. POSSIBLE CHANGES IN POLICY RULES AND INSTITUTIONS

Our forecasts are conditional not only on the course of exogenous variables, but also on the assumption that Yugoslav policymakers, firms, and households continue to respond to their external environment and interact with each other as they have done in the past. Major changes in policy rules and institutions could falsify that assumption. Such changes are rare, but their potential impact should be considered, especially at a time like the present when they are widely anticipated. Following the Yugoslav practice, we shall discuss both policy rules and institutions without making a precise distinction between them.

A. PROPOSALS

By one commentator's count, various aspects of Yugoslavia's socioeconomic system are now the subject of no less than 10 reform proposals.¹⁷ We will concentrate on the two proposals currently attracting the most attention among economists. The first of these, commonly known as the Milosevic Report, was issued in April 1988 by a Commission for Questions of Economic Reform established by the Presidency of the Socialist Republic of Serbia.¹⁸ The second proposal, generally known as the Mikulic Report, was issued in June 1988 by a Commission for Reform of the Economic System established by the Federal Executive Chamber.¹⁹

The authors of the Milosevic Report, whom we shall call the Milosevic Commission, propose changes in the nature of state intervention in the economy, the structure of markets, and the organi-

¹⁷ Slaven Letica, "Jugoslavija i njezinih 60 reformi u 43 godine," *Vjesnik socijalistichog saveza radnog naroda Hrvatske*, July 13, 1988, p. 5.

¹⁸ The formal title of the Milosevic Report is "Osnovni stavovi za reformu privrednog sistema."

¹⁹ The formal title of the Mikulic Report is "Polazne osnove za reformu privrednog sistema." It was published in *Delegatski vjesnik* (a supplement to *Vjesnik socijalistichog saveza radnog naroda Hrvatske*), June 30, 1988.

zation of firms. With regard to the first point, the Milosevic Commission recommends a strong but less interventionist state. Legitimate state functions, in the commission's view, include protecting the unity of the market, conducting monetary and fiscal policy, and regulating foreign trade. Forms of intervention that should be reduced include allocation of investment and regulation of business. On the second point, the commission recommends abolishing the compulsory business associations and agreed profit margins characteristic of the contractual economy and eliminating regional barriers to trade. With regard to the third point, the commission favors increasing the authority and responsibility of enterprise managers and abolishing the compulsory divisionalization of enterprises.²⁰

The authors of the Mikulic Report, whom we shall call the Mikulic Commission, justify their contribution to the stream of reform proposals by noting that earlier efforts, including the Long-Term Stabilization Program adopted in 1983, did not anticipate the depth of the present social and economic crisis. To escape from the crisis, the Mikulic Commission recommends the following measures. Social property ought to be redefined to strengthen incentives to maintain existing assets and undertake new investment. Steps should be taken to create an integral market economy—i.e., unified Yugoslav-wide markets for goods and productive factors, open to the world market. Private investment is to be encouraged, although social property must continue to dominate. Enterprises are to become autonomous market subjects. The state must find effective tools for macroeconomic stabilization but should refrain from administrative intervention in the economy. The Mikulic Commission promises to elaborate its proposals in subsequent reports.

Taken at face value, both reports chart a course toward a market economy. However, critics with experience at reading between the lines of official documents note substantial ambiguities. Against the background of Slobodan Milosevic's campaign to reign in the Autonomous Provinces of Kosovo and Vojvodina, the most important theme of his report may be the need to strengthen the central government. The Mikulic Commission makes liberal use of oxymorons and murky formulations. Thus it approves of selling shares in public enterprises without compromising workers' management and social property. Similarly, the commission approves of private enterprise without exploitation.²¹ Recalling that Branko Mikulic's government used an ostensibly promarket resolution passed by the federal assembly as its authority for freezing prices in the fall of 1987, one may doubt whether Mikulic would interpret his commission's report as a mandate for markets.

²⁰ Enterprises are currently divided into basic organizations of associated labor (BOAL's), which have the right to make contracts with other BOAL's either within or outside the parent enterprise, and even to secede from the latter. On the functioning of enterprises divided into BOAL's, see Stephen R. Sacks, "Self-Management and Efficiency: Large Corporations in Yugoslavia" (London: George Allen and Unwin, 1983). The Milosevic Commission does not explicitly call for abolition of BOAL's, but if compulsory divisionalization were ended, some enterprises would presumably dissolve their BOAL's.

²¹ Predrag Tasic, "Butalci otkrivaju tržište," *Vjesnik socijalističkog saveza radnog naroda Hrvatske*, July 17, 1988, p. 5.

B. PROSPECTS FOR IMPLEMENTATION

Two partial explanations may be offered for the fact that Yugoslav policymakers sometimes adopt promarket resolutions but fail to implement them. First, the resolutions are partly for foreign consumption. Passing a promarket resolution may help secure a foreign loan, but once the loan is secured, the incentives to implement the resolution fade. Of course, a government which fails to implement its resolutions eventually loses its credibility. But in the post-Tito era governments change frequently and hence have little incentive to maintain credibility.

Second, Yugoslavia is a federation in which implementation of federal resolutions is in part the responsibility of republican, provincial, and local authorities. (For brevity we shall refer to republics, provinces, and their subdivisions as regions.) The regions enjoy varying levels of economic development. Regional representatives are involved in a strategic game such that they may prefer that Yugoslavia as a whole move from a contractual to a market economy, provided that the efficiency gains are distributed to their liking, yet prefer not to implement promarket resolutions in their own region.

A simplified game of this nature is illustrated in the payoff matrix shown in Table 7. The game has two players: a less-developed region (LDR) and more-developed region (MDR). As the payoff matrix is structured, the best outcome for either region is that in which it retains the monopolistic and monopsonistic powers that go with a contractual economy while the other region implements a competitive market economy. The worst outcome for either region is that in which it adopts a competitive market economy but the other region does not. Neither region has an incentive to unilaterally create a market economy. The sum of the payoffs is highest if both regions have a market economy, but the gains go entirely to the MDR.²² A side payment to the LDR could induce it to accept a cooperative solution involving a market economy in both regions, but disagreement about the size of a fair side payment can result in both regions retaining a contractual economy.

²² It is this feature of the game that differentiates it from a classic prisoners' dilemma.

Table 7
 Illustrative payoff matrix for an inter-regional game

		Less developed region	
		Contractual economy	Market economy
More developed region	Contractual economy	2	0
	Market economy	3	2

Note: The payoff matrix is presented as a 2x2 grid. The top row represents the 'More developed region' and the bottom row represents the 'Less developed region'. The left column represents the 'Contractual economy' and the right column represents the 'Market economy'. The entries in the cells are: (More developed, Contractual) = 2; (More developed, Market) = 0; (Less developed, Contractual) = 3; (Less developed, Market) = 2. The matrix is enclosed in a dashed border.

Note: The payoff matrix pertains to a game with two players: a less developed region and a more developed region. Each player has two strategies: retain a contractual (*dogovorna*) economy or implement a market economy. The entry in the upper right of each cell of the matrix represents the payoff to the less developed region; the entry in the lower left of each cell represents the payoff to the more developed region. The entries are illustrative; only their relative magnitude matters.

If we accept these two partial explanations for nonimplementation of past resolutions in favor of a market economy, we may be skeptical about the prospects for implementing the current round of proposals. However, social pressures are mounting to do something to improve economic performance. In the last few months workers demanding higher pay have struck, demonstrated, and in one instance even forced entry into the federal parliament building. Labor unrest, interacting with long-simmering ethnic tensions, could explode should the policymakers fail to improve living standards. If it is true that nothing concentrates the mind like the prospect of being hung in a fortnight, then there is yet hope that policymakers will concentrate their minds long enough to find a way of implementing reforms.

C. CONSEQUENCES OF IMPLEMENTATION

The announcement effect of policy changes and reforms is likely to be small because the public is skeptical about their longevity.²³ Even if people come to believe that a market economy is here to stay, they will not all immediately become indifferent to planners' preferences. Numerous individuals who have in the past engaged in some transaction of dubious legality will want to remain politically "on-line" for fear of attracting unwanted attention from the Social Accounting Service or politically connected journalists. However, if proposals such as those of the Milosevic and Mikulic Commissions are interpreted and implemented in a manner that

²³Letica, p. 5.

strengthens market forces for a substantial period, the economy's longrun prospects might alter appreciably. Stronger market forces would arguably result in slower growth of employment relative to gross material product, and hence faster growth of output per worker. The share of consumption in gross material product would probably rise at the expense of investment and government expenditure. Both exports and imports would probably expand, with an uncertain effect on the balance of trade.

THE ECONOMIC SYSTEM AND FORMS OF GOVERNMENT CONTROLS IN POLAND IN THE 1980'S

By Bartłomiej Kaminski*

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SUMMARY

Poland's economic growth performance in the 1980's was unimpressive. Since the mid-1980's, there have been symptoms of stagnation. The main cause of poor performance has not been a debt burden. The reasons have been rooted in a combination of General Jaruzelski's strategy of containing Solidarity and incompatibilities of economic policies. Rejection of the Ceausescu variant of external adjustment has amounted to the dismissal of drastic austerity measures and brutal repressions as a means to mobilize resources.

The policy of implementing the economic reform has been inconsistent. It has focused on introducing new instruments of public economic policy aimed at providing the government with the means of indirect controls. It has failed, however, to introduce measures that would create environment, i.e., competition and market clearing prices, which would compel enterprises to seek ways to maximize microeconomic efficiency. The government has been left with no effective tools to stimulate economic activity except for direct microeconomic interventions subject to bargaining.

The failure to tune behavior of both central authorities and enterprises to financial constraints has resulted in growing budget deficits and inflation. It assured protection of inefficient and did not reward the efficient. All the systemic drawbacks, i.e., shortages, microeconomic inefficiency, investment bias in favor of energy-intensive sector, etc., have not been removed. The "traditional" policies, e.g., across-the-board price increases, in the economic system, which has been only partially reformed, have only exacerbated tensions and fueled inflation.

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INTRODUCTION

The Polish government's record in attaining the quadruple goals of stability, restructuring, balance-of-payments adjustment and growth is equivocal at best. The Polish economy has not collapsed, as many critics predicted in 1982. But it has not fully recovered. Its export performance has substantially improved since 1986, yet it still runs a substantial current deficit. There have been some significant political and economic innovations. However, they have fallen short of creating political and economic circumstances conducive to overcoming economic stagnation and society's indifference. The threshold of political and economic change remains to be reached.

Given the scope of contraction in 1978-82, the recovery has been rather slow and erratic. Polish economy has yet to attain its highest historic level of global output of 1978: the 1987 national income produced stood at 92.8 percent of that in 1978, and national income produced per capita at 87.6 percent.

Had it not been for the private agriculture sector the contraction would have been larger. In a marked contrast, the net output of this sector exceeded the 1978 level in 1984, and was about 10 percent higher in 1986. Although the authorities ascribe this development to the change in policies toward this sector, which indeed occurred, the reasons are rooted in technical backwardness. The contraction in industrial supplies had little impact on agricultural performance.

The government's capacity to boost economic performance has been hindered by unfavorable external adjustment. The loss of access to international financial markets and the outflow of resources related to debt servicing and principal repayments have produced significant strains on the Polish economy, which, as a result of Gierek's import-led growth strategy in the 1970's, has become heavily dependent on Western supplies of raw materials and intermediate products. In spite of a turnaround from a deficit in hard currency trade in 1981 to a surplus and increasing surplus in services and remittances, Poland was not able to generate hard currency earnings sufficient to pay interest. Between 1981 and 1987, the total of unpaid interest amounted to \$10.2 billion.¹

The surplus in hard trade currency seesawing at the level of \$1 billion in 1983-88 has been due solely to administrative cuts in imports. Compression of imports has frustrated recovery. Cuts in imports of intermediate products have impeded current output. They have been lower than cuts in capital goods imports which in turn were significantly lower than the replacement needs of the industrial sector.² As a result, both current and future competitiveness of Polish industry has been seriously impaired. In spite of a fast, double-digit growth in 1987 and in the first 6 months of 1988, hard currency exports (in current prices) are yet to reach their 1980 level. In addition, their commodity composition remains dominated

¹ See Andrzej Olechowski and Grzegorz Wojtowicz, "O co chodzi wierzycielom?" (What Do the Creditors Want?), *Polityka-Eksport-Import*, No. 34, 1988.

² Kazimierz Poznański, "The Competitiveness of Polish Industry and Indebtedness," in Paul Marer and Włodzisław Siwinski, eds., *Creditworthiness and Reform in Poland. Western and Polish Perspectives*, Bloomington and Indianapolis: Indiana University Press, 1988.

by resource intensive exports.³ Thus overall hard currency export performance was not very impressive in the 1980's.

This was not because of discrimination against Poland in the international markets. Rather, the reasons were of domestic making. The most crucial reasons were that the crisis failed to trigger restructuring and to bring about a meaningful reform of the economic system. The investment policies failed to address the issue of industrial competitiveness in international markets. Economic policies were not export oriented: the so-called pro-export investment projects accounted for a tiny proportion of total investment outlays.⁴ They did not focus on addressing the issue of technological backwardness of the agriculture system. No serious attempt was made on the development of industries providing input to the agriculture. Cuts in investment outlays in the 1980's affected less energy producing sector and coal industry than other sectors. According to a report of the Consultative Economic Council the share of investment in coal and energy-producing sectors in the total for the state-owned sector increased from 21.5 percent in 1976-80 to 32.5 percent in 1981-87.⁵

The Polish economy consumes between two and three times more energy per unit of output than the Western economies: its material intensity, exacerbated by the aging capital stock, is also much higher.⁶ Excessive material and energy intensity has been a trademark of the economic system in Poland. The policymakers faced an alternative of either relying on microeconomic efficiency enhancing and energy saving measures or investing in coal mining and energy producing sector. The dilemma was solved against the economic reform. There was no significant change in the investment program to cut material- and energy-intensive projects.⁷ To the contrary, they retained their priority status, e.g., the Katowice steel works in the 1986-90 plan. No attempt was made to alter mechanisms of allocation of energy and raw materials: administrative rationing has been retained. No economic measures that would compel enterprises to reduce excessive consumption of energy and raw materials, i.e., to improve microeconomic efficiency were introduced.

The program of economic reform adopted in 1981 by the IXth Extraordinary Congress of Polish United Workers' Party was not, as will be shown, free of internal conceptual incoherences. They were

³ See Kazimierz Poznański, op. cit., and Bartłomiej Kamiński, "Poland's Foreign Trade: Complex Challenges and Simple Responses" in Philip Joseph, ed., *The Economies of Eastern Europe and their Foreign Economic Relations*, Brussels: NATO, 1987.

⁴ In current 5-year plan, they account for about 8 percent. See Tomasz Jeziorański, "Jednak korekta planu pięcioletniego," (Finally, the revision of a 5-year plan), *Zycie Gospodarcze*, No. 18, 1988.

⁵ The report of the Consultative Economic Council notes: "Thus in the mid-1980's, we have attained higher, as it seems, shares [of energy and coal industry in total investment—B.K.] than during the 6-Year Plan, which accorded priority to the development of energy base." (See *Zycie Gospodarcze*, No. 2, 1988, p. 4.)

⁶ The estimates of relative consumption are critically dependent on highly unreliable estimates of Poland's GNP. See Jerzy Bobek and Leszek Zienkowski, "Mniej znaczy lepiej" (Less Is Better), *Polityka-Eksport-Import*, Warsaw, No. 17, 1987.

⁷ Czesław Bobrowski, a respected Polish economist and a former Chairman of the Consultative Economic Council in his interview for *Zycie Gospodarcze* (No. 51/52, 1987) said: "Five years ago it was possible to implement effective measures to promote energy- and materials-saving capital projects at the expense of the capital-intensive ones [...] but now it is a little bit too late to do it." He failed, however, to explain why the restructuring is no longer feasible.

exacerbated in the course of its limited implementation. Because of a lack of serious policy commitment to replace central planning with competition and price mechanism, there were growing incompatibilities between a preserved "core of central planning," i.e., hierarchical planning system and administrative allocation mechanism, and introduced financial instruments. This was to the detriment of any serious improvement in microeconomic efficiency. Several reform measures congruent with making enterprise management more responsive to profit maximization were introduced. On the other hand, however, no attempt was made to create "regulated markets," a major component of the program, and the emphasis of current economic policies continued to be on output maximization.⁸

The clash between new instruments and administrative hierarchy has been solved in favor of the latter. The focus in economic policies was on reducing effective demand through price increases and stimulating supply through a combination of administrative and financial instruments. This approach could not be effective.⁹ It was not only because investment policies continued to favor capital- and resource-intensive sectors thus exacerbating domestic and external disequilibria. Neither was it because of the introduced measures to decentralize the wage system. Rather the problem was that structural arrangements did not allow for maintaining tight financial policies. First, supply was obstructed because the reform did not establish the link between an enterprise effort and its profits. Price increases in a nonmarket environment did not trigger a market response, i.e., the increase in supply. Therefore, with or without price increases, under the existing arrangements, there was no mechanism to assure market-clearing prices. For this reason, the 1982 dramatic price increases, although brought a temporary improvement, did not equilibrate the economy. Neither did the ill-conceived 1988 price operation. What they achieved was a double-digit inflation.

Second, the replacement of directives by taxes, tax exemptions, etc., all subject to bargaining between the authorities and enterprises contributed to inflation. Because of the persistence of administrative mechanism of allocation and, consequently, of recompen-sations, the demand for inputs and productive factors (labor included) was always excessive no matter by how much prices increased. As the authors of a report by the Consultative Economic Council noted: "The main factor making possible above-plan wage increases was not an enterprise policy [. . .] but numerous exemptions and remissions by central authorities."¹⁰

These structural impediments were exacerbated by a lack of coherent industrial policy. Inefficient enterprises were not closed. The policies of differentiated subsidies tuned to individual enterprises, rationing based on bureaucratic rather than economic effi-

⁸ Given the incompatibility of these two objectives, enterprises have become neither profit nor output maximizers. See Keith Crane, "An Assessment of the Economic Reform in Poland's State-Owned Industry," paper presented at the conference *The Dimensions of the Polish Economy*, Wichita State University, KS, Sept. 5-6, 1987.

⁹ Consumer price index amounted to between 15-17.5 percent in 1985-86. In 1987, it increased to 27 percent, and to 54.7 percent during the first 6 months in 1988.

¹⁰ See *Zycie Gospodarcze*, No. 24, 1988, p. 4.

ciency considerations, encouraging economic concentration rather than competition, had more than their share in problems facing the Polish economy. Nonetheless, their roots were in the existing economic system.

Faced with political and economic uncertainties of a radical restructuring of the economic system, the authorities opted for a policy of small steps, accompanied by frequent reversals of the introduced measures. Instead of responding to the challenge of restructuring, the prevailing policymakers' approach was to put off the activation of radical measures. This approach did not improve the capacity of the state administration to manage the economy. Neither did it produce conditions for a sustained economic growth in the future.¹¹ It did, as we shall see, contribute to the increase of the private sector and diversification of economic activity.

As in 1982, the attainment of a twin goal of growth and overcoming debt crisis critically hinges on overhauling institutional structures of command planning introduced in Poland in the late 1940's.

BACKGROUND: THE EVOLUTION OF ECONOMIC SYSTEM

Reform of the economic system has been a recurrent policy objective in postwar Poland. In fact, throughout most of the postwar period Communist authorities have been involved in various endeavors designed to improve economic management. There were for major waves of economic reform. Each of them has left a legacy of unsolved problems. Each of them has been followed by a period of regression thus generating pattern of progression and regression, typical for Poland as well as other East European countries. The most radical and also the most successful was the first wave which resulted in a fundamental change of the Polish economic system. No subsequent waves succeeded in altering the institutional core of the system that was erected in the late 1940's.

The roots of Poland's economic predicament date back to the imposition of Stalin model of command planning in the aftermath of the World War II. The centralization of economic controls complemented the simultaneously occurring process of Communist takeover of the political institutions. What they had in common was a drive to establish totalitarian political controls over both the society and the economy.

The shift to a Stalin's economic system spread over a period between 1946 and 1949. The 1946 Act of Nationalization of Industrial Enterprises marked the beginning of the process. Subsequent "battle for commerce," i.e., elimination of private sector in trade, imposition of state controls over the agriculture, de facto, although not de jure, nationalization of banking destroyed activities autonomous from the state. The foundation of Ministry of Foreign Trade and Foreign Trade Organizations in 1949 established the state's monopoly of foreign trade, which effectively broke the link between domestic and international prices. Domestic producers were shield-

¹¹ This conclusion, shared by a number of Polish economists and social scientists, can be drawn from excellent contributions reviewing environmental, demographic, public, health, economic and foreign trade problems of Poland in the mid-1980's in the edited volume *Nasza kondycja i nasze perspektywy* (Our Shape and Our Perspectives) published by Economics Department, University of Warsaw, May 1983.

ed from both domestic producers and international markets. The economy has thus become the domain of the state-party apparatus.

The crucial aspect of the new economic system, based on symbiosis of the government apparatus and the economy, was demonetization or naturalization of the economy. Total demonetization was not possible, however. Reduced as it was the private sector still existed in agriculture, handicrafts and some services, and production was based on hired labor. Thus money was retained, although according to the official ideology, the economy would move toward a moneyless world.

The inclusion of the economy within the direct reach of the government apparatus significantly increased the regime's capacity to mobilize resources and bring them into use. Fueled by catchup dynamics, industrial output rates of growth were at double digit numbers in the early 1950's. The growth pattern inflicted enormous social costs. Once the massive terror faded away with Stalin's death, social costs became politically unsustainable. As a result, during a period of destalinization the issue of economic reform first entered the political agenda: the Economic Council headed by late Oskar Lange was to submit the "blueprint."¹²

The discussion of successive waves of economic reforms in 1956-58, 1964-65, 1969-70, 1971-73, goes beyond a modest format of this essay. Their common characteristics are worth noting, however. First, more radical changes were envisaged during the periods of political leadership succession, always accompanied by a political crisis, than during the periods of political stability. Thus the "Polish October" project (1956) and a blueprint drafted by the Gierek's Committee for the Modernization of the System of Functioning of the Economy and State (1971-73) were considerably more comprehensive than, say, the Jaszczuk reform (1969-70). By far the most radical was the economic reform blueprint adopted by the IXth Extraordinary PUPW Congress during Solidarity period in 1981, even when judged against the most reformed socialist countries.¹³ However, once the crisis was diffused, and the government became again less accountable to the society, radical components of the reform were dropped. This was responsible for the pattern of progression and regression of economic reforming.

Second, because of the emasculation of more radical components, actually implemented changes differed little from nonradical blueprints. The "radical" blueprints called for decentralizing economic decisionmaking: the "October" blueprint envisaged enterprises run by workers' councils (direct industrial democracy) and the Gierek's blueprint by strong autonomous managers. As will be shown later, the 1981 proposal was more radical. However, the changes implemented usually consisted in making management more responsible for enterprise performance but without neither ceding authority nor creating decision environment to make them meaningful.

¹² For an illuminating discussion see Włodzimierz Brus, "The Political Economy of Reforms" in Marer and Siwinski, eds., op.cit.

¹³ Comulka and Rostowski observe that if the blueprint was implemented in full, "the Polish reform would be more radical than the Hungarian, and if bankruptcies were really allowed, it would be more radical even than the Yugoslav reform." See Stanislaw Gomulka and Jacek Rostowski, "The Reformed Polish Economic System 1982-1983" *Soviet Studies*, Vol. XXXVI, No. 3, July 1984, p. 388.

Nonetheless, there was devolution of political and economic decisions. Regional authorities and *zjednoczenia* (intermediate layer of economic administration) acquired a greater say in production and investment decisions. This was so less by the design than by the growth of informational complexity of microeconomic central planning.¹⁴ The introduction of various financial directives has reduced a number of "physical" directives but has failed to make the task of central planning more manageable.

Third, a common trait of planned was well as implemented changes was the supplementing of physical directives with various financial instruments. Allocation of some decision responsibilities to enterprises was accompanied by a limited switch from central commands to more subtle financial directives or economic levers. Their objective was to establish a link between the economic performance and financial situation of an enterprise and capital and labor productivities. The link was never established. The command planning instruments, i.e., material balances and central allocation and "planning from the achieved level" were still used. Although enterprises became more sensitive to prices, interest rates, subsidies, and taxes, they were increasingly faced with conflicting signals of financial indices and rigid commands of central planning. However, no matter how badly or how well they fared, their survival was guaranteed. Instead of moving toward moneyless economy, as Marxist-Leninist ideology had it, the evolution produced an increasingly hybrid economic system.

The common thread of reform efforts was to undo damage inflicted on economic efficiency by the "original" system. Successive reform attempts to monetize and decentralize the economic system met with limited success. It is unclear what their impact on economic performance was. What is apparent, however, is that there was a growing dissatisfaction with both overall efficiency and economic growth performance. This led to workers' upheaval in December 1970 and Solidarity's birth in Summer 1980.

A marked deterioration in the 1960's was reversed in the early 1970's, but only for a limited period. This was due less to the changes in the economic system than to the change in macroeconomic policies. In contrast to prudent, autarkic policies of his predecessor, Gierek launched a deliberate policy of borrowing in the West to finance rapid expansion of investment and consumption, which came to be known as import-led growth strategy. By the late 1970's, the growing current account deficit with the West became unsustainable. Cuts in imports combined with energy bottlenecks contributed to a rapid decline of output in 1979-82. The immediate cause of the crisis was that import-led growth was not transformed into export-led growth.

Theoretically, there was nothing wrong with the Gierek's macroeconomic policy of opening to the West. In fact, this was the only option for modernization, and many countries have successfully followed this strategy. However, the policy was implemented within the confines of the economic system which shielded domestic pro-

¹⁴ The Polish economy faced what Nove succinctly described as "the impossible (in terms of information processing—BK) scale of centralized microeconomic planning." Alec Nove, *Socialism, Economics and Development*, London: Unwin, 1986, p. 143.

ducers from both domestic and international competition and deprived central planners of information indispensable to choose international specialization. This combination of the anachronic economic system and modernization strategy requiring an open economy was responsible for the crisis. Therefore, it should come as no surprise that the crisis triggered, as in the past, a debate on radical change of the economic system. Although exacerbated by Gierek's expansionary policy, the crisis was the product of the incompatibility between economic openness and logics of the existing economic system.

PROGRESSION AND DERAILMENT OF THE ECONOMIC REFORM

There were two waves of debates on economic reform in the 1980's: in 1981 and in 1986-88. The period preceding and immediately following the imposition of martial law witnessed the introduction of legislative framework of the reform as well as of innovative reform measures. The government's effort was not sustained beyond 1984. In spite of the rhetoric to the contrary, the reform was derailed. In late 1986, the 5-Year Plan draft together with a package of 11 laws which, if passed, would effectively put the 1981 Program of Economic reform to rest, triggered a response from reformers. The 11 laws were shelved, and a new debate ensued on the future shape of the economic system. The new program was dubbed the second stage of economic reform, although many objected to this delineation on the grounds that there has been no first stage. Indeed, some major provisions of the Program were not implemented.

The blueprint of the Party-Government Commission for Economic Reform, formally accepted by the IXth Extraordinary Party Congress in 1981,¹⁵ was a significant departure from the institutional framework of the economic system erected in the late 1940's. It went beyond the "October" proposal in implicitly linking political changes with changes in the economic system. In contrast to earlier discussions on economic reform measures, the program recognized a necessity of major changes not only in planning and management instruments but also in the framework of the party-state involvement in the national economy. At the core of the reform blueprint was the transfer of some powers from the government to society and economic actors. Various mechanisms of social participation were to be introduced. Government's economic policies were to be brought back under control of the Sejm. Thus the program directly addressed the lack of direct accountability of policy makers and the symbiosis between the government apparatus and the economy. It called for a significant dismantling of central controls and establishing of direct industrial democracy.

Direct industrial democracy, strongly reminiscent of the "October" blueprint, was to be achieved by the changes in enterprise

¹⁵ See *Kierunki reformy gospodarczej-projekt: Projekt ustaw o przedsiębiorstwach państwowych o samorządzie przedsiębiorstwa państwowego*, published by the CC PÜWP's official daily *Trybuna Ludu*, Warszawa, July 1981. The official blueprint was the least radical among several programs debated in 1981. For their discussion, see Zbigniew Fallenbuehl, "Poland: Command Economy in Crisis," *Challenge*, No. 5, 1981. For Solidarity's program, see Bartłomiej Kaminski, "The Dying Command Economy: Solidarity and Economic Crisis in Poland," *Journal of Contemporary Studies*, Vol. VII, No. 1, 1985.

regime. As the enterprises were to be self-dependent, self-managed and self-financed, this might be called the SSS regime. Self-dependence implied the emancipation from a central plan imposed from the above. Consequently, the scope of central planning was to be reduced mainly to parameters of indirect controls, budget-financed social infrastructure and large-scale projects in key economic sectors. Social participation in central planning, i.e., in choosing the objectives and the means to attain them, was also envisioned. Self-management meant granting decision autonomy to enterprises' employees. Self-financing, in turn, denoted less financial support from the government and a linkage between an enterprise's financial results and its employees' incomes as well as investment. Wages and bonuses were to be directly linked to production and productivity growth, whereas the state would guarantee minimum wages. In consequence, a soft-financial constraint, in Kornai's terminology, was to be replaced by a hard-financial constraint.

The authors of the blueprint understood that the SSS regime would require restructuring of the prices, the introduction of competitive markets and an overhaul of the existing banking system. Price were to be brought to market clearing levels. Competition was to be encouraged through antimonopoly law and forced exit, i.e., bankruptcy. The issue of entry, symmetrical to exit, was not mentioned, however. In order to assure access to financing, the banking system was to be reformed by establishing competing commercial banks controlled by the Central Bank. Finally, the program called for institutional changes designed at streamlining central economic administration.

The program was conceptually wanting on three major accounts. First, in a marked contrast to the 1946-51 "reform," it paid little attention to drawing up the sequence of implementing the economic reform measures and their timing. There was a failure to recognize that it is easier to destroy markets, as was the case in 1946-51, than to create them. The transition from "economic dictatorship of the state" to markets would be a difficult feat. The timing was not defined: according to the blueprint, the implementation was to be spread over a period of 2 to 3 years beginning on January 1, 1982.

Second, the program was based on the assumption that output growth and its structure would be shaped by administrative central plans rather than by market forces. Competitive markets were to be regulated by central plan; an idea that was deeply entrenched in "economics of reform" in Eastern Europe. As a Polish economist Adam Lipowski perceptively observed: "market mechanism is [should be] a natural component of the economy, and only then the problem of state planning can be discussed."¹⁶ However, this view did not gain official acceptance. Indicative planning, which was to prevail upon, can coexist with analytically tractable markets but only in the economy where public policies are to correct market failures, i.e., in a mixed economy.

Third, the program envisaged the introduction of "economic coercion," to borrow a phrase used in Polish debates. Economic coercion implies bankruptcies and subjecting enterprises to a hard

¹⁶ See Adam Lipowski, "Plan a rynek" (Plan versus Market), *Polityka*, Warszawa, No. 17, 1987, p. 5.

budget constraint. The blueprint failed to recognize that the option, bankruptcy must be accompanied by its symmetrical equivalents: award for good performance and the possibility of entry to a given sector. In addition, economic coercion could be effective only if the state has confined its standards to economic efficiency. The issue how to reconcile state preferences, often carried through microeconomic interventions, with the notion of economic efficiency was not tackled by the program.

In addition, the imposition of martial law invalidated the social and political assumptions underlying environment of reform implementation. The objective of the martial law to centralize political controls over the society was hardly compatible with the idea of direct industrial democracy and social participation.¹⁷

The combination of conceptual fallacies, martial law and the government's formal commitment to "outmoded program" produced what Fallenbuchl described as a "dual discrepancy:"¹⁸ the discrepancy, on the one hand, between the original program "Kierunki reformy . . ." and legislation enacted by Sejm, and then between specific legal acts and their interpretations manifested as supplementary regulations issued by various levels of the central economic administration. As a result, the current economic system differs in many respects not only from the original blueprint but also from the spirit of its legal pillars.

Implementation of the reform began in early 1982. Its legal foundation were two laws enacted by the Sejm on September 25, 1981: one on the state enterprise and the other on workers' self-management. These two acts were supplemented by nine acts and amendments. Together with the restructuring of productive inputs prices (January 1, 1982) and consumer goods price increases (February 1, 1981), they set the terms of the reform.¹⁹ The introduced measures also expanded a menu of tools of public economic policy and affected the organizational structure of economic administration.²⁰

Not all the sectors were equally influenced by new policies, however. A significant part of the economy was exempted. Command planning was retained over the coal, cement, sugar, power, and meat industries. Most of the provisions did not concern agriculture and private sector although, as we shall see, they were affected by some important changes.

In the assessment of the reform, Mieszczankowski notes that from the onset "some trends conflicted with the stipulations of the reform."²¹ These trends, one may suspect, were related to a grow-

¹⁷ A renowned Polish economist Jan Mujzel argued that this incompatibility was a major threat to the economic reform as outlined in "Kierunki . . ." See his intervention in a discussion "Piata bitwa o reforme" (The Fifth Battle for the Reform), *Przegląd Techniczny*, Warsaw, No. 3, 1982. For a comprehensive analysis of political impediments, see Jack Bielasiak, "Economic Reform Versus Political Normalization," in Marer and Siwinski, eds., op.cit.

¹⁸ Zbigniew M. Fallenbuchl, "Present State of Economic Reform," in Marer and Siwinski, eds., op.cit., p. 117.

¹⁹ See Mieczysław Mieszczankowski, "Krótka historia reformy" (A Brief Account of the Reform), *Życie Gospodarcze*, No. 20, 1987.

²⁰ In 1981, the central economic administration was streamlined. The number of branch ministries was reduced from nine to four. However, it fell short of the reform proposals which called for a single branch ministry, the Ministry of Industry. This measure curtailed neither the number of positions in central economic administrations nor powers of branch ministries, granted the status of founding organs, over enterprises.

²¹ Mieczysław Mieszczankowski, loc. cit., p. 4.

ing incompatibility between persistent disequilibria and the implemented reform measures.

A price increase of consumer goods implemented on February 1, 1982, curtailed excessive demand in spite of a contraction in supply.²² Between 1982 and 1985, direct rationing was gradually removed. This movement toward a less-shortage economy was short lived, however. Excessive demand significantly increased in subsequent years, in particular in 1987 and 1988.²³ Similar patterns could be observed in the case of raw materials, intermediate products and capital goods.²⁴

The introduction in 1982, of "free" prices subject to direct negotiations between the contracting parties affected between one-third and two-thirds of all products, depending on a category. Because of informal bureaucratic pressures and fears of retaliation by suppliers, even contract prices were set below equilibrium levels. Regardless, maximum ceilings were put on contractual prices' growth in 1983. In 1984, the government changed the procedure of contractual price setting by explicitly linking them to "justifiable economic cost."²⁵ The inflexible, since it was supply rather than demand determined, cost-plus formula of price setting prevailed. As a result, all prices were again under some form of central control, be it explicit (administrative prices) or implicit (contractual and regulated prices).

The prices set at below market-clearing levels, symptom of a failure of the price reform, ruled out a greater role for financial policies. The implemented reform measures introduced new tools, both nonfinancial and financial. Nonfinancial tools included government contracts and the obligatory fulfillment of the tasks of "operational programs." The scope of "operational programs" was gradually reduced in favor of contracts. The incentives, designed to make governments contracts attractive to enterprises, included preferential access to scarce hard currency and raw materials. The use of these tools perpetuated administrative rationing and thereby violated the spirit and the letter of the reform. As a result, the regulatory system became excessively complex and riddled with inconsistencies.

The most dramatic attempt to remove inconsistencies in favor, however, of reversing the reform came in 1986. The government's program triggered strong protests from proreformers. The government was forced to retreat. This incident, however, brought to the fore the realization that the economic reform had been derailed.

In 1988, following the public debate over "Theses of the Second Stage of Economic Reform" and referendum, the program of the

²² Food prices increased by more than 160 percent, while—because of the increases in prices of raw materials and intermediate products—the prices of final consumer goods were increased by slightly more than 100 percent.

²³ For a detailed analysis, see Wiktor Herer and Mieczyslaw Sadowski, *Market Equilibrium—A Prerequisite for the Autonomy of Enterprises*, The Vienna Institute for Comparative Economic Studies, No. 141, April 1988.

²⁴ While in 1983—according to a survey of the Consultative Economic Council—only 13 percent of enterprise managers complained about the growth of shortages, their number increased to 42.5 percent in 1986. *Zycie Gospodarcze*, No. 44, 1987.

²⁵ As one observer noted: "contract prices [. . .] have become kind of regulated prices." Zygmunt Polański, "Spirala" (The Spiral), *Zycie Gospodarcze*, No. 39, 1986, p. 8.

second stage was adopted.²⁶ Politically, the most important upshot of the debate is a promise that the government's commitment will go beyond rhetoric, after several years of inaction. Conceptually, the second stage does not go significantly beyond the 1981 Program. In fact, it reads like a list of measures which would have already been implemented had the government followed an activist approach like the one pursued in 1982 and 1983. It pledges institutional changes compatible with the SSS enterprise regime.

Like in the first stage, the implementation began with the reorganization of central administration which took place in late 1987 and the price-income operation in 1988. The total number of ministries was reduced from 16 to 8.²⁷ The objective of the price income operation was to reduce subsidies and, consequently, to raise relative prices of food. The operation has failed. As of August 1988, it is clear that neither have the food prices increased in relation to manufactured goods' prices, which was the intention of policymakers, nor are the subsidies likely to fall.²⁸

ASSESSMENT: OLD WINE IN A NEW BOTTLE?

The objective of the reform in Poland in the 1980's was to shift decisionmaking authority from the state administration to enterprises which would adapt to financial constraints. The reform has fallen short of substantially changing the patterns of behavior by economic actors, i.e., planners and enterprises. Enterprises instead of adapting to exogenous financial parameters then have been able instead to adapt them to their needs, whereas in the administration's policies microeconomic considerations have remained prevalent. Bureaucratic bargaining rather than market mechanism have shaped allocation of investment, raw materials, intermediate products and productive activities. Instead of decentralization, numerous indicators pointed to growing recentralization after an initial improvement in 1982. This was because of a growing gap between implemented reform measures and adherence to administrative ad hoc interventions by central planners.

There were three major manifestations of it: the growing involvement of the state budget in redistributing resources among enterprises; differentiation of tax rates and exemptions; and, a growing complexity of economic management which inevitably leads to the expansion of bureaucracy. Underlying these manifestations has

²⁶ See "Tezy w sprawie II etapu reformy gospodarczej" (Theses on the Second Stage of Economic Reform), *Rzeczpospolita*, Warszawa, Apr. 17, 1987.

²⁷ Five branch ministries were replaced by the Ministry of Industry; Ministries of Communication, Telecommunication and Maritime Office were fused into Ministry of Transportation, Maritime and Telecommunication; Ministry of Foreign Trade and Council of Ministers' Committee of Economic Cooperation With Abroad were replaced by Ministry of Economic Cooperation With Abroad; Ministry of Education and Ministry of Science and Higher Education were merged into Ministry of National Education; and, finally, Central Committee of Physical Education and Tourism and Minister responsible for Young People were merged into Committee for Youth and Physical Education. The names of two remaining ministries were changed: Ministry of Labor, Wages and Social Problems became a Ministry of Labor and Social Policy; Ministry of Construction, Regional and Communal Economy became a Ministry of Regional Economy and Construction. See *Trybuna Ludu*, Warsaw, Oct. 13, 1987.

²⁸ Paradoxically, the price increases in 1988, estimated at 66 percent, would amount to a de facto fulfillment of a radical price variant that was rejected by the Sejm as well as by the population in the last year's referendum on the second stage of economic reform.

been a reluctance to allow financial constraints to shape real behavior of central planners and enterprises.

All the indicators concerning the state budget's role in the Polish economy in the 1980's point toward recentralization and a continued reliance on direct budgetary allocations to accomplish public policy objectives. The portion of national income passing through the state budget, after a contraction in 1982-83, has increased. It exceeded in 1986 the level of 1978.²⁹ The demand for subsidies has not faded, but—to the contrary—it has been recently increasing.³⁰ Thus the primary concern of the fiscal system has not been affected by the economic reform. As in the "original" economic system dating back to the late 1940's, its major focus has remained to redistribute income in money and in kind mainly within the public sector through the use of instruments of direct control.

This was so mainly because of the growing state budget's involvement in the transfer of purchasing power from profitable to loss-making enterprises. More generally, it was necessitated by a failure to establish price mechanism and competitive markets. Simultaneously, the introduction of financial indicators and a new taxation system, which partially replaced automatic transfers of profits to the state budget by direct taxes on enterprise profits, produced an inevitable conflict between direct controls and indirect controls, envisaged in the legislative codification of the reform.

Disequilibrium prices failed to provide enterprise management with information about relative scarcities. In addition, the absence of linkage between financial performance and wages and bonuses as well as enterprises' monopolistic position did not encourage maximization of capital and labor productivities. Financial performance of enterprises was also of limited value as a guide for the conduct of financial policies by the government. A Polish economist succinctly observed that given the scope of the budget involvement, it became impossible to identify enterprises and sectors which were really profitable.³¹ Under these circumstances, instead of selecting and using financial and price-setting instruments so that the best use of resources would be pursued by enterprises, the government was condemned to rely on direct microeconomic interventions, carried out by ministries and banks.

These drawbacks were exacerbated in 1985-88 by the policy solving the conflict between requirements of decentralization in favor of direct microeconomic interventions, i.e., direct controls. For a fear of disturbing a precarious political equilibrium, the authorities allowed for a growth in price distortions at both the macro- and

²⁹ In fact, the budgetary transfers were relatively higher in the mid-1980's than in the 1960's or the 1970's.

³⁰ The share of subsidies in current budgetary expenditures reached its maximum for the 1980's in 1981. However, in 1986 it fell short of setting a new record level only by 1 percent. The share of subsidies in current budgetary expenditures amounted to 30 percent in 1986, whereas it amounted to 31 percent before the economic reform of the 1980's. According to one estimate each percentage point of the increase in sales required in both 1985 and 1986 a percentage point and a half increase in the subsidies. See Marek Misiak, "Wyniki finansowe przedsiębiorstw w 1986 roku" (Financial Performance of Enterprises in 1986), *Życie Gospodarcze*, No. 10, 1987. For an excellent analysis covering the whole postwar period, see Urszula Wojciechowska and Marek Zytrowski, "Deficyt i dotacje w przemyśle" (Deficit and Subsidies in Industry), *Życie Gospodarcze*, No. 12, 1987.

³¹ See Tomasz Jeziorański, "Budżetowe manewry" (Budgetary maneuvers), *Życie Gospodarcze*, No. 34, 1988.

microeconomic levels. The authorities also bent to pressures to increase wages. The Executive Committee of the Official Trade Union noted in an official statement that the growing disparity in wages in various industries "unfortunately, bears often no relation to their economic performance."³² Fears of inflation as well as of loss of revenues from household savings were probably accountable for keeping the average rate on bank deposits well below inflation rates. Bending to bureaucratic pressures, the government encouraged an increase in the monopolization of the economy.³³ In all, government policies pursued in the 1980's allowed for the existence of a soft budget constraint, to use Kornai's term and the increased monopolization.

Distorted prices and, consequently, distorted financial performance of an enterprise was accountable for a proliferation of bargaining. In contrast to the 1970's when the bargaining was over allocation of resources and planned quotas, tax rates, rebates, size of subsidies and exemptions became subject of negotiations.³⁴ Tax reliefs and subsidies were often tailored to specific needs of enterprises.³⁵ Their responses to the changes in various policy instruments were shaped by enterprise management assessment of the degree to which they could be renegotiated. As a result, a move toward a relatively neutral taxation system, came to a halt if it was not altogether reversed.

To make things worse, central planners have not developed a coherent tax/subsidy policy. For instance, neither the differences between "object" and "subject" subsidy were clearly defined nor the rates and the rules of allocating subsidies. The rates were determined on the basis of "cost estimates submitted by an enterprise and were subject to bargaining with an institution granting subsidy."³⁶

Taking into account that the reform has not produced environment conducive to effective macroeconomic intervention,³⁷ it should come as no surprise that behavioral patterns of state-owned enterprises have remained basically unaltered. Comparative analy-

³² See *Życie Gospodarcze*, Warsaw, No. 50, 1987.

³³ It is significant that the share of sales of top 500 industrial corporations (energy sector excluded) increased from 37.4 percent in 1983 to 39.6 percent in 1986. The share of the largest 100 in top 500 increased from 57 percent to 59.6 percent in the same period. Derived from the lists of top 500 corporations published by *Zarządzanie* monthly (June 1984 and June 1987). There were several cases of mergers forced by administration. The best known example of a bureaucratic guerilla warfare is the fusion of 102 electronic enterprises into one corporation ELPOL. In spite of a spate of critical publications, ELPOL was established in 1988. See Ewa Balcerowicz, "Koncentracja" (Concentration), *Zarządzanie*, No. 6, 1988.

³⁴ Budgetary revenues in 1987 were significantly lower than planned because of these changes. This contributed to the increase in budget deficit. See Jezioranski, loc. cit.

³⁵ As a result, tax burden has varied significantly among sectors of the economy and individual enterprises. The share of net payments (the total of all taxes and deductions net of subsidies) to the state budget in net income of individual sectors varied, excluding net recipients of subsidies, between 39 percent (road transport) and 96.5 percent (fuels) in 1986: the ratio of standard deviation to mean was 1.76. The variability of PPWW (above norm wage payments) tax rates across the sectors is particularly high.

³⁶ See Marek Dąbrowski's comment in *Zarządzanie*, 1987, No. 3, p. 39, quoted in Stanisław Albinowski, "Cudów [niestety] nie ma" (There Are [Unfortunately] No Miracles), *Życie Gospodarcze*, No. 16, 1987.

³⁷ In broadest terms, indirect controls cannot function properly unless (1) prices reflect the relative scarcities and productivities of resources; (2) there is a competitive environment; (3) enterprise are accountable for profits and losses, with bankruptcy as a final penalty, and ownership rights are unambiguously specified; (4) there is an efficient system of financial intermediation. The reform measures have fallen short of introducing these changes that would have met these conditions. Therefore, bargaining continues to be the dominant mechanism of allocation.

sis of discrepancies between individual, nonobligatory, enterprise plans and the central, indicative, plan suggests strong similarity with behaviors displayed under command planning: their planned output targets are lower than anticipated in central plans while demand for inputs significantly higher; investment demand is excessive while the planned increases in productive capacities much lower; and finally, individual financial plan account for bargaining with the authorities tax rates, exemptions, and subsidies.³⁸

Instead of a declining direct intervention in the economy, the 1984-88 witnessed a significant increase in the intensity of direct intervention, as measured by the expansion in economic bureaucracy. Between 1981 and 1986 the number of positions in central economic administration increased from 21,941 to 36,553, that is by 66.6 percent. The state administration increased by 26.7 percent in this period.

The implemented reform measures changed the mix of public policy tools used to coordinate economic activities and achieve balance between the supply and demand, but they fell short of creating conditions for the conduct of macroeconomic fiscal and monetary policies. Because of the incompatibility between physical shortage and financial instruments, the introduction of financial tools of economic policy during the first stage of economic reform in Poland has made the system of planning and management internally inconsistent and "overregulated." A well-known Polish economist Czesław Józefiak, succinctly described it as "a concept of indirect centralization of the economy . . . which consists of replacing administrative commands by financial parameters shaped not by the market, but by central planning authorities."³⁹

PRIVATE SECTOR: TOWARD LIBERATION FROM THE STATE'S TUTELAGE

The SSS enterprise regime was of little relevance to the private sector which always operated on the basis of self-financing. However, the legislative innovations enacted in the 1980's provided a legal infrastructure more favorable to the private sector. Ideological objections to private economic activities in agriculture, services and small-scale industry were shelved, although reluctantly. An amendment to the Constitution, passed on July 21, 1983, and guaranteeing the permanence of the private agriculture, outlawed forced collectivization. No similar constitutional guarantees were extended to the private nonagricultural sector.⁴⁰

The area of the economy open to private activity has increased, although the reform fell short of removing authoritative controls of the state and of providing for more substantive contribution of the private sector to overcome the crisis. The rules of the state's intervention in this sector remained highly volatile: note that thanks to

³⁸ See Marek Misiak, "NPSG, CPR i plany przedsiębiorstw: rozbieżności" (National Socio-Economic Plan, Central Annual Plan and Enterprises' Plans: Discrepancies), *Zycie Gospodarcze*, No. 33, 1987. In conclusion, he wryly notes that "a road from directive-distributive plan to new methods of planning and management is neither straight nor short" (p. 3).

³⁹ As quoted in Tomasz Jeziorański, "Przyspieszenie, jak i kiedy?" (An Acceleration; How and When?), *Zycie Gospodarcze*, No. 14, 1987.

⁴⁰ The small-scale private was recognized as a "permanent component of socialist economy" in the 1972 Law on Organization of Handicraft. The meaning of it remains rather obscure. See J. Pawlas, "Gospodarka prywatna w Polsce," *Więź*, No. 9, 1987.

loopholes and exemptions actual tax rates paid by private firms were determined by the administration on ad hoc basis rather than by universal rules. This was particularly visible in the case of foreign firms. The law enacted on July 6, 1982, was designed to encourage the inflow of foreign capital. The law was flawed on several accounts. First, it limited entry to small firms preferably producing for domestic consumer market. As a consequence, it encouraged neither the transfer of technology and know-how nor export oriented production.

Second, it gave local authorities discretion over issuing licenses. The interpretation of the rules was subject to negotiations with the local authorities.⁴¹ In order to found a firm, field of activity, production technology, output mix, investment, employment size had to be specified in great detail. Any change in the original blueprint was subject to administrative scrutiny.

Third, the general rules with direct impact on a foreign firm's profitability were not stable. For instance, they were changed twice between 1984 and 1986; profit tax rate was increased from 50 to 80 percent, and extra limitations on local input use, product diversification and employment were imposed. These were hardly conditions conducive to technological innovations. Restrictions concerning ownership and transfers of capital assets encouraged endeavors minimizing investment outlays. It is therefore little wonder that most of foreign firm have specialized in cosmetics and food using simple technologies, frequently obsolete by international standards, and that these firms do not display an outstanding propensity to export.⁴²

Some firms and their owners were discriminated against, in particular those which were well established and whose cost of closing down would be considerable. The case of a 70-year-old owner of one of the most successful enterprises, Inter Frangrance La Foret, who was detained several times on phony charges by the Poznan militia was widely reported in the Polish mass media. There are grounds to believe that this was only the tip of an iceberg. While such individual acts might be attributable to local corrupt practices, the law on joint ventures enacted on April 23, 1986, demonstrates that the supreme legislative body has not been immune to arbitrariness and disdain for the private foreign sector. This law effectively established a dual legal treatment between "small" foreign capital, i.e., Polonia firms, and "large" capital. The existing foreign-owned firms were excluded from the newly granted, more favorable provisions concerning tax holidays, profit tax rates, the proportion of retained hard currency earnings, etc.

Yet, in spite of all these restrictions, the weight of the private nonagriculture sector in the economy, as measured by its share in total employment, national income produced, total investment ex-

⁴¹ Some local authorities have been known for their reluctance to grant licenses and affinity to erect hurdles to existing foreign. It was reported, for instance, that the Konin voivodship authorities were particularly hostile to foreign firms. See Piotr Aleksandrowicz, "Hodowia krasnoludkow" (The Raising of Goblins), *Przegląd Tygodnia*, Dec. 20-27, 1987.

⁴² Exports accounted for about 5.4 percent of their total sales in 1986, and the difference between their hard currency export revenues and import outlays amounted to about \$1.5 million; a trifle contribution to Poland's balance of payments. For illuminating insights on administrative treatment of foreign firms, see the interview with Mr. Stanisław Szewczyk published in *Zarządzenie*, December 1987.

penditure, etc., increased significantly between 1982 and 1986. The nonagriculture private sector has become a substantial source of state budget revenues and employment. Its share in the state budget revenues increase from 0.8 percent in 1982 to 3.0 percent in 1986 whereas employment increased from 4.1 to 5.8 percent in the same period. The private sector (agriculture included) employed 28.3 percent of all employed in 1986.⁴³ Thus in contrast to the state-owned industry, the private sector displayed flexibility and growth potential.

The expansion of foreign firms contributed significantly to this increase: their share in total sales of the private nonagriculture sector increased from 5.5 in 1982 to 12.9 percent in 1986, their share in employment of this sector grew from 1.7 percent to 5.9 percent. The largest was their share in state budget revenues from the private nonagriculture sector: it amounted to 14.9 percent in 1986, up from 6.3 percent in 1982.⁴⁴

This relatively rapid growth was not the result of reforming the rules of the game. The only thing that substantially changed was the scope of activity open to private "entrepreneurs." Otherwise, it may be argued that neither the introduced measures nor the pursued policies have significantly changed the nature of relations between the state and the private sector. It has remained a paternalistic arrangement combining authoritative allocations with private property. The survival of a firm has depended on its administrative clout, albeit to a much lesser degree than in the case of a state-owned enterprise. Private enterprises have not operated in a competitive environment. They performed in a supply-constrained rather than demand-constrained environment. Because of shortages and inflationary overhang, they have exercised almost a monopolistic position.⁴⁵ They have also used inputs distributed not through markets but by the administration. This all justified a direct microeconomic intervention by the authorities.⁴⁶ The failure to overhaul paternalism and authoritative controls of the private sector was a sign that the reform in other sectors has misfired.

CONCLUSION

The economic system that has emerged as a result of the policies pursued in the 1980's is different from the one dominant in the 1970's. The fundamental difference relates to the erosion of the principle of the state's monopoly over conducting economic activity. This erosion, however, has yet to lead to a transition from the dominance of direct to indirect controls. The new legislative framework allows for a greater diversity in forms of ownership. However, it has not put an end to a preferential treatment of the state-owned sector. Whether a new law on economic activity, which is currently

⁴³ However, because of contraction in agricultural employment, it was slightly lower than in 1982—28.4 percent. Derived from *Rocznik Statystyczny* (various issues).

⁴⁴ Foreign firms are both substantially larger and more efficient than the domestic ones. An average foreign firm employs 88 people while an average private firm employs 1.66 person. Derived from data in *Rocznik Statystyczny 1987*, and *Zarządzanie*, No. 12, 1987.

⁴⁵ There are some notable exceptions, e.g., computers.

⁴⁶ Needless to add, that the rules governing the administration's involvement might have been substantially different from the ones actually pursued. For instance, they could have been more branch-oriented rather than individual firm-specific oriented.

debated in Poland, will open the economy to unfettered competition between state-owned and private enterprises and obliterate arbitrariness of state fiscal policies remains to be seen.⁴⁷

The state-owned economic system has also changed. A considerable portion of investment decision has been transferred to enterprises. The introduction of various innovative measures such as currency retention quotas allowing exporters to retain a share of their export revenues and of licenses to conduct foreign trade has foiled foreign trade monopoly. The scope of central rationing has also declined. Yet, because of the failure of economic policies pursued in the 1980's to create equilibria and competition, these changes have failed to institute a viable enterprise regime based on autonomy and decentralization. They have also fallen short of improving the state's ability to control economic processes as amply demonstrated by its income, prices, or investment policies.

The experience of the 1980's demonstrates that as long as investment and production structure is centrally determined there is no viable combination between market and central plan: something has to give in, and in the previous absence of markets and unwillingness to fully reprivatize the economy, this is the market. What is left is the caricature of both market and command planning.

The Polish authorities have been justifiably praised for rejecting both the Husak variant of normalization based on massive reprisals and the Ceaucescu approach to "solving" the debt crisis by imposing extreme hardships on the population. They cannot be praised for instituting reform measures congruent with the depth of economic crisis, however. Preoccupations with containing Solidarity and preserving short-term political stability overshadowed overall economic efficiency considerations. Limited and shortsighted as it was adjustment program was carried mainly through administrative measures. However, no other measures were available as the economic system had not been overhauled. A transition from direct to indirect controls has not occurred.

⁴⁷ See *Zycie Gospodarcze*, No. 29, 1988.

POLAND: THE ANATOMY OF STAGNATION

By Zbigniew M. Fallenbuchi¹

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1. DECLINE AND SLOW RECOVERY

Between 1978 and 1982 the Polish economy experienced a truly dramatic decline in production.²

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² Details can be found in own previous contribution to JEC and in table 1 of this manuscript.

TABLE 1.—NET MATERIAL PRODUCT EMPLOYMENT AND CAPITAL STOCK (OFFICIAL DATA) AND GNP (WESTERN ESTIMATES)

[Percent Rates of Growth]

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1987 or 1986(*) 1978-100	Plan 1986- 90	Plan 1988
Produced NMP:															
Total	6.8	5.0	3.0	-2.3	-6.0	-12.0	-5.5	6.0	5.6	3.4	4.9	2.0	94.6	3.0-3.5	3.4
Industry	9.1	7.6	2.7	-1.7	-4.1	-14.6	-4.5	5.8	5.4	4.0	4.5	3.3	96.3	3.7-4.6	3.4-3.7
Construction	6.8	.0	.7	-7.7	-21.4	-25.1	-8.4	7.7	8.1	4.3	4.3	1.0	63.7	2.8	3.3
Agriculture	2.0	.2	7.3	-5.6	-15.5	1.4	4.9	5.1	5.3	.1	6.4	-4.0	95.1	1.1-1.5	2.2-2.9
Distributed NMP:															
Total	6.5	2.2	.5	-3.7	-6.0	-10.5	-10.5	5.6	5.0	3.8	5.0	1.0	88.5	2.6-3.2	N.A.
Total consumption	8.8	6.8	1.7	3.1	2.1	-4.6	-11.5	5.8	4.4	2.9	4.8	N.A.	* 106.0	2.3-2.9	2.1
Consumption from personal incomes	8.7	6.6	1.0	3.2	2.3	-4.1	-14.6	6.2	3.8	2.2	5.0	2.3	104.6	N.A.	2.1
Total net capital formation	2.4	-6.5	-2.0	-19.2	-29.6	-27.6	-6.6	4.9	7.3	7.2	5.4	N.A.	* 48.9	3.6-4.2	3.7
Net fixed capital formation	-9	2.7	-4.0	-15.4	-25.4	-24.2	-19.9	9.5	12.3	4.9	5.9	N.A.	* 52.4	5.9	N.A.
Employment:															
Total material sphere	-7	.3	.5	.5	-7	-2	-3.2	-8	-1	.4	.1	-5	95.5	N.A.	.3
Industry .....	.4	1.2	.0	.2	-1	-1	-4.8	-3	.5	.1	.6	-5	95.6	N.A.	N.A.
Construction	-3.5	.2	8.5	-1.6	-9.4	-7.3	-6.6	.4	2.4	2.4	1.8	N.A.	* 82.7	N.A.	N.A.
Agriculture	-2.1	-1.5	-2.4	1.0	.9	1.1	-5	-2.2	-1.9	-1	-1.2	N.A.	* 97.1	N.A.	N.A.
Gross capital stock:															
Total material sphere	9.7	9.5	8.1	7.1	5.1	3.5	1.8	2.6	2.8	3.0	2.1	N.A.	* 131.5	N.A.	2.8
Industry	10.4	11.8	8.9	7.1	4.5	3.3	2.5	2.8	3.1	3.4	2.3	N.A.	* 132.7	N.A.	N.A.
Construction	14.0	12.1	14.5	12.2	6.2	1.6	.4	1.4	1.9	1.4	.1	N.A.	* 127.5	N.A.	N.A.
Agriculture	7.4	7.7	7.4	7.2	6.0	4.4	1.9	2.0	2.7	2.4	1.9	N.A.	* 132.1	N.A.	N.A.
GNP (Western estimates)	4.1	2.8	3.7	-1.9	-2.6	-5.3	-6	4.6	3.4	1.1	2.8	-2.4	98.7		

Sources: G.U.S., Rocznik statystyczny, Warsaw, 183, pp. 69, 74; 1985, pp. 77, 82; 1987, pp. 90, 92; Economic Commission for Europe, Economic Survey of Europe in 1987-1988, New York, 1988, pp. 118, 121, 331, 332, 339, 341, 343; Zuzie gospodarcze, No. 1, 1988, pp. 1, 6; No. 6, p. 5. Western estimates of GNP: Research Project on National Income in East Central Europe, Economic Growth in Eastern Europe, New York: L.W. International Financial Research, OP-59, 1980, p. 16; OP-65, 1985, p. 24; OP-80, 1984, p. 23; OP-85, 1985, p. 24; OP-90, 1986, p. 24; OP-95, 1987, p. 24; and OP-100, 1988, p. 28.

After such a deep decline relatively high rates of growth could have been expected as the result of increasing the utilization of existing productive capacities. This has not, however, happened until now. The recovery process has been slow and uncertain. It has been plagued by serious external and domestic macroeconomic disequilibria, rapidly increasing inflation, drastic shortages, continuing social dissatisfaction and a potentially explosive political situation.

In 1987, the PNMP was still by 5.4 percent smaller than in 1978. In industry it was by 3.7 percent smaller, in construction by 36.6 percent and in agriculture by 4.9 percent. The deficiency in the DNMP was even greater (11.5 percent and, although consumption from personal incomes was in 1986 about 4.6 percent above its 1978 level, net capital formation was still by 51.1 percent lower. Particularly disappointing was the performance of the economy in 1987 when PNMP increased by less than 2 percent and DNMP by less than 1 percent. (See Table 1.)

All these officially reported rates of growth are subject to an upward bias. There are the usual overestimation of NMP resulting from double counting, difficulty to arrive at net figures, inclusion of some wasted materials and usable goods, reduction in quality that is not reflected in the administratively determined prices, as well as the overreporting of results by the enterprises. In addition there is also a major statistical problem of the elimination of the full impact of price increases during a period of high inflation, especially when both the enterprises and the authorities have reasons to conceal them. This last point, which is often mentioned in the Polish economic literature at present,³ applies not only to the rates of growth of production, consumption and net capital formation, but to productivity, standard of living, real wages and all similar measures expressed at constant prices. For this reason it is, for example, almost certain that there was no growth in 1987 and growth was probably almost insignificant in 1985.

In 1986, "net production" in the whole socialist industry was still about 9.7 percent below the 1978 level.⁴

³ "With very big jumps in prices a more cautious approach to statistics on increase in production in constant prices is necessary," M. Misiak, "Gospodarka po I polroczu: na wybojach" (The Economy After the First Half Year: the Rough Ride), *Zycie gospodarcze*, No. 31, 1988, p. 11; "With the present scale of changes in prices this increase (2 percent in PNMP) is within the range of a statistical error," J. Mujzel, "Jalowa inflacja" (The Barren Inflation), *Lad*, No. 28, 1988, p. 11.

⁴ Details can be found in Table 2.

TABLE 2.—NET PRODUCTION IN SOCIALIST INDUSTRY

[Constant prices]

	1971-75	1976-80	1981-85	1979	1980	1981	1982	1983	1984	1985	1986	1986 1978=100	Share	
													1978	1986
Total socialist industry	11.0	2.4	-1.5	2.0	4.5	-15.0	-4.8	5.3	4.8	3.7	4.2	90.3	100.0	100.0
Fuel and power	5.8	-1.8	-8.6	-4.4	-13.6	-39.0	-0.9	2.2	2.6	.5	.1	52.8	24.3	14.0
Coal	2.9	-5.2	-12.0	-1.1	-25.6	-47.4	-2.1	1.2	2.1	-7.7	-1.9	38.1	6.6	5.8
Fuels	9.3	.8	-6.5	-5.1	-5.5	-28.8	-1.4	1.1	.4	.4	1.1	65.0	5.3	6.0
Power	9.8	1.6	-3.1	-11.9	3.6	-29.0	2.7	6.2	7.1	3.0	3.1	80.4	2.4	2.2
Metallurgical	11.6	.8	-2.6	-6.7	-4.3	-16.4	-4.2	7.1	2.4	-0.5	.6	78.5	6.2	5.2
Iron and steel	9.3	.2	-3.4	-5.9	-7.6	-16.6	-5.4	6.2	1.6	-1.2	1.2	74.1	3.2	3.2
Non-ferrous	16.7	1.4	-1.3	-7.5	-.8	-15.9	-2.1	8.7	3.9	.6	-4	85.6	3.0	2.0
Engineering	15.2	7.1	3.2	6.6	-1.3	0.2	-3.2	6.8	5.7	6.7	7.6	132.1	30.7	33.4
Metalworking	13.0	6.2	.6	9.2	-5.3	0.8	-7.5	3.3	3.7	3.3	5.4	112.5	5.9	5.2
Machine building	15.5	8.5	4.8	8.4	2.8	1.6	-.3	8.3	6.2	8.2	10.4	155.0	9.7	10.4
Precision	22.6	9.5	8.6	8.0	.6	3.1	6.0	10.9	7.9	15.3	12.0	183.3	2.6	2.2
Transport equipment	14.1	4.6	.9	3.0	-5.6	-.9	-4.6	4.3	2.3	3.7	3.4	105.2	7.5	9.0
Electrical and electronic	16.9	7.9	4.4	4.8	.7	-1.4	-4.8	9.9	10.9	8.2	9.8	143.5	5.0	6.6
Chemical	15.1	2.9	4.5	-1.8	-2.6	7.4	-2.3	8.8	6.0	2.8	3.6	123.1	10.4	7.3
Mineral	9.9	1.0	-2.7	-3.1	-9.3	-18.4	-1.1	4.9	4.7	-1.6	1.6	77.9	3.6	4.3
Building materials	8.7	-3.5	-5.2	-9.6	-15.6	-24.4	-2.1	2.7	4.0	-2.9	2.2	59.9	2.1	2.1
Glass	12.8	6.9	2.0	5.7	-2.2	-1.2	-1.1	7.7	5.0	.0	-2	114.3	1.1	1.1
Ceramics	14.9	9.7	7.2	8.3	.8	1.8	7.8	15.0	8.3	3.7	2.5	158.3	.4	.5
Wood and paper	9.9	2.4	2.5	-10.4	1.9	-1.5	-1.5	8.2	3.9	3.7	5.6	109.1	4.8	4.1
Wood	10.9	3.2	3.4	-10.0	2.0	1.4	-3.4	9.8	5.0	4.5	4.0	112.7	3.7	3.4
Paper	7.1	.2	-.3	-11.5	1.6	-10.4	5.3	3.2	.1	.9	14.2	101.0	1.1	.7
Light industry	10.7	1.4	.7	-4.1	-5.7	-4.5	-6.1	2.3	7.4	5.1	2.0	95.5	17.0	13.9
Textiles	10.7	1.5	.7	-2.9	-7.0	-.7	-9.0	.4	7.9	5.4	.5	93.7	12.5	8.3
Clothing	12.3	1.2	.4	-8.2	-2.0	-14.0	-1.0	5.2	8.3	5.2	6.0	97.3	2.5	2.9
Leather goods	9.4	.8	1.4	-6.4	-2.3	-6.5	-1.1	5.8	5.0	4.4	2.7	100.6	2.0	2.0
Food processing	6.0	-2.9	-6.8	-14.4	-4.2	-25.7	-3.7	4.3	2.6	2.8	4.3	60.4	12.3	15.5

Sources: G.U.S., Rocznik statystyczny przemyslu (Statistical Yearbook of Industry), Warsaw, 1979, p. 95; 1981 p. 103; 1986, p. 61; g.u.s., Rocznik statystyczny (Statistical Yearbook), Warsaw, 1987, p. 220.

Some of these differences in the rate of recovery have resulted in changes in the industrial structure that may be regarded as favorable in principle, such as a reduction in the share of the fuel and power and metallurgical industries and an increase in the share of engineering industry. They were not, however, expected to be achieved as the result of a failure to regain the precrisis level of production in some industries. The very slow recovery process in the fuel and power industry has been responsible for the shortage of gasoline, diesel oil, and coal and for interruptions in the supply of power. Bottlenecks and stoppages of work are created and all sectors are affected. The inability of the light and food industries to achieve the 1978 level of production create shortage of consumption goods, especially because large quantities of the products of these industries are directed for export to compensate for the shortage of such traditional exportables as coal.

Similarly in agriculture an attempt was made at first to adjust the size of animal production to the supply of feeds from the domestic sources. The actual changes have, however, been greater than envisaged. While crop production exceeded the 1978 level by 9.9 percent in 1987, animal production was 9.5 percent below that level. Shortages of fuels and other producer goods for agriculture represent serious bottlenecks. Inadequate food processing, warehousing, and transportation facilities are responsible for a high proportion of wastages. Technological backwardness and inadequate agricultural infrastructure make further increases in output difficult and make it very sensitive to changes in climatic conditions. A reduction in crops by more than 2 percent and in animal production by more than 4 percent in 1987 and the fact that in that year the number of cattle was by 19.8 percent lower and the number of pigs by 14.7 percent lower than their respective 1978 levels (see Table 3) represent a considerable obstacle to the further growth of the economy.

TABLE 3.—AGRICULTURAL PRODUCTION, INPUTS, LIVESTOCK, PURCHASES AND PRICES

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1987 or 1986 (*) as percent of 1978
Global agricultural output	4.1	-1.5	-10.7	3.8	-2.8	3.3	5.7	0.7	5.0	-3.0	99.4
Crops	5.4	-3.7	-15.2	18.9	-2.5	5.9	7.4	-2.0	6.3	-2.0	109.9
Animal	2.6	1.3	-5.6	-8.9	-3.2	0.4	3.7	4.0	3.2	-4.0	90.5
Material costs	2.1	2.1	-7.5	1.5	-7.5	-0.3	5.4	2.6	3.8	N.A.	*99.2
Net agricultural output	8.3	-8.4	-17.3	8.6	6.1	9.2	6.1	-2.0	7.0	-4.0	101.8
Investment	5.9	-3.6	-17.2	-12.5	-15.3	5.6	4.6	-1.9	.4	N.A.	*64.4
Gross capital stock	7.0	6.5	5.7	4.0	1.9	2.0	2.6	2.4	1.6	N.A.	*129.9
Employment	-2	1.7	.2	1.1	-0.5	-2.2	-1.9	-0.1	-1.2	N.A.	*97.1
Livestock:											
Cattle (million animals)	13.1	13.0	12.6	11.8	11.9	11.3	11.2	11.5	10.9	10.5	80.2
Pigs (million animals)	21.7	21.2	21.3	18.5	19.5	15.6	16.7	17.6	18.9	18.5	85.3
Purchases of meat (million tons)	2.53	2.65	2.54	1.88	1.89	1.78	1.81	2.03	2.32	2.27	89.7
Purchases of milk (million litre)	9.98	9.98	10.01	9.26	9.32	10.72	11.50	11.13	10.62	10.74	107.6
Prices of produce:											
Total	4.6	4.3	13.2	64.7	56.9	8.1	10.5	10.2	12.2	N.A.	*450.7
Crops	6.4	.8	25.6	49.6	65.3	0.8	12.7	7.8	10.8	N.A.	424.8
Animal	3.6	6.1	7.0	71.8	53.5	11.2	9.6	11.1	13.0	N.A.	*458.2
Prices of goods and services purchased by agriculture	5.2	5.3	6.7	26.8	112.4	19.5	12.8	13.4	16.8	N.A.	*540.4
Ratio of total produce to prices of goods and services purchased	99.4	99.1	106.1	129.9	73.9	90.5	98.0	97.2	96.1	N.A.	*83.4

Sources: G.U.S., Rocznik statystyczny (Statistical Yearbook), Warsaw, 1985, pp. 283, 294, 305, 1987, pp. 294, 306, 315, 327.

Western estimates of the Gross National Product (GNP) includes services, a relatively slowly growing but also less rapidly declining sector. The 1987 level was equal to 98.7 of the 1978 level, a higher proportion than for the PNMP.

All the above statistics indicate that the crisis has been followed by a prolonged stagnation without any apparent hope for improvement. This is how the society in Poland assesses the current economic situation as numerous articles in the official and underground press, opinions expressed at the meetings of professional organizations and in the Sejm (parliament) and officially conducted polls indicated.⁵ This assessment is directly related to the negative results of the referendum of November 1987 and the outbreaks of two waves of strikes in April and August 1988.

2. DEPENDENCE OF PRODUCTION ON FOREIGN TRADE

The present industrial structure was created as the result of the operation of a highly centralized command system and the application of stalinist development strategy during the 1950's and it was further extended in the 1960's. It was based on import substitution and determination to produce as many goods needed within the country, or for export to the Soviet Union, as only physically possible, neglecting economies of scale and ignoring costs which could not be calculated with distorted prices, purely arbitrary exchange rates, subsidies and direct allocation of inputs. Priority was given to the iron and steel industry, heavy machinery, the so called "heavy chemicals" and other producers' goods. Agriculture, housing, modern transportation and communication the production of consumption goods and such "modern industries" as plastics and petrochemicals, light metals, electronics and later, computers were neglected. No viable export sector was created as the available large quantities of coal, copper and sulphur were expected to pay for those imports that were unavoidable. This industrial structure is capital- fuel- and material-intensive and ill adjusted to present requirements.

Efforts to restructure and modernize the economy with the help of Western credits and technology that were made in the early 1970's, with a basically unchanged inflexible command system, failed. They created, however domestic and external disequilibria, dislocations, shortages and partly hidden and suppressed but also open inflation.

⁵ Report by the Centre for the Study of Public Opinion, "Jak minal rok?" (How Was the Last Year?), Warsaw, December 1987.

TABLE 4.—TRADE WITH SOCIALIST AND OTHER COUNTRIES

[Annual rates of growth, constant prices]

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 Jan.- June	1982 as percent of 1978	1987 as percent of 1978
Import from socialist countries	7.8	12.3	4.0	1.7	2.4	-6.3	-5.6	4.4	9.2	4.6	¹ 6.4	¹ 5.0	¹ 11.6	92.1	126.2
Import from other countries	11.4	-10.9	-2.0	-4.5	-7.2	-31.5	-24.2	6.6	7.4	13.4	² 3.2	² 4.2	² 20.6	46.0	61.1
Total import	10.3	.4	1.5	-1.2	-1.9	-16.9	-13.7	5.2	8.6	7.9	4.9	4.7	¹ 15.7	69.5	94.1
NMP produced in industry	9.1	7.6	2.7	-1.7	-4.1	-14.6	-4.5	5.8	5.4	4.0	4.5	3.3	.....	76.9	96.0
Export to socialist countries	-3	10.6	7.5	9.6	-9.5	-17.0	16.6	8.3	10.0	8.1	¹ 8.7	3.7	¹ 11.3	96.0	137.9
Export to other countries	12.3	4.0	2.9	2.1	5.0	-22.1	.9	12.4	9.0	-6.5	² 1.5	² 4.4	¹ 14.8	84.3	102.2
Total export	5.4	8.8	5.7	6.8	-4.2	-19.0	8.7	10.3	9.5	1.3	4.9	4.1	13.1	90.1	120.4

¹ "First payment region" instead of "socialist countries."² "Second payment region" instead of "other countries."

Source: G.U.S., Rocznik statystyczny handlu zagranicznego (Statistical Yearbook of Foreign Trade), Warsaw, 1987, p. 7; Zycie gospodarcze, No. 7, 1988, p. 11; No. 5, 1988, p. 11; No. 27, 1988, p. 14; No. 32, 1988, p. 11.

It was the inability to expand profitable exports to the West to a sufficient extent that led to the appearance of the balance-of-payments disequilibrium in the second half of the 1970's. A positive balance of trade with nonsocialist countries was achieved starting in 1982 by drastic limitation of imports. The decline in imports reduced production through the mechanism of foreign trade supply multiplier,⁶ including production for export. The decline in production was stopped at a very low level consistent with the low level of supply of necessary imports, with the help of strong performance in agriculture (see Table 3) and at the price of imposing very strict restriction on the quantity, quality and the range of consumption goods made available for the population.⁷ Western banks stopped new credits at the beginning of the 1980's and soon afterwards Western governments responded to the imposition of martial law by economic sanctions, imports from the West became entirely dependent on the expansion of exports in this direction. It is the inability to expand exports to the West to the extent which would ensure the servicing of the hard currency debt and, at the same time, securing the necessary imports that has been slowing down the process of recovery through the operation of the same mechanism of foreign trade supply multiplier. At the same time the lack of success in adjusting the aggregate demand first to the decline in the aggregate supply and later to its slow growth results in the continuation of inflationary pressure and makes the elimination of domestic and external disequilibria impossible.

3. THE POSSIBILITY OF REDIRECTION OF TRADE TOWARD THE CMEA COUNTRIES

A policy of the so called "geographic reorientation" of trade was formulated in Poland under the operation of martial law in 1982.⁸ It was based on both economic and political considerations. Difficulties to expand exports to the West were enormous but without that expansion it was impossible to eliminate the bottlenecks and work stoppages created by the shortages of raw materials, intermediate goods, machines and spare parts. Moreover, faced with Western sanctions the leaders regarded this policy as a necessary condition for a reduction of the country's sensitivity to Western embargoes and, therefore, political pressures. An effort was made to substitute import mainly from the CMEA countries, but also from other countries—especially China and Yugoslavia and from the less-developed nonsocialist countries, for import from the West. This task was formulated as one of the objectives of the Three-Year Plan for 1983–85 and was geared to the CMEA-wide effort aiming at an increased self-sufficiency of the bloc and a reduction in its sensitivity to political pressures from the West.

⁶This mechanism has been examined by F.D. Holzman, "The Operation of Some Traditional Mechanism in the Foreign Trade of Centrally Planned Economies," reprinted in his *Foreign Trade Under Central Planning*, Cambridge, Mass.: Harvard University Press, 1974, pp. 93–125.

⁷For more details see Z.M. Fallenbuchl, "The Balance of Payments Problems and the Economic Crisis in Poland," *The Carl Beck Papers in Russian and East European Studies*, No. 406, Pittsburgh: University of Pittsburgh, 1985.

⁸P. Jagiello, "Geograficzna reorientacja importu Polski—rezultaty z lat 1982–1983" (Geographic Reorientation of Poland's Import—Results in the Years 1982–1983), *Handel Zagraniczny*, No. 4, 1985, pp. 23–25, 31.

The share of total imports from the CMEA countries, measured at current prices, increased from 51.9 percent in 1978 to 59.0 percent in 1982, then declined to 52.3 percent in 1987.

TABLE 5.—STRUCTURE OF IMPORTS

(SITC classification, current prices)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CMEA countries.....	51.9	51.7	53.3	51.8	59.0	59.7	58.0	54.8	52.3
Other socialist countries.....	2.2	2.6	2.3	3.2	4.3	4.4	5.0	5.9	8.5
Developed countries.....	40.5	37.9	35.0	37.1	30.9	28.9	29.5	32.3	33.0
Developing countries.....	5.4	7.8	9.4	7.9	5.8	7.0	7.5	7.0	6.2
Food beverages, tobacco	11.7	11.5	13.1	21.0	14.1	9.2	10.3	9.2	9.8
CMEA countries.....	2.1	1.8	1.9	2.2	2.3	2.5	3.0	1.8	1.3
Other socialist countries.....	.4	.3	.3	.4	1.6	.9	.7	.8	1.5
Developed countries.....	7.0	6.4	8.1	14.5	7.7	4.7	5.1	5.3	5.0
Developing countries.....	2.2	3.0	2.8	3.9	2.5	1.1	1.5	1.3	2.0
Raw materials	10.5	10.7	10.6	10.3	11.	10.1	10.6	10.2	7.9
CMEA countries.....	4.1	3.9	4.5	4.0	5.2	4.1	3.9	3.6	3.2
Other socialist countries.....	.3	.3	.2	.4	.3	.3	.3	.4	.6
Developed countries.....	4.8	5.0	4.1	3.6	4.1	3.9	4.8	4.2	2.8
Developing countries.....	1.3	1.5	1.8	2.3	2.2	1.8	1.6	2.0	1.3
Mineral fuels	12.8	15.3	18.2	17.4	21.9	26.1	23.2	22.2	20.7
CMEA countries.....	10.1	11.2	12.8	14.9	19.7	21.1	20.1	18.8	18.5
Other socialist countries.....	.0	.1	.1	.1	.3	.2	.1	.2	.2
Developed countries.....	1.5	1.3	1.3	1.3	1.4	1.6	.3	.9	.3
Developing countries.....	1.2	2.7	4.0	1.1	.5	3.2	2.7	2.3	1.7
Chemicals	7.7	7.9	8.1	7.7	9.4	8.7	8.6	8.9	9.6
CMEA countries.....	2.8	2.5	2.7	2.9	3.4	3.0	2.5	2.3	2.3
Other socialist countries.....	.1	.1	.1	.2	.2	.2	.4	.6	.8
Developed countries.....	4.7	5.3	5.2	4.6	5.8	5.5	5.6	5.9	6.4
Developing countries.....	.1	.0	.1	.0	.0	.0	.1	.1	.1
Machines and transport equipment	37.2	34.4	32.2	28.6	24.4	25.2	27.7	30.5	32.3
CMEA countries.....	23.0	23.1	22.7	19.6	17.7	18.2	19.3	20.2	19.6
Other socialist countries.....	.8	.9	.7	1.2	.8	1.0	1.1	1.2	1.4
Developed countries.....	13.3	10.4	8.8	7.8	5.9	6.0	6.7	8.5	10.7
Developing countries.....	.1	.0	.0	.0	.0	.0	.6	.6	.6
Other industrial commodities	20.1	20.2	17.8	15.0	18.4	20.7	19.6	19.0	19.7
CMEA countries.....	9.8	9.2	8.8	8.2	10.7	10.8	9.2	8.1	7.4
Other socialist countries.....	.6	.9	.8	.9	1.1	1.8	2.4	2.7	4.0
Developed countries.....	9.2	9.5	7.5	5.3	6.0	7.2	7.0	7.5	7.8
Developing countries.....	.5	.6	.7	.6	.6	.9	1.0	.7	.5

Sources: G.U.S., Rocznik statystyczny handlu zagranicznego (Statistical Yearbook of Foreign Trade, Warsaw, 1980, pp. 46-7; 1981, pp. 48-9; 1984, p. 62; 1986, p. 76-7; 1987, p. 76.

The temporary increases in the CMEA share in the total value of Polish imports were the result of two opposite tendencies: (1) relative increases in the value of imports of mineral fuels from the CMEA countries, caused by the delayed increase in the price of

Soviet oil with the bloc; and (2) relative decreases in the value of the sum of all other imports from the CMEA countries.

Information on the extent to which the geographic reorientation of Polish foreign trade has been taking place is provided by the examination of changes in the quantities of some 30 imported basic raw materials and intermediate goods measured in physical units. The shortages of this group of products drastically limited industrial production and were responsible for work stoppages and unused productive capacities. Statistics are available with division into socialist and other countries only. It is, therefore, possible to examine only the extent to which Poland has been able to substitute import from all socialist countries for that from other countries.⁹

During the period when production was declining between 1978 and 1982 total import decreased in the case of 24 and increased in the case of 6 commodities. During the period of recovery, from 1983 to 1986, total import decreased in the case of 16 and increased in the case of 14 commodities. In 1986 the import of 24 commodities was below the 1978 level and it was above that level only in the case of 6 commodities.

The following summary of cases is useful to examine the extent of substitution taking place in 1978-82, 1982-86 and during the whole period 1978-86:

	1978-82	1982-86	1978-86
One source only (increase)	1	1	1
Increases in import from both sources	1	6	1
Increases in import from, socialist countries greater than or equal to decreases in import from nonsocialist countries (more than complete or complete substitution)	4	3	2
Increases in import from socialist countries insufficient to compensate for decreases from nonsocialist countries (incomplete substitution)	14	4	18
Decreases in import from both sources	9	7	6
Increases in import from nonsocialist countries not sufficient to compensate for decreases in import from socialist countries (incomplete reverse substitution)	1	4	2
Increases in import from nonsocialist countries greater than or equal to decreases in import from socialist countries (more than complete or complete reverse substitution)	0	5	0
Total number of cases	30	30	30

This group of commodities does not include all raw materials and intermediate goods that are imported but it can be accepted as representative of all imports of this nature. These are essential producers' goods and their reduced import had to restrict industrial production. Only in a few cases (two for the period as a whole) it was possible to effect a complete substitution of imports from socialist countries for decreases in import from nonsocialist countries. In most cases only an incomplete substitution was possible, very often leaving quite a big gap. There were cases where import decreased from both sources (six for the period as a whole) and cases where the process of substitution was reversed, i.e., increases in imports from non-socialist countries. The latter cases appear during the period of reconstruction of 1982-86 (nine in both groups together).

⁹ Table on "Import of Selected Raw Materials and Intermediate Goods" available from author upon request.

The selected 30 commodities are relatively homogeneous. They can be measured in physical units and they are reported in this way in Polish statistics. The same calculations cannot be made for components, spare parts and machines. In some of these cases there are no substitutes for Western imports of the required specifications and quality. If the policy of geographic reorientation of trade has not been successful in the case of homogeneous goods where substitution is physically relatively easy, it must have been even less successful in respect of the other producers' goods. On the other hand, it is necessary to take into consideration that the policy was introduced when the 5-year plans for 1981-85 had already been in implementation in the Soviet Union and other CMEA countries and, moreover, at the time when all those countries experience considerable difficulties not only with expanding but even with maintaining levels of production. A more careful coordination of plans in 1986-90 could have created better results in respect of the reorientation of trade. The data for 1986 (see footnote 9) do not, however, show any visible improvement. It can be expected that the well known shortages of fuels, raw materials, intermediate goods, modern machines and higher quality products in general with the bloc will continue to limit the success of the policy of geographic reorientation of trade. Further expansion of national product in Poland will continue to depend on the possibility to secure sufficient quantities of necessary imports from the West. This, in turn, will depend on the ability to expend export in this direction.

Between 1978 and 1982 an attempt was also made to maintain the highest possible level of the import of necessary producers' goods by a more severe reduction in other imports. The proportion of imports for production purposes increased from about 64 percent before the crisis to 68 percent in 1979 and 1980, exceeded 71 percent in 1981-82, reached its highest proportion of about 78 percent in 1984 and it is about 72 percent at present. This increase in the share of fuels, raw materials and intermediate goods has been achieved at the price a very drastic reduction in the share of imports for investment purposes. (See Table 6.)

TABLE 6.—IMPORTS ACCORDING TO USE AT CURRENT PRICES

[Percent Share of Total Import]

Import	1970	1975	1979	1980	1981	1982	1983	1984			1985			1986			1987			1988		
								Total	I	II	Total	I	II	Total	I	II	Total	I	II	Total	I	II
For production purposes.....	64.2	63.6	68.3	68.0	71.9	71.3	70.2	77.8	77.5	78.3	76.3	77.0	75.5	68.5	76.4	60.4	71.9	74.2	70.0	71.9	73.3	69.6
For investment.....	16.9	24.5	18.7	17.3	11.2	9.7	9.4	8.9	10.0	7.5	10.1	10.9	9.0	11.1	11.8	10.5	12.1	12.7	11.0	12.2	13.5	10.2
For consumption by the population.....	15.7	8.8	10.9	11.2	11.5	15.9	15.1	11.9	11.9	11.9	12.5	11.8	13.2	15.2	11.6	18.8	14.3	12.3	16.0	14.3	12.3	17.5
Unclassified.....	3.2	3.1	2.1	3.5	5.9	3.1	5.3	1.4	.6	2.3	1.1	.9	2.3	5.2	.2	10.3	1.7	.0	2.0	1.6	.9	2.7
Total Import.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: G.U.S., Rocznik statystyczny, Warsaw: 1982, p. 320, 1986, p. 373; Zycie gospodarcze, No. 6, 1985, p. 14; No. 7, 1986, p. 11; No. 8, 1987, p. 11; No. 7, 1988, p. 11; No. 24, 1988, p. 14.

In this way even a deeper reduction in the current level of production was probably avoided, particularly in 1981-82. This policy could have helped to increase the level of production perhaps in 1983 and 1984. However, in the long run it must have become counterproductive. It has secured increases in the supply of fuels, raw materials and intermediate goods but it has prevented the process of modernization and restructuring of the economy and even made the replacement of used up machines and equipment impossible. It has, therefore, given priority to increases in the quantity of available producers' goods over the task of reducing their use per unit of output. It reflects the same wrong priorities as those that are revealed in the current Polish investment policy and, together with that policy, is probably partly responsible for the stagnation of the economy.

The share of imports for investment purposes has remained low, particularly in trade in hard currencies (Second Payments Region—II) and this reflects the priority for the purchases of investment goods from socialist countries. This policy has, undoubtedly, been induced, at least partly, by the acute shortage of hard currencies and the necessity to use some of them for the necessary consumption goods, especially since 1986. (See Table 6.) It could, however, have some serious adverse longrun effects. A similar policy of importing a larger part of machines and equipment from socialist countries than from the West, which was conducted even during the investment drive of the 1970's,¹⁰ has been responsible for the very high fuel- and material-intensity and technological backwardness of the Polish economy. This is another cause of the present stagnation. It probably tends to make greater increases in the import of fuels, raw materials, and intermediate goods necessary and makes the expansion of profitable exports of modern goods more difficult.

4. EXPORT PERFORMANCE AND THE BALANCE OF PAYMENTS

Between 1978 and 1982 total export in constant prices declined by about 10 percent. Export to socialist countries declined by only about 4 percent and export to nonsocialist countries by almost 16 percent. In 1987, total export was about 20 percent above the 1978 level, export to socialist countries about 38 percent, and export to nonsocialist countries about 2 percent. (See Table 4.) Priority was given to the protection of exports to socialist countries during the period of crisis and to the expansion of these exports during the period of recovery, although the indebtedness situation would have suggested the reversal of these priorities. The hard-currency debt increased from \$25.1 billion at the end of 1980 to \$39.2 billion at the end of 1987 while the nonconvertible currencies' debt increased from 1.4 billion to 6.6 billion transferable rubles during that period. This has happened despite a positive balance of trade in hard currencies, which has been maintained since 1982 mainly by severe limitation of imports, and a negative balance in nonconvertible currencies. (See Table 7.)

¹⁰ Zbigniew M. Fallenbuhl, *East-West Technology Transfer: Study of Poland 1971-1980*, Paris: OECD, 1983.

TABLE 7.—POLAND'S BALANCE OF PAYMENTS

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
A. In socialist countries' currencies (million transferable roubles)										
Merchandise export.....	2,070	4,365	6,188	5,725	6,839	7,542	8,534	9,073	10,147	10,665
Merchandise import.....	-2,227	-4,208	-7,020	-7,276	-7,532	-8,440	-9,518	-10,303	-11,049	-11,219
Balance.....	-157	157	-832	-1,551	-693	-898	-984	-1,230	-902	-554
Export of services.....	225	293	518	5089	615	727	772	898	1,034	.....
Import of service.....	-68	-180	-338	-358	-333	-452	-580	-579	-641	.....
Balance.....	157	113	180	150	282	275	192	319	393	.....
Transfers received.....	0	0	0	8	12	13	14	16	11	385
Transfers paid.....	0	0	0	-7	-5	-7	-7	-8	-10	.....
Balance.....	0	0	0	a1	7	6	7	8	1	.....
Interest received.....	0	0	0	.....	7	30	127	13	10	.....
Interest paid.....	0	-23	-23	-57	-116	-114	-159	-207	-213	.....
Balance.....	0	-23	-23	-54	-109	-84	-142	-194	-203	-254
Balance on current account.....	0	247	-675	-1,454	-513	-701	-927	-1,097	-711	-423
Medium- and long-term credits received.....	45	-248	-203	475	-79	-a104	-15	111	355	71
Medium- and long-term credits granted.....	-23	-23	-23	-9	92	24	30	32	38	29
Short-term credit—balance.....	-22	45	788	1,200	700	200	1,0008	700	495	344
Financial operations.....	0	45	0	0	37	63	68	113	33	.....
Changes in bank accounts.....	0	-68	133	-212	-237	518	-164	141	-210	21
Refinanced credits.....	0	0	0	0	0	0	0	0	0	.....
Capital account and settlements balance.....	0	-249	675	1,454	513	701	927	1,097	711	423
Gross debt (billion transferable roubles).....	.6	.4	1.4	3.1	3.7	3.8	4.8	5.6	6.5	6.6
Net debt (billions transferable roubles).....	.4	.2	1.2	2.9	3.4	3.5	4.5	5.3	6.3	6.3
B. In convertible currencies (million U.S. dollars)										
Exports of goods.....	1,300	4,367	7,957	5,481	4,974	5,402	5,828	5,768	6,226	6,920

Import of goods	-1,200	-7,349	-8,743	-6,231	-4,616	-4,317	-4,372	-4,594	-5,108	-5,878
Balance.....	100	-2,982	-786	-750	358	1,085	1,456	1,174	1,118	1,042
Export of Services.....	175	572	950	645	491	639	552	585	629	.....
Import of Service.....	-150	-512	-1,081	-504	-407	-607	-618	-602	-709	.....
Balance.....	25	60	-131	141	84	72	-66	-17	-80	-51
Transfers received.....	75	271	¹ 1,146	¹ 1,288	416	622	852	1,162	1,348	.....
Transfers paid.....	0	0	-491	633	-98	-247	-390	-398	-404	.....
Balance.....	75	271	655	655	318	375	462	764	944	1,409
Interest received.....		30	131	170	86	161	183	168	183	202
Interest paid.....	-50	-512	-2,456	-2,273	-1,862	-1,591	-1,248 ^a	-1,767 ^a	-1,169 ^a	-2,994
Balance.....	-50	-482	-2,325	-2,103	-1,776	-1,430	-1,065	-1,599	-986	2,792
Balance on current account.....	150	-3,133	-2,587	-2,056	-1,016	62	787	322	996	-392
Medium- and long-term credits received.....	0	2,650	3,045	1,751	-944	-2,081	-3,084	-2,491	-6,587	-3,205
Medium- and long-term credits granted.....	-50	-120	-163	-422	-5	-69	-176	-9	-253	614
Short-term credits.....	-25	693	-720	-839	86	74	37	252	119	72
Financial operations.....	-25	-120	-164	-448	-71	-242	-634	-427	-305	.....
Changes in bank accounts.....	-50	30	589	236	-100	48	132	421	-62	2,911
Refinanced credits.....	0	0	0	1,778	2,050	2,208 ^a	2,938	1,932	6,092	.....
Capitol account and settlement balance.....	-150	3,133	2,587	2,056	1,016	-62	-787	-322	-996	392
Gross debt (billion U.S. dollars).....	1.1	8.4	25.1	25.5	^a 24.8	26.4	26.8	29.3	33.5	39.2
Net debt (billion U.S. dollars).....	.8	7.7	23.7	24.1	^a 23.5	25.2	25.5	28.1	32.1	37.9

¹ These figures include aid from CMEA countries; \$131 in 1980 and \$327 in 1981.

^a Without unpaid interest on credits guaranteed by the governments which were neither paid nor formally rescheduled.

^a Without unpaid interest which was \$845 million in 1985 and \$1,685 in 1986.

Sources: G.U.S., Rocznik statystyczny handlu zagranicznego (Statistical Yearbook of Foreign Trade), 1983, pp. 73-74, 1987, p. 81; Zycie gospodarcze, No. 12, 1988, p. 8; U.N., Economic Survey of Europe in 1987-1988, New York 1988, p. 360.

The official Polish balance-of-payments statistics in hard currencies show positive balance on current account in the years 1983-86 by excluding unpaid interest payments which were added to the debt. They amounted to \$845 million in 1985 and \$1,685 million in 1986. Taking these amounts into consideration the deficit on current account was \$523 million in 1985 and \$689 million in 1986.¹¹

The Polish economy has not been able to create a sufficient surplus of hard currencies in order to service the debt and to secure necessary imports, without which national product cannot increase more rapidly, because the possibility to expand export of fuels and raw materials is limited and the expansion of the export of manufactured goods requires some far-reaching changes in the structure of the economy and improvement in the efficiency of not only the foreign trade mechanism but of the entire economy.¹²

Data presented in Tables 7 and 8 suggest some basic structural weakness of Polish exports. The coal mining is now unable to expand its output. The net product of the fuel and power in 1986 was equal to only 52.8 percent of its 1978 level, the volume of its export to 82 percent (export to socialist countries 107.5 percent and that to nonsocialist countries 70.4 percent). Although the volume of export of the metallurgical industry in 1986 represented 116.5 percent of the 1978 level (157.3 percent in trade with socialist and 97.2 percent in trade with nonsocialist countries), its net products represented in that year only 78.5 percent of the 1978 level. The industry is heavily fuel intensive and its future expansion encounters, therefore, consideration difficulties. To some extent the same limitation applies to at least some parts of the chemical industry.

TABLE 8.—STRUCTURE OF EXPORTS

[SITC classification, current prices]

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CMEA countries	58.0	57.8	53.3	45.7	50.0	51.3	49.0	48.8	46.6
Other socialist countries	3.1	3.1	2.6	2.8	3.6	3.4	4.1	6.0	7.3
Developed countries	31.3	31.1	34.4	37.0	32.6	32.5	34.6	34.7	33.9
Developing countries	7.6	8.0	9.7	14.5	13.8	12.8	12.3	10.5	12.2
Food beverages, tobacco	7.9	7.7	6.7	6.1	6.3	7.3	7.9	8.2	8.7
CMEA countries	1.8	1.9	1.3	.8	1.1	1.3	1.5	1.6	1.6
Other socialist countries .....	.1	.1	.1	.0	.2	.4	.2	.2	.2
Developed countries	5.2	5.0	4.9	4.9	4.6	5.1	5.6	5.9	6.6
Developing countries .....	.8	.7	.4	.4	.4	.5	.6	.5	.3
Raw materials	4.5	4.6	5.0	6.7	5.8	5.9	6.8	7.4	6.7
CMEA countries	1.2	1.2	1.2	1.2	1.3	1.4	1.3	1.3	1.4
Other socialist countries .....	.1	.1	.1	.2	.3	.5	.4	.6	.5
Developed countries	2.9	3.0	3.2	4.3	3.2	3.2	4.2	4.4	3.6
Developing countries .....	.3	.3	.5	1.0	1.0	.8	.9	1.1	1.4
Mineral fuels	15.6	15.0	14.2	10.5	15.4	17.4	17.5	15.7	13.2

¹¹ A full account may be found in this volume in William Kunkle's paper on balance of payments in EE.

¹² W. Trzeciakowski, "Reforma, restrukturyzacja zadłużenie" (The Reform Restructuring Indebtedness), *Handel zagraniczny*, No. 8, 1987, pp. 3-7, 29.

TABLE 8.—STRUCTURE OF EXPORTS—Continued

(SITC classification, current prices)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
CMEA countries.....	6.7	5.8	4.5	2.9	5.7	7.1	6.6	5.1	4.6
Other socialist countries.....	.1	.1	.1	.1	.3	.1	.3	.2	.3
Developed countries.....	8.1	8.4	8.3	6.6	8.3	9.1	9.6	9.3	6.9
Developing countries.....	.7	.7	1.3	.9	1.1	1.1	1.0	1.1	1.4
Chemicals.....	5.4	4.8	5.5	5.1	4.8	5.6	6.1	6.1	6.4
CMEA countries.....	3.5	3.1	3.3	2.7	2.8	3.3	3.2	3.0	3.1
Other socialist countries.....	.3	.2	.2	.2	.2	.3	.6	.6	.6
Developed countries.....	1.1	1.2	1.5	1.9	1.4	1.6	1.8	2.1	2.2
Developing countries.....	.5	.3	.5	.3	0.4	.4	.5	.4	.5
Machines and transport equipment.....	41.8	44.0	43.1	43.6	44.0	41.6	38.6	39.4	34.8
CMEA countries.....	31.2	33.9	31.7	28.2	29.1	28.9	27.6	29.0	25.5
Other socialist countries.....	1.8	2.1	1.5	1.3	1.8	1.1	1.3	2.2	2.6
Developed countries.....	5.7	4.7	5.7	7.6	6.3	4.7	4.1	3.5	3.8
Developing countries.....	2.9	3.3	4.2	6.5	6.8	6.9	5.6	4.7	2.9
Other industrial commodities.....	24.8	23.9	25.5	28.0	23.7	22.2	28.1	23.2	30.2
CMEA countries.....	13.6	11.9	11.2	9.9	10.0	9.3	8.8	8.8	10.6
Other socialist countries.....	.7	.5	.7	1.0	.8	1.0	1.3	2.2	3.1
Developed countries.....	8.1	8.8	10.8	11.7	8.8	8.8	9.3	9.5	10.8
Developing countries.....	2.4	2.7	2.8	5.4	4.1	3.1	3.7	2.7	5.7

Sources: G.U.S., Rocznik statystyczny handlu zagranicznego, Warsaw, 1980, pp. 47-48; 1981, pp. 49-50; 1981, pp. 49-50; 1984, p. 63; 1986, pp. 77-78; 1987, pp. 77-78.

TABLE 9.—COMPOSITION OF EXPORTS ACCORDING TO SECTORS OF PRODUCTION

[Current prices]

	1981		1982		1983		1984		1985		1986		1987		June 1988	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent
	A. First payments region (million roubles):															
Total exports.....	5,725	100.0	6,839	100.0	7,542	100.0	8,534	100.0	9,073	100.0	10,147	100.0	10,665	100.0	5,513	100.0
Fuels and power.....	366	6.4	780	11.4	1,041	13.8	879	10.3	717	7.9	954	9.4	1,013	9.5	437	7.9
Metallurgical industry.....	269	4.7	301	4.4	453	6.0	384	4.5	336	3.7	619	6.1	640	6.0	170	3.1
Engineering industry.....	3,504	61.2	3,973	59.8	4,359	57.8	5,155	60.4	5,634	62.1	5,875	57.9	6,164	57.8	3,346	60.7
Chemical industry.....	515	9.0	602	8.8	709	9.4	768	9.0	817	9.0	964	9.5	1,024	9.6	531	9.6
Mineral industry.....	23	0.4	27	0.4	38	0.5	51	0.6	64	0.7	61	0.6	53	0.5	28	0.5
Wood and paper industry.....	57	1.0	68	1.0	53	0.7	59	0.7	73	0.8	81	0.8	96	0.9	46	0.8
Light industry.....	550	9.6	588	8.6	400	5.3	444	5.2	490	5.4	568	5.6	587	5.5	285	5.2
Food processing industry and agriculture.....	115	2.0	171	2.5	226	3.0	265	3.1	327	3.6	426	4.2	491	4.6	192	3.5
Construction.....	263	4.6	280	4.1	211	2.8	435	5.1	517	5.7	528	5.2	427	4.0	391	7.1
Other*.....	63	1.1	49	0.7	52	0.7	94	1.1	98	1.1	71	0.7	170	1.6	87	1.6
B. Second payments region (million U.S. dollars):																
Total exports.....	5,481	100.0	4,974	100.0	5,402	100.0	5,828	100.0	5,768	100.0	6,226	100.0	6,920	100.0	3,961	100.0
Fuels and power.....	7840	14.3	1,005	20.2	1,210	22.4	1,364	23.4	1,280	22.2	1,102	17.7	1,259	18.2	511	12.9
Metallurgical industry.....	658	12.0	537	10.8	713	13.2	758	13.0	744	12.9	585	9.4	692	10.0	585	14.8
Engineering industry.....	1,677	30.6	1,383	27.8	1,361	25.2	1,259	21.6	1,148	19.9	1,438	23.1	1,426	20.6	910	23.0
Chemical industry.....	554	10.1	458	9.2	481	8.9	606	10.4	669	11.6	635	10.2	768	11.1	461	11.6
Mineral industry.....	82	1.5	55	1.1	54	1.0	70	1.2	69	1.2	87	1.4	118	1.7	68	1.7
Wood and paper industry.....	208	3.8	139	2.8	167	3.1	175	3.0	179	3.1	224	3.6	263	3.8	205	5.2
Light industry.....	428	7.8	308	6.2	286	5.3	309	5.3	363	6.3	417	6.7	567	8.2	310	7.8
Food processing industry and agriculture.....	647	11.8	597	12.0	735	13.6	833	14.3	883	15.3	1,227	19.7	1,356	19.6	731	18.5
Construction.....	351	6.4	418	8.4	330	6.1	297	5.1	288	5.0	324	5.2	283	4.1	102	2.6
Other*.....	92	1.7	74	1.5	65	1.2	157	2.7	145	2.5	187	3.0	188	2.7	78	1.9

* Calculated as residuals in every column.
Own calculations based on total export and total import to the two payments regions as given in the balance-of-payments statistics which differ from trade figures in roubles and dollars. For 1981-83 shares of sector for "CMEA countries" instead of "first region" and "other countries" instead of "second region".

Sources: G.U.S., Rocznik statystyczny handlu zagranicznego (Statistical Yearbook of Foreign Trade), Warsaw, 1986, p. 13; 1987, p. 13; Zycie gospodarcze, No. 6, 1985, p. 14; No. 7, 1986, p. 11; No. 8, 1987, p. 11; No. 7, 1988, p. 11; No. 27, 1988 and, p. 14; No. 32, 1988 p. 11.

So far the restructuring of Polish exports, especially to nonsocialist countries has taken place without a restructuring of production. It has been effected at the expense of the domestic market to the point that the shortages of fuels, raw materials, and intermediate goods, caused by exporting them, adversely affect production, including the production of some exportables, and the shortage of consumption goods discourages improvements in productivity and generates social and political tensions and strikes.

The expansion of export, especially to nonsocialist countries has also been restricted by systemic factors. The following modifications in the foreign trade mechanism have been included in the program of implementation of the so-called "second state of economic reform" or have been introduced approximately parallel to it:

(1) A decree facilitating the obtaining of concessions for indirect involvement in foreign trade and a decision of the minister of foreign trade exempting 20 items in import and 78 items in export from the requirement of obtaining a concession;

(2) The elimination of obligatory use of specific Foreign Trade Organizations (FTO's) in respect to export to the second payments region, except in the case of some commodities designated as particularly important for the national economy, and in respect of import financed from the enterprises' own reserves of foreign currencies;

(3) The creation of a special export restructuring fund in order to improve the profitability of the production of exportables included in structural changes and of the export of food and agricultural products in connection with which the use of the administratively determined official prices would be introduced in 1988;

(4) A decrease in the proportion of imports from the second payments region which are financed centrally and an increase in the proportion of imports financed in the decentralized way up to about 38 percent already in 1988; a modification of the foreign exchanges retention accounts for the exporters, introduced already from the beginning of 1987 and introduction of "foreign exchange auction for specific purposes";

(5) Tax allowances for the enterprises involved in export applying to both tax on the above of the norm payments of wages and income tax;

(6) The determination of the rate of exchange at the level which would ensure profitability to at least 80 percent of total export, separately for the first and the second payments regions; a reduction in the use of price equalization mechanism used to compensate for differences between the prices actually paid for imports, or obtained for export, and the domestic prices; and the increased use of transaction prices in connection with tradables; and

(7) The elimination of surcharges on exports and imports and the introduction of a comprehensive tariff schedule as from the beginning of 1989 which would be used as the only instrument

for the export inducing restructuring of the economy for the acceleration of technological progress.¹³

Some of these measures were supposed to be introduced at the beginning of the economic reform in 1982. After a clear regress in the years 1983-86 they were introduced in 1987 and 1988 or are going to be soon introduced. They should increase the flexibility of the system by reducing the monopoly power of FTO's, improve somewhat rationality of the calculation of profitability in foreign trade and create stronger incentives to expand exports. The results may not, however, be fully satisfactory. The system of foreign trade that has been in operation during the last 5 years is a specific mixture of traditional and new features of both market and administrative nature. The measures which have now been introduced, or are going to be introduced, increase the proportion of new features in the total mix, but some of them are still of administrative nature and they are not opening the economy. There is still room for incompetent manipulations with tax allowances, prices, rate of exchange and special privileges which may prevent the expansion of exports as has been the case until now.¹⁴

Moreover, "the introduction of the reform by itself does not create sufficient conditions for the expansion of export, although without it it would not be possible to reduce Poland's debt or even to service it." It is also necessary to effect an export-inducing restructuring of the economy and in this field" the last 5 years have been wasted.¹⁵

5. PRODUCTIVITY

Some indication of the present level of productivity can be obtained by comparing changes in the level of Produced Net Material Product (PNMP) at constant prices with changes in employment and gross capital stock. (See Table 1.) In 1987 the PNMP in the economy as a whole represented 94.6 percent of its 1978 level. Employment in that year was equal to 95.5 percent of its 1978 level. And gross capital stock in 1986 was equal to 131.5 percent of its 1978 level and undoubtedly increased further in 1987.

These statistics imply a reduction in labor productivity and even a greater reduction in capital productivity in comparison with the precrisis situation which was far from satisfactory. As has, however, been mentioned in section 1, all value calculations at constant prices suffer from a considerable degree of inaccuracy caused by the very rapidly changing rate of inflation, the effects of which are difficult to eliminate. The decline in labor productivity can, therefore be quite deeper. On the other hand, capital stock is measured as a gross concept. A large part of it has been used up and there is a problem with its revaluations lagging behind increases in prices at which output is calculated. For those reasons nothing is gained by calculation more sophisticated measures of productivity. They

¹³ M. Deniszczuk, "Drugi etap czy kolejna runda?" (The Second Stage or Another Round?), *Handel zagraniczny*, No. 2, 1988, pp. 3-4.

¹⁴ M. Gorynia, W.J. Otta, "Czy przedsiębiorstwa musza eksportowac?" (Do the Enterprises Have to Export?), *Zycie gospodarcze*, No. 9, 1988, p. 9.

¹⁵ M. Krzak, "Poczatek drogi" (The Beginning of the Road), *Zycie gospodarcze*, No. 10, 1988, p. 13.

would be equally inaccurate as a simple comparison of the rates of growth.

A low productivity of labor and capital has to be accepted as another cause of stagnation, beside the balance-of-payment difficulties connected with the inability to expand profitable exports to the West, which has contributed to the difficulties.¹⁶

TABLE 10.—CONSUMPTION OF SELECTED BASIC MATERIALS IN THE ECONOMY

[Rates of growth of physical quantities]

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1986 as percent of 1978
Produced net materials product.....	3.0	-2.7	-6.0	-12.0	-5.5	6.0	5.6	3.4	4.9	92.8
Coal.....	4.4	2.1	6.3	-9.1	1.7	.4	2.4	2.2	-3	103.2
Brown coal.....	2.3	-8.6	-9	-2.9	5.9	14.9	21.4	4.0	16.3	178.1
Coke.....	6.9	-2.2	-1.5	-8.6	-10.8	-2.3	-6.4	3.1	0.5	78.0
Electric power.....	5.3	1.6	4.0	-4.6	1.1	3.2	7.9	4.1	3.5	121.5
Rolled steel.....	-2.8	.8	-1.5	-13.9	-10.2	.7	3.5	.8	2.5	82.7
Copper.....	-2	3.5	-4.4	-23.2	13.7	15.0	11.2	11.1	-3.8	118.1
Lead.....	2.2	-1.7	-3.5	-20.8	-11.1	28.8	6.0	5.7	-2.3	94.3
Aluminum.....	2.5	-9	-9.2	-25.4	-21.6	-4.0	16.8	9.6	6.4	68.7
Plastics.....	3.0	-2.8	8.4	-14.0	-3.8	10.2	13.4	2.6	3.2	115.2
Synthetic rubber.....	.8	5.0	1.0	-5.5	-9.0	12.8	3.3	-7.3	4.6	92.1
Cement.....	-2.7	-9.6	-4.6	-18.8	2.3	6.2	2.4	-14.4	1.1	65.0
Lumber.....	-1.6	1.1	-9.6	-1.1	-10.6	22.0	-5.1	-24.5	-6.5	66.3
Wood pulp.....	-5.9	-7.5	1.1	-11.8	11.1	7.5	-17.0	9.5	16.7	104.4
Paper.....	0	-4.8	-7	-7.9	-7.8	14.3	-5.6	-8.2	.8	80.2

Sources: G.U.S., Rocznik statystyczny (Statistical Yearbook), Warsaw, 1982, p. 160; 1987, p. 205.

The 1986 level of the use of electric power was 121.5 percent of its 1978 level, the 1986 level of the use of lignite (brown coal) was 178.1 percent and the 1986 level of the use of coal was 103.2 percent. These statistics suggest an increase in the fuel intensity of production. When the amounts of fuels, including natural gas, oil and oil products, used by the economy are presented in the conventional energy units, the total consumption of all fuels per unit of PNMP increased from 1.631 in 1978 to 1.929 in 1986 and 1.987 in 1987.¹⁷ It is not only much higher than it was before the crisis but it is still increasing.

The structure of the economy is the first reason for its high fuel intensity which is, depending on the methodology applied, about three times higher than in the developed countries.¹⁸ A more rapid expansion in the expansion in the production of consumption good than producers' goods would lead to a reduction in fuel intensity.¹⁹

More than 22 percent of the PNMP is produced by seven industries with a relative energy intensity that is higher than one (i.e., those which have a larger share in the use of energy than their share in the production of PNMP). These are the iron and steel in-

¹⁶ Details in Table 10.

¹⁷ A. Szpilewicz, "Gospodarka paliwami i energia w roku 1987: duzo i drogo" (The Use of Fuel and Power in 1987: A Lot and Costly), *Zycie Gospodarcze*, No. 7, 1988, p. 5.

¹⁸ S. Pasierb, "Jak dlugo racjonalizacja zuzycia energii pozostaje tylko szansa?" (For How Long Will the Rationalization of the Use of Energy Remain Only a Chance?), *Zycie gospodarcze*, No. 18, 1988, p. 15.

¹⁹ Table on "Investment Outlays in Socialist Industry (Constant Prices)" available from author upon request.

dustry with relative energy intensity of 8.97 in 1985, the building materials industry (2.78), the chemical industry (2.31), the fuels industry (1.95), nonferrous metallurgy (1.87) and the glass industry (1.54). Because of the very high energy intensity of the iron and steel industry, all those industries which use large quantities of its products as their inputs, such as ship building or construction of heavy machinery, have a high indirect energy intensity.²⁰

Since the beginning of the crisis in 1979 no significant attempt has been made to modify this structure. The lack of investment funds is usually given as the main reason. However, investment outlays on these seven particularly fuel-intensive industries, the share of which declined from 37.4 percent of all industrial investment outlays in 1979 to 29.1 percent in 1980 and 22.1 percent in 1983, have again started to grow. Their share increased to 25.8 percent in 1984, 27.6 percent in 1985 and 28.3 percent in 1986.

The second reason for the high fuel intensity of the Polish economy is the use of outdated highly fuel-intensive technologies, particularly in the production of steel and cement. The third reason is a very high proportion of used up capital and a rapidly progressing process of decapitalization.²¹ In 1985 about 34 percent of all machines and equipment in the national economy should have already been replaced. In industry the proportion was 45 percent.²² The fourth uses a very high proportion of solid fuels, which are relatively inefficient and from 10 to 25 percent of the excessive fuel intensity can be explained by this factor.²³

However, the least equally important as the above structural and technological factors is the lack of economic motivation and pressure to economize fuels and raw materials. The economic reform has had so far no impact on enforcing the introduction of the fuel-intensive technologies, machines and equipment, it has not made it necessary for the enterprise to reduce costs in order to maximize profits or simply to survive, and it has not encouraged the production of more energy- or material-efficient machines and equipment. The monopolistic structure of industry, the sellers' market, a negative real rate of interest, still relatively low prices of fuels and power despite recent upward price adjustments, partial rationing of fuels and scarce materials, the use of subsidies, individualized tax exemptions and other privileges do not create an economic pressure for a reduction in costs and create obstacles to an improvement in the rational location of scarce inputs.²⁴

In this way the lack of a sufficiently far-reaching economic reform is one of the main causes of stagnation. Faced with very short supply of fuels, power and materials, as well as with limited quantities of capital and smaller increases in labor than in the past, the economy will not grow at a satisfactory rate until all these systemic obstacles are removed and replaced by the operation of market forces. The program of the second stage of reform is not going to remove these obstacles because, as one of its outspoken

²⁰ Z. Rozewicz, "Energochłomność: przyczyny i co dalej?" (Energy-intensity: Its Causes and What Next?), *Zycie gospodarcze*, No. 9, 1988, p. 8.

²¹ *Ibid.*

²² G.U.S. *Rocznik statystyczny (Statistical Yearbook)*, Warsaw, 1987, p. 200.

²³ Pasierb, *op. cit.*

²⁴ Rozewicz, *op. cit.*

critics in Poland, Prof. C. Jozefiak, has recently stated, "this program maintains the philosophy of the state steering of the allocation of physical streams of inputs, regarding financial streams as secondary, and this is the essence of the 'mistakes and deformations' in our economy during the last 40 years."²⁵

6. INVESTMENT, RESTRUCTURING AND MODERNIZATION

The sharp decline and subsequent relative slow growth of national income, insufficient to ensure the recovery of the 1978 level by 1987, and a positive balance of trade since 1982 have imposed a severe limitation on the share of net capital formation (accumulation) in the Distributed Net Material product (DNMP) and, therefore, on the rate of growth of and investment outlays. Comparisons of the share of net capital formation in various years are difficult because of changes in prices. Measured in the "constant 1982 prices," which overstated investment, the share in 1980 was 25.6 percent. It declined to 20.7 percent in 1981 and increased to between 21 and 22 percent in 1982-84. It reached 22.6 percent in 1985 which, however, in the "constant 1984 prices" became only 19.0 percent. This share remained approximately unchanged in 1986 (19.1 percent).

In 1981 about 1,600 investment projects under construction were stopped.²⁶ They were the legacy of the excessively big investment drive of the 1970's. Many of them have, however, been again continued, usually at a very slow rate, which was dictated by the shortage of funds but which is the worst possible policy as it extends their already long original gestation period. As expenditures are made while the results have been postponed in this way into the far future, a strong source of inflationary pressure has been created with the economy. At the same time, the projects represent an increasingly more obsolete technology. In most cases they are highly capital-, fuel-, and material-insensitive and they are often not geared any more to the requirements of the economy. The allocation of very scarce resources for their continuation reduces the possibility to effect the necessary structural changes, modernization and even replacement of used-up capital in sectors which, like the food processing and light industries, carry the burden of expanding exports to the West with a rundown and largely obsolete capital stock.

At the end of 1983 there were 1,119 stopped investment projects with about 21 percent of their total expected value already spent. At the end of 1984 the number declined to 863 with 19.7 percent of the total value spent. At the end of 1985 the number was 592 with 19.1 percent spent and at the end of 1985 the number was 427 with 17.9 percent already spent.²⁷

The policy of giving priority to investment for the expansion of production of fuels rather than for the reduction of fuel consumption throughout the economy, although the latter is less capital in-

²⁵ T. Jezioranski, "Alternatywy-4" (The Alternatives-4), a report from a conference organized by the University of Wrocław, *Zycie gospodarcze*, No. 22, 1988, p. 3.

²⁶ "Ruszyć strukturę" (To Change the Structure), *Zycie gospodarcze*, No. 32, 1985, p. 7.

²⁷ G.U.S., *Rocznik statystyczny*, 1985, p. 183; 1986, p. 192; 1987, p. 193.

tensive²⁸ has also aggravated the scarcity of investible funds. For example it has been calculated that the cost of extracting an additional ton of hard coal is under the present conditions about 3 to 3.5 times higher than the cost of economizing 1 ton as the result of investment in the more efficient use of coal.²⁹

As the result of the systemic weaknesses and policy mistakes the investment front has again become very wide, the delays in the completion of newly started projects are very long and the total number of unfinished projects and the amounts needed for their completion very high. The average gestation period of investment in the national economy which was 41.9 months in 1978, increased to 51.4 in 1986.³⁰

The shortages of investment funds and the lack of an effective economic mechanism delay the restructuring of the economy. There has been no clear increase in the allocation of investment funds for the development of the least energy-intensive industries, majority of which are the producers of consumption goods, important for the supply of the domestic consumers and play now an important role in the expansion of exports to the West. (See Table 11.) Decapitalization is a very serious problem and so is the use of obsolete technologies, machines and equipment.³¹ At the same time, as the result of a very drastic reduction in the purchases of foreign licenses and cut in funds for the development of science and technology (See Table 13), technological progress has decelerated.

TABLE 11.—FOREIGN LICENSES, OUTLAYS ON SCIENCE AND TECHNOLOGY AND PATENTS

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1986 as percent of 1978
Foreign licenses:										
Active (number).....	367	344	329	284	230	181	149	119	99	27.0
Utilized (number).....	270	268	260	26	185	148	122	95	82	30.4
Industrial production based on foreign licenses:										
As percent of industrial production.....	4.6	4.8	5.0	3.3	2.3	1.7	1.2	1.2	1.0	21.7
As percent of industrial exports....	5.3	4.8	5.3	3.6	2.8	2.5	1.9	1.6	1.6	30.2
Outlays on science and technology										
As percent of state budget expenditures.....	4.2	4.0	3.3	2.7	1.8	2.2	2.2	2.4	3.2	76.2
As percent of produced NMP.....	1.9	2.0	1.9	1.7	.8	.9	.9	1.0	1.2	63.2
Rates of growth of outlays at constant prices.....	-.8	-1.0	-13.0	-17.8	-48.0	4.9	10.1	184.2	34.9	65.5
Polish patents:										
Registered in the country.....	2,831	3,661	3,891	3,269	3,611	3,617	3,532	3,021	2,551	90.1
Registered abroad.....	N.A.	409	436	374	277	287	236	226	N.A.	-

Sources: Rocznik statystyczny (Statistical Yearbook), Warsaw, 1981 pp. 454, 502, 512-514; 1985 pp. 442, 445; 1986, pp. 409, 452, 455, 456; 1987, pp. 457, 459, 460.

²⁸ A Karpinski, "Jeszcze raz o perspektywach paliwowo-energetycznych Polski" (Once More on Poland's Perspectives in Connection With Fuels and Power), *Zycie gospodarcze*, No. 24, 1985, p. 8; Albinowski, "Pytania za 300 miliardow" (A Question That Is Worth 300 Billion), *Zycie gospodarcze*, No. 38, 1986 p. 4.

²⁹ P. Glikman, "Dekapitalizacja" (Decapitalization), *Zycie gospodarcze*, No. 32, 1986, p. 7.

³⁰ G. U.S., *Rocznik statystyczny*, 1985, p. 193.

³¹ Glikman, *op. cit.*

It has been suggested by a group of Polish economists that the technological gap between the advanced countries and Poland represents now 15 years and that with the existing trends it will grow by a further 3 years every year.³²

7. INFLATION

Despite central planning and all administrative controls at their disposal it is difficult for the directors of the Soviet-type economies to conduct effective macroeconomic policies. There is no mechanism that would automatically tend to reduce the excess demand. When it grows too far, the authorities are forced to deal with its consequences by rationing of consumption goods and stricter administrative allocation of inputs, accepting lines in front of stores, bottlenecks, work stoppages caused by shortages or delays in the supply of inputs, and the operation of the second economy as unavoidable. They usually concentrate on some of these consequences only when forced by the appearance of excesses. Some adjustments in the prices of consumption goods can be effected relatively easily by modifications in the rates of the turnover tax. However, a major adjustment in the price level and its structure is an enormously complicated, cumbersome, and time-consuming exercise, which can only be effected sporadically and to make it more or less internally consistent, it has to affect the whole economy at once.

When the centrally administered import cuts were imposed on the Polish economy on a large scale in the late 1970's, the maximum level of materials, components, spare parts and machines started to decline. The planners found it very difficult to adjust the aggregate demand downward to the required level. Their task was further complicated by the political weakness of the regime in Poland. It became necessary to pacify the society by protecting consumption and avoiding big price adjustments. It was also impossible to reduce expenditure on public administration at the time when an even larger bureaucracy seemed necessary to effect a larger volume of more strict administrative controls and the police state was the only guarantor of social peace.

With every consecutive decline in the maximum level of real aggregate supply, and an insufficient downward adjustment in the aggregate demand, the inflationary pressure mounted. Some prices were allowed to increase. This was, however, partly a hidden inflation, in which price increases were hidden under the disguise of prices for "new products," "higher quality," or "luxury items" which do not affect the official price index. The rest of the inflationary gap was left open in the form of a suppressed inflation with prices which were not allowed to grow and, therefore, to help to close it. All the consequences of this policy in the form of a growing unspent purchasing power in the hands of population and in the enterprises and maladjustments and disturbances in the production processes were present.

Despite another enforced change in the leadership as the result of the strike wave in 1980, the imposition of martial law in December 1981 and a half-heartedly introduced economic reform from the

³² *Gospodarka swiatowa i gospodarka polski w 1987 roku*, p. 44.

beginning of 1982, basically nothing has changed in respect of the ability of the directors of the economy to conduct macroeconomic policy. The reform has not created any systemic features that are essential for this purpose. Prices continue to be distorted and administratively controlled, real rate of interest is still negative. Subsidies, direct allocation of inputs, including foreign currencies, and administrative controls are more important than financial instruments. The system that emerged after 6 years of reforming the economy differs in many respects from the traditional system³³ but it neither stimulates greater efficiency nor makes the adjustments in the aggregate demand easier. The political situation has deteriorated and the leaders have even less freedom of maneuver with the introduction of unpopular measures. Partly hidden and partly suppressed inflation coexists with big sporadic adjustments in the price level and structure and a partly uncontrollable upward movement in the contractual prices when they are not frozen by the authorities.

The slowly progressing recovery of the maximum level of real aggregate supply which is limited by insufficient imports, unsatisfactory improvements in productivity and shortage of investible funds, requires a very careful adjustment in the aggregate demand to these improvements. There are, however, four main sources of inflationary pressure in the economy.

The first of them is the situation in the balance of payments and indebtedness. A negative balance on current account in payments with the second region (convertible currencies) does not represent an inflow of new capital but inability to service the debt and it reduces somewhat the outflow of capital that would have occurred otherwise. A positive balance of trade with second region exceeded the negative balance with the first region when the latter existed prior to 1988 and the difference increased shortages of material goods for both consumption and production. Now the positive balance in trade in both directions exerts even a greater pressure.

The second source of inflationary pressure is the government's inability to balance its budget. (See Table 12.) The deficit declined in 1983 and increased in 1984. It declined in 1985 and increased again in 1986 and became particularly big in 1987, when it was supposed to be completely eliminated. The situation deteriorated because subsidies exceeded the planned amounts and the revenue did not reach the expected level because excessively big individualized tax exemptions were granted³⁴ and because of the unsatisfactory performance of the economy.

³³ Zbigniew M. Fallenbuchl, "Present State of the Economic Reform," in P. Marer and W. Siwinski (eds.), *Creditworthiness and Reform in Poland*, Bloomington: Indiana University Press, 1988, pp. 115-130.

³⁴ *Gospodarka swiatowa i gopodarka polska w 1987 roku*, p. 48.

TABLE 12.—STATE BUDGET

[Billion zloty]

	1978	1979	1980	1981	1982	1983	1984	1985	Budget 1986	1986	Budget 1987	1987	Budget 1988
Revenue.....	1,103.5	1,150.4	1,220.2	1,341.1	2,353.4	2,629.1	3,299.7	4,043.4	(4,441)	4,898.6	(5,967)	6,037	
Expenditure.....	994.2	1,109.6	1,246.2	1,465.6	2,434.2	2,654.4	3,367.8	4,078.6	(4,592)	4,952.5	(5,967)	7,404	
Balance.....	109.3	40.8	-26.0	-124.5	-80.8	-25.3	-68.1	-35.2	(-151)	-53.9	(.4)	¹ -1,404	-369
Balance as percent of expenditure.....	11.0	3.7	-2.1	-8.5	-3.3	-1.0	-2.0	-.9	(-3.3)	-1.1	(.0)	-19.0	
Subsidies.....	599	677	799	953	1,249	1,136	1,430	1,600	N.A.	1,934	(1,593)	N.A.	(2,221)
Subsidies as percent of expenditure.....	60.2	61.0	64.1	65.0	51.3	42.8	42.5	39.3	N.A.	39.1	(26.7)	N.A.	

¹ In 1987 prices; in 1988 prices the deficit of 1987 was calculated to be 369 billion zloty.

Sources: G.U.S., Rocznik statystyczny, Warsaw, 1981, p. 583; 1985, p. 96; 1987, pp. 107, 110; Zycie Gospodarcze, No. 49, 1986, p. 2; No. 50, 1987, p. 8; No. 2, 1988, p. 3.

After the years of underfunding, at least since the beginning of the crisis in 1979 and in some cases after the decades of neglect, many so called "nonproductive" fields desperately require increases in financing. They include, above all, health services, education, science and technology and environmental protection. But there are also other parts of the socioeconomic infrastructure such as housing, transportation, warehousing, and communications which have to be expanded and modernized. In some fields any further delays can have truly catastrophic consequences. Because of the low productivity of the economy, the revenue is not sufficient to cover all the necessary expenditures, even with the use of some very drastic fiscal measures that transfer practically all profits and a larger part of depreciation funds to the central budget and do not leave in the enterprises sufficient funds for expansion, modernization or even for replacement of the used-up capital, and are of course also detrimental to an increase in productivity by destroying material incentives.

Employment in public administration has not been reduced as the result of the reform and this can be accepted as one of the indicators of its ineffectiveness. Despite a reduction in the number of ministries and central offices and some reallocation among them, employment in public administration increased from 135,418 in 1981 to 177,327 in 1986³⁵, or by 31 percent. Expenditure on public administration, administration of justice, public prosecution, and internal security increased from 4.3 percent of the total current budgetary expenditure in 1980 by 6.4 percent in 1986 and expenditure on national defense from 4.8 percent to 9.1 percent,³⁶ not taking into consideration possible changes in expenditures on these two fields which are hidden in the accounts of other ministries and offices.

The third source of inflation is the wide investment front, delays in their completion and long gestation periods, particularly the slow continuation of those projects which were started in the 1970's and were to be stopped. These expenditures increase the aggregate demand while the expected increases in the aggregate supply would come in the future. Wages are paid but they do not contribute to the production of goods on which they can be present be spent.

The fourth source of inflationary pressure is the income policy. So far the authorities have not been able to keep increases in nominal personal incomes within the planned dimensions. (See Table 13.)

³⁵ G.U.S., *Rocznik statystyczny*, 1987, p. 512.

³⁶ *Ibid.*, p. 108.

TABLE 13.—NOMINAL INCOMES EXPENDITURES AND SAVINGS OF THE POPULATION

[Current prices, annual rates of growth]

	1981	1982	1983	Plan 1984	Plan 1985	1985	Plan 1987	1987	Plan 1988	1988	Jan.-July		
Nominal personal incomes	31.5	65.8	22.3	(13.8)	17.9	17.0	22.3	(12.4)	20.1	(18.8)	27.3	(48.7)	65.0
Wages	27.0	46.2	26.2	(16.9)	15.7	(19.0)	19.9	(13.3)	22.6	(14.7)	21.8	(42.2)	53.9
Social payments	36.9	139.4	19.3	(12.3)	12.4	(11.6)	13.1	(26.0)	23.3	(31.3)	29.9	(59.4)	69.2
Incomes from individual agriculture.....	64.0	59.8	4.3	(6.1)	7.9	(7.2)	16.2	(7.1)	13.8	(14.4)	19.7	(48.2)	83.4
Expenditures on goods and services.....	20.1	68.9	31.0	(16.4)	19.9	(17.5)	18.5	(16.8)	23.4	(21.7)	30.3	(55.4)	57.1
Savings (deposits and coal balances).....	38.0	37.0	21.0	(-19.0)	16.0	(7.9)	30.5	(-44.1)	-8.5 *	(-17.3)	-8.0	(34.5)	158.5
Cash balances.....	37.9	50.5	19.6	(-9.8)	14.8	(11.9)	23.0	(-21.3)	-20.8	(13.4)	-5.3	(118.7)	206.4

Sources: G.U.S., Rocznik statystyczny (Statistical Yearbook), Warsaw, 1987, pp. 1136-137; Zycie gospodarcze, No. 5, 1986, p. 15; No. 6, 1987, p. 11; No. 5, 1988, p. 11; No. 26, 1988, p. 11; No. 31, 1988, p. 11.

Shortages of goods and services have resulted in the appearance of forced savings. They are shown partly as increases in the deposits in banks and partly as cash balances. The latter are particularly dangerous from the point of stability in the market for consumption goods as they far exceed reserves in trade and the ability of producers to expand their output. A decline in cash balances in 1987 occurred in the last quarter of that year as the result of the government's announcement of proposed big price increases. The increase in cash balances in the first half of 1988 by far exceeded the government's expectation when the increases in nominal incomes, which were granted to compensate for the big increase in the price level and adjustment in its structure, could not have been spent because of insufficient supply of goods.

The government seems to be unable to deal effectively with any of these four sources of inflation pressure. A reduction in the first of them would require more successful negotiations of rescheduling of the debt and obtaining new credits. This, in turn, requires an improvement in the government's reputation in the economic and political field that would strengthen its position in relations with Western governments, international financial institutions and bankers. To eliminate the second source it would be necessary to reduce expenditures on public bureaucracy, internal security, and national defense, as well as to reduce subsidies and exemptions and to stimulate economic growth by increasing productivity. A very thorough revision of the investment program would be necessary to reduce the third source. The reduction of the fourth source requires the reestablishment of a viable workers' representation as a necessary precondition, a "social pact" between the government and the society. By outlawing Solidarity the government lost a partner with whom it could negotiate an income policy that the workers would be prepared to accept. As the events of August 1988 demonstrated, the government has to ask Lech Walesa to intervene in order to end labor strikes in various parts of the country. This seems to be the only effective way out from the impasse created by the imposition of marital law which has exerted an adverse effect on both productivity and the fight against inflation.

So far the government's policy has been to delay action on all these fronts and to wait until the higher rates of growth would again appear and would eliminate inflation by increases in the aggregate supply. In the meantime the government depends almost entirely on big periodic price increases effected by the central authorities. These are, however, administratively determined upward adjustments in fixed prices and new "corrected" price structure becomes obsolete almost at the time when, after several months of preparation, it is finally announced. As adjustments in nominal incomes follow, a politically motivated mechanism is created that pushes inflation further. The most recent such big upward adjustment, the so-called price and income operation, took place in February 1988 and has failed to improve the situation. Professor Mujzel in Poland refers to these increases in prices as a "barren inflation" which does not secure any benefits for the economy but involves a serious danger:

If this were a necessary price that has to be paid for achieving equilibrium in the consumption goods market, or in the market for producers' goods, it would be possi-

ble to calculate a balance of its costs and benefits. The market has not, however, improved, at least not to any significant extent, while the economy is entering into an inflationary spiral, which becomes extremely difficult to control and which blocks the reform and the improvement of productivity.³⁷

8. STANDARD OF LIVING

The consequences of the crisis for the standard of living were dramatic. In 1982 alone the cost of living index increased by 101.5 percent and, despite compensations, the statistical real monthly wage declined almost by a quarter. The 1987 level of real wages was equal to 84.9 percent of the 1978 level and 79.9 percent of the 1980 level. (See Table 14.) Real personal incomes declined by 19.0 percent in 1982 and their 1987 level was equal to 103.7 percent of the 1978 level and 97.9 percent of the 1980 level. However, the decline in the ratio of changes in nominal wages or nominal personal income to changes in the official index of administratively fixed prices does not measure the real decline in the standard of living in a situation of great shortages of goods and services. Similarly small improvements in statistical real wages or statistical real personal incomes do not have to reflect an improvement. Quite apart from the problem of whether the official index really reflects movements of prices, and this is very problematic with the present rate of inflation in Poland, there is the availability of and the access to goods and services for the purchase of which at official prices the consumers have sufficient cash. Many commodities and services are unavailable, or can only be obtained as the result of considerable efforts and long hours spent in lines before the stores. The availability may depend on personal connections, the type of employment that guarantees special privileges, better supplied internal factory stores and cafeterias, or ability to exchange favors for favors. In some cases additional expenses are necessary, when a particular commodity can only be obtained in another town or in rural areas. In other cases bribes have to be paid or some gifts are expected. Free market prices, where they exist, are often not fully recorded and black market prices are not included in the official price index. Even the official prices may not be well recorded by the index under the conditions of hidden inflation if the basket of goods on which the index is based is small and the prices of the so called "new products" are higher than those of the goods which they replace or the prices for "higher quality" or "luxury items" are not taken into consideration while the lower quality goods disappear from the market. On the other hand, official statistics do not take into consideration incomes earned in the second economy, which according to the estimates of the National Bank of Poland represent about 20 percent of the recorded incomes in the national economy.³⁸

³⁷ Mujzel, *op. cit.*

³⁸ *Gospodarka światowa i gospodarka polska w 1987 roku*, p. 49.

TABLE 14.—COST OF LIVING, WAGES, PERSONAL INCOMES AND SALES OF GOODS AND SERVICES

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1986		1987	
											as percent of 1978	as percent of 1980	as percent of 1978	as percent of 1980
Cost-of-living index.....	8.7	6.7	9.1	24.4	101.5	23.1	15.7	14.4	17.3	26.0	557.6	479.2	702.7	603.6
Nominal wages.....	6.3	9.0	13.4	27.3	51.3	24.5	16.3	18.8	20.4	21.0	493.0	398.9	596.5	482.7
Real wages.....	-2.2	2.2	3.9	2.3	-24.9	1.1	.5	3.8	2.6	-4.0	88.4	83.2	84.9	79.9
Per capita nominal personal incomes.....	7.9	9.3	11.1	29.9	63.4	21.8	17.2	22.0	18.4	N.A.	530.8	437.6	.....	.....
Per capita real personal incomes.....	.1	2.4	2.0	4.4	-19.7	.7	1.9	6.3	.6	N.A.	95.9	91.9	.....	.....
Nominal personal incomes.....	8.9	9.9	12.1	31.1	64.9	23.0	18.3	22.9	19.2	27.3	568.1	460.7	723.2	586.5
Real personal incomes.....	1.0	3.0	2.9	5.4	-19.0	1.6	2.9	7.1	1.3	1.1	102.6	96.8	103.7	97.9
Sales of goods and services (At constant prices).....	1.1	3.3	2.2	-4.0	-14.9	6.5	3.9	2.4	5.0	3.0	102.8	97.3	105.9	.....
Food (constant prices).....	2.5	3.7	.4	-4.6	-10.0	1.7	2.4	2.5	5.8	N.A.	101.0	97.0	.....	.....
Alcohol beverages (constant prices).....	-4.2	2.2	3.6	-30.5	6.5	-2.6	6.2	8.6	4.3	N.A.	91.9	86.8	.....	.....
Nonfood commodities and services (constant prices).....	1.4	3.2	3.1	6.0	-24.0	14.1	4.7	.6	4.5	N.A.	107.8	101.4	.....	.....

Sources G.U.S., Rocznik Statystyczny, Warsaw 1985, pp. 119-120, 127; 1987, pp. 136-137, 143.

According to Western calculations, the rates of change of the per capita standard of living in Poland was -0.4 percent average in 1980-85, -0.3 percent in 1986 and -0.9 percent in 1987.³⁹ This represents a reduction in the standard of living by 3.2 percent between 1980 and 1987.

Finally, some indication as to the extent of decline in the standard of living can be obtained by comparing per capita consumption of some selected basic consumption goods measured in physical units:

	1980	1985	1986
Meat including poultry.....	69.1	55.8	61.1
Fish and products (kg).....	8.1	7.8	6.8
Fats and oils (kg).....	21.0	20.02	20.9
Eggs (number).....	223	220	209
Milk (in liters).....	262	273	280
Four grains (kg).....	127	118	117
Rice (kg).....	3.2	1.9	2.1
Potatoes (kg).....	158	143	144
Vegetables (kg).....	101	105	114
Fruits (kg).....	37.7	28.9	35.7
Sugar (kg).....	41.4	41.3	41.1
Cotton and cotton imitation textiles (by meter).....	22.5	20.5	20.5
Wool and wool imitation textiles (by meter).....	3.1	3.6	3.0
Shoes and boots (pairs).....	3.8	3.5	3.5

The uncertainty as to whether some commodities that are available at a given moment would not disappear again from the market affect the quality of life and also tend to stimulate inflation by excessive buying of everything that is available.

The standard of living is also adversely affected by an acute shortage of housing and by a very serious ecological situation.

9. PROSPECTS

The Polish economy has reached a stage in its development in which an acceleration of growth and significant improvements in the standard of living depend now, to a large extent, on participation in international trade and access to the world's pool of modern technology. As the recent attempts to redirect trade toward the CEMA countries have demonstrated, there are only limited possibilities for obtaining the necessary materials, intermediate goods, machines and technology with the bloc. The economy must open up to the world trade, finance and technology transfer but to ensure its sustained participation it must develop profitable exports to the West. This objective cannot be achieved unless a certain critical mass of annual imports from the West is secured first to serve as a primer. For this reason a more realistic rescheduling of the debt and its partial conversion into equity, new credits and direct investments in the country are essential. This is the key to the acceleration of recovery and a further successful development of a

³⁹ Research Project on National Income in East Central Europe, *Money Income of the Population and Standard of Living in Eastern Europe, 1970-1987*, New York: L.W. International Financial Research, OP-103, 1988.

modern economy at Poland's level of civilization and aspirations of its population.

The expansion of profitable exports to the West requires an increase in the overall productivity of the economy, a complete overhaul of foreign trade mechanism and policies, and a restructuring of the economy in accordance with the requirements of international specialization. None of these tasks can, however, be implemented without removing bureaucratic obstacles and other remnants of the old, inefficient command system.

It is clear that the reform which has been half-heartedly implemented since the beginning of 1982, including its "second stage," is not sufficient and that the hybrid system that it has created will not work efficiently in the present situation in Poland. The recovery and further successful growth in that country now require some equally bold decisions like those that were made in Western Europe after the Second World War. It is necessary to remove, as soon as possible, various administrative open or hidden commands, direct allocation of resources, excessive protectionism and rationing, which create pathological deformations and choke the economy, and to let the market force, competition and rational prices to ensure an efficient allocation of resources, increases in productivity and restructuring the economy.

Although the subject of the economic reforms, economic policies and politics are outside the scope of this paper, this is where the future of the Polish economy will be decided. If the present system and ineffective policies are retained basically unchanged, a prolonged economic stagnation, civilizational degradation and a potentially explosive political situation are the most likely prospects.

TOWARDS DE-ETATIZATION AND DEMOCRACY: THE CHALLENGE OF THE "ROUND TABLE" AGREEMENT

By Bartłomiej Kaminski*

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SUMMARY

The Roundtable Accords set a stage for transition from communism to democracy and market economy. The Accords are more specific on political issues, whereas the grand issue of a change of the economic system is barely touched upon. The inability of the authorities to revive the economy and implement a reform has demonstrated that political support of the majority of society is indispensable.

While all political ingredients of the present situation point toward stability and irreversibility of the process set by the Accords, there are several potential impediments to the transition. Poland's emerging political economy lacks well-developed democracy and a market economy. In the absence of a market, the forthcoming competition between Solidarity and OPZZ official trade union may contribute to the increased militancy of the working class. In the absence of radical reform, Solidarity risks losing its moral capital by becoming involved in day-to-day management of the shortages. Thus the success of transition critically hinges upon the pace of introducing a modern economic system, which will be a much more complex task than striking a compromise on political reforms.

The success of political reform will irreversibly change the nature of political and economic relations in both Warsaw Pact and CMEA (Council for Mutual Economic Assistance). Although the dynamics of the transition will be largely determined by internal developments, the Western involvement through a skillful use of diplomatic and economic statecraft may contribute to its failure or success. The unique feature of the current situation is that the active use of economic statecraft would be designed not to change

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or modify political developments but *to remove destabilizing hurdles* to the process already underway.

The truth is that our efforts have always been wasted that our work is badly remunerated, that nothing goes as it should. This is the result of a bad system and of lack of freedom. On our shoulders we still feel the breath of Stalinism. This must not go on. It all must change so that life in this country can become normal. . . .¹

This is all uncharted territory. No one has yet discovered how to dismantle totalitarian Communist structures and replace them with representative governments and market economies.²

INTRODUCTION

The wind of political and economic reformism blowing from Moscow have weakened potential internal opposition to the authorities' more innovative search for a solution to Poland's problems. Inflation accompanied by shortages of basic consumer goods, rapidly declining real purchasing power of large segments of the society, a dominant sense of a lack of perspectives for the improvement in the quality of life have created politically explosive situations. Had the authorities succeeded in overcoming economic crisis and stagnation, the opposition would not have been invited to roundtable negotiations. By reversing their position on legalization of Solidarity, the authorities publicly admitted to the bankruptcy of their policies after the imposition of martial law.

The continued crisis brought to the surface two fundamental incompatibilities in Poland's political economy in the mid-1980's. These incompatibilities included, first, a tolerance of diversity and of the political opposition combined with a simultaneous rejection of reforms that would make pluralism politically meaningful and, second, an introduction of economic reform measures congruent with market economy while failing to introduce market environment that would make reforms economically meaningful. As a result, Poland's state socialism became a caricature of both totalitarianism and democracy as well as of central planning and market alike.

The roundtable negotiations between the government coalition and Solidarity opposition, concluded on April 7, 1989, can be regarded as a first attempt at solving the systemic political incompatibility. The Accords are to begin a first phase of transition from disintegrating totalitarianism to democracy. Its provisions calling for democratic elections, albeit still restricted, are a promising first step toward introducing accountability of the government to the people. By ending the 7-year-old ban on Solidarity, which regained the right to legal existence on April 17, 1989, and creating a new system of government including a powerful presidency and a two-chamber legislature, the agreement introduces important institutional changes severely limiting the powers of the party-state.

The Solidarity-Government Accords are more specific on political issues, whereas the grand issue of overhauling the bureaucratic mechanism of controlling the economy is barely touched. The economic component of the Agreement focuses on distributive and

¹ From Lech Walesa's opening speech at the roundtable negotiations, *Solidarnosc News*, Brussels, No. 127, Feb. 1-15, 1989.

² Andrew Nargorski, "Uncharted Territory: Dismantling Communist Rule." *The Washington Post*, May 30, 1989.

welfare problems. The references to the most pressing issues such as debt management, inflation, economic efficiency and international competitiveness are rather sparse and general. Thus the second incompatibility that between expanding monetization of the economy and the administrative environment, responsible for inflation and persistent disequilibria, remains to be addressed but within the scope of a reformed political system.

The conceptual underpinning of the Accords stems from the conviction shared by both negotiating parties that a new economic order, as a market-oriented economic reform referred to in the Accords, cannot be implemented without opening of the political system. The Chinese drama seems to vindicate this approach. The Accords attest to the collapse of policies pursued after the imposition of martial law and, on the other hand, to the authorities' willingness to seek solution to Poland's deeply seated economic problems through incorporating the opposition into the political system.

The reforms are only "a beginning of a road to democracy."³ It remains to be seen whether this road will indeed lead to the emergence of a modern political system. There are many obstacles rooted in the systemic characteristics and a disastrous state of the economy. The success of transition critically hinges upon the pace of introducing a modern economic system closing the bridge between administrative economic system and instruments of market provenance. This will be a much more complex task than striking a compromise on political reforms. At a minimum, it will require close political cooperation between the opposition and the authorities, a lot of sacrifice and goodwill of the populace as well as external assistance.

The success of political reform, as outlined in the Accords, will irreversibly change the nature of political and economic relations in both Warsaw Pact and the Council for Mutual Economic Assistance. The transition poses a great challenge to Western foreign policy interests. Although the dynamics of the transition will be largely determined by internal developments, Western involvement through a skillful use of diplomatic and economic statecraft may contribute to its failure or success.

BACKGROUND: WHY A SUDDEN RECONCILIATION?

The authorities' decision in August 1988 to change Lech Walesa's status from that of a "private citizen," a term recurrently used by a government spokesman, Jerzy Urban, to a leader of the opposition was prompted by rethinking of domestic and political challenges in the context of the August wave of strikes and Mikhail Gorbachev's tolerance for diversity in Eastern Europe.⁴ Yet, despite favorable external environment and the deteriorating economy, the roundtable negotiations were delayed for almost 6 months. The delay was due to the new Rakowski's cabinet attempt to pursue economic restructuring without political reform and report-

³ Ibidem.

⁴ As the Soviet Deputy Foreign Minister, Victor Karpov, recently stated, "We are not imposing any recommendations on the Polish Government, to accept or not. Those times are gone." Quoted in Flora Lewis, "Moscow Steady Ahead." *The New York Times*, June 7, 1989.

edly to substantial resistance to relegalization of Solidarity among top party officials.

The inability of the authorities to match institutional changes in the economic system and investment policies with the twin challenges of servicing the debt and shielding personal consumption from drastic cuts to maintain political stability eroded the economic base. As a result, the room for maneuvering through economic concessions to selected strategic groups, the policy pursued in the 1980's, has become increasingly limited.

The ill-conceived decision to increase prices in early 1988 combined with rapidly declining availability of many consumer goods was directly responsible for two waves of strikes, which made the authorities more receptive to the Solidarity's offer of an anticrisis pact. Although the two waves of strikes were limited to a small number of factories,⁵ they demonstrated the growing militancy of workers and frustration of the populace and a grand "comeback" of Solidarity.⁶ They served as a warning to the ruling elite that reaching a compromise with a new generation of militant leaders may be impossible. The fears were succinctly expressed by Secretary of Central Committee of Communist Party Leszek Miller who said "it is easy to imagine a wave of anarchy and chaos and the eventual predominance of demagogues."⁷

However, in spite of strong arguments in favor of recognizing the opposition, the decision was preceded by a nervous search for alternatives. The first wave of strikes in April-May initially prompted the authorities to opt for the authorization solution, as exemplified by the Sejm Act (May 1988) granting emergency powers to the government to accelerate the introduction of economic reform and to restore equilibria in consumer goods markets.⁸ However, the Messner cabinet, whose credibility was badly damaged by the ill-conceived price income operation, had neither political strength nor a program of restructuring the economic system.

The second wave of strikes in August-September triggered two significant policy changes. First, in return for the promise of assistance in ending the strikes, the government invited Lech Walesa and his advisers to participate in the roundtable negotiations.⁹ The second change was the unprecedented fall of the cabinet headed by Zbigniew Messner on September 19, 1988. In response to a call of the Sejm's Extraordinary Commission to Assess the Implementation of the Economic Reform for "deep changes in the cabinet" and for incorporating the experts "who had been critical of the mode of the reform implementation for a long time,"¹⁰ the Prime Minister

⁵ In 1980, for instance, more than 700 enterprises comprised the Inter-Enterprise Strike Committee while during the August 1988 only 5 enterprises proved active. (An interview with Jacek Merkel, member of the National Executive Commission of NSZ Solidarnosc, in *Solidarnosc*, No. 132, Apr. 16-30, 1989.)

⁶ The relegalization of Solidarity was on the top of all lists of demands of striking workers. See Abraham Brumberg, "Poland: State and/or Society," *Dissent*, Winter, 1989.

⁷ Quoted in Jackson Diehl, *The Washington Post*, Feb. 6, 1989.

⁸ The emergency law was enacted by the Sejm on May 11, 1989.

⁹ A meeting between Lech Walesa, who was suddenly officially recognized as the leader of the opposition, Bishop Jerzy Dabrowski (whose presence was requested by two sides), General Czeslaw Kiszczak (Minister of Interior) and Stanislaw Ciosek (Secretary General of PRON) was held on Aug. 31, 1988.

¹⁰ Quoted in *Polityka*, Sept. 24, 1988.

submitted a resignation of his cabinet pending on the vote of confidence by the Sejm. The Sejm overwhelmingly accepted the resignation, and Mieczyslaw F. Rakowski, Deputy Prime Minister during Solidarity period and Politburo member in charge of ideology, was designated to form a new government.

The new government adopted a more aggressive posture toward the economic reform and more confrontational stance toward the opposition. Numerous policy declarations by cabinet members promised a strong commitment to overhaul bureaucratic planning and management. One of its first actions was the withdrawal from the Sejm of the two proposed laws on undertaking economic activity and on joint ventures with foreign capital. Much more "liberal" versions—eliminating employment limits in the private sector, equity constraint, discriminatory taxation practices of foreign capital, etc.—in tune with the professed goal of marketization were enacted in December 1988.¹¹

Because of growth potential depleted as a result of economic policies pursued in the 1980's, the Rakowski cabinet, in which "businessmen" replaced "economics professors," could do little to control inflation, rapidly moving to triple-digit levels, and shortages. The new legal framework that put an end to a discrimination of the private sector will significantly affect the structure of Poland's economy but not immediately. In the meantime, however, shortages and prices continued their upward movement producing the increased social frustration. The increased imports of consumer goods in late 1988, designed to prevent violent explosions, could not be sustained because of the shortage of hard currencies. They led to a fall of inventories of raw materials and other industrial inputs to the levels threatening current outputs. Under those circumstances, the authorities fearing another wave of social unrest opted for "unthinkable," that is, the acceptance of the principle of trade union pluralism. The sudden shift prompted Lech Walesa to observe: "We are shocked by the government's opening."¹²

Although the change was met with strong resistance among some party officials, the absence of viable alternatives as well as the support of the Army and of the powerful internal repressive apparatus sufficed to quell a potential opposition. The approval for legalization of Solidarity was won after a stormy Xth Plenum of Central Committee, held in Warsaw in January 1989.¹³

THE SIGNIFICANCE OF THE ROUNDTABLE ACCORDS

The final communique of roundtable negotiations confirms the view, shared by two negotiating parties, that without political

¹¹ Catholic weekly *Tygodnik Powszechny* (Nov. 6, 1988) usually critical of the government's policy, noted this was a step in "the right direction."

¹² Quoted by Tadeusz Kowalik, *Zycie Gospodarcze*, No. 24, 1989. The official explanation that this was because of the change in the posture of Solidarity leadership is wanting since the idea of negotiations was first suggested by Solidarity. Lech Walesa, for instance, expressed a desire to talk with the authorities with no conditions attached in 1987 and 1988, and his adviser Bronislaw Geremek called for anticrisis pact in the summer of 1988.

¹³ During this meeting General Jaruzelski, supported by two most powerful ministers General Kiszczak (Interior Affairs) and General Siwicki (Defense), threatened to resign from all their official positions and forced a vote of confidence. Faced with a possibility of political crisis, Central Committee members had little choice but to give their seal of approval to the roundtable negotiations.

reform no radical restructuring of the economy would be possible. The Accords between the government-coalition and Solidarity opposition encompassed all domains of public life in Poland. They contained three major parts or standpoints on political reforms, on socioeconomic policy and systemic reforms, and trade union pluralism. In addition, eleven annexes covering a very wide range of various issue-areas discussed within the so-called sub-roundtables were an integral component of the Accords.¹⁴

What makes the agreement a very important event is that it has institutionalized a dialogue between the authorities and the opposition representing the majority of society, as the recent elections have amply demonstrated. This is a first step toward solving the conflict, in a perverse way reminiscent of Madison's Dilemma,¹⁵ between growing diversity and freedom of expression and the absence of effective political mechanisms that would control their effects. Bringing the opposition within the confines of political system has already contributed to depoliticization of local conflicts. It is rather significant, for instance, that since the beginning of roundtable negotiations the strikes have lost their political characters. The demands have been purely economic and therefore more easily manageable.

The reform is not exactly a "beginning of a road to democracy," as the final communique has put it, but this is a turning point.¹⁶ From a broader perspective of the evolution of a Communist system in Poland, the reform promises an acceleration of processes that have been underway for at least a decade.¹⁷ These processes, which include ideological decomposition of communism, growing pluralism, increased protection from lawlessness of the state, and the increased acceptance of the rule of law have already institutionalized some restraints on the exercise of political power. The restrictions on free elections which guarantee the government-coalition control of the Sejm and implicitly the office of president, however, still prevent transfer of power to a majority "party."¹⁸ Yet the measures already implemented, limited as they are, constitute a first step towards the emergence of a parliamentary democracy commanding the people's allegiance.

The reform promises an overhaul of the institutional vestiges of the Communist political order. It envisages the emergence of a constitutional democracy, establishing orderly political process and limiting freedom in the exercise of power. One of the objectives of a

¹⁴ The annexes contain: (1) minutes from the meetings of the commission on reform of law and judiciary; (2) on mass media; (3) the final statement of the commission on territorial self-management; (4) on the associations; (5) recommendations of the commission on education, science and technological progress; (6) recommendations of the commission on youth; (7) on housing; (8) standpoint on social problems of agriculture and other documents of the commission on agriculture; (9) minutes from the meetings of the commission on mining; (10) the final statement of the commission on public health care; and (11) on natural environment.

¹⁵ See *The Federalist Papers*, No. 10. This is clearly not a solution but the first step officially recognizing the existence of private interests (or factions) and the necessity of channeling, instead of suppressing them into the political system.

¹⁶ *Dokumenty "okraglego stolu"* (The Documents of "Round Table"), Warsaw, 1989, p. 4.

¹⁷ For a general discussion, Bartłomiej Kaminski and Karol Soltan, "The Evolution of Communism," forthcoming in *International Political Science Quarterly* (No. 2, 1990).

¹⁸ Free elections, held on June 4, were restricted to Senate and to 35 percent of seats in Sejm. But "the next elections in four year's time must be free or none at all," as Solidarity co-chairman of the table on political reform put it. (Bronislaw Geremek, "Policies for the Period of Transition." *News Solidarnosc*, Mar. 1-15, 1989.)

newly elected National Assembly will be to amend the Constitution and revamp many of the existing laws. The Accords mark a return to the concept, that was rejected after a Communist takeover in Poland, of separation of powers among three branches of government, at least initially favoring the executive branch. The road to parliamentary democracy, as depicted in the Accords, is to go through a combination of limited parliamentarism and limited presidential political system.

The reform includes the establishment of National Judiciary Council, bicameral National Assembly consisting of Sejm and Senate as well as of the powerful office of President. The executive power is to be vested in the President, who is elected by a majority of votes at a joint session of Senate and Sejm for a term of six years. A candidate for the office has to be approved by one-fourth of deputies to the National Assembly.

During transition period, the President is granted powers to act as "national arbiter," although his powers are not unlimited. He may dissolve the Sejm but only when the Sejm is unable in three months to appoint a cabinet, to pass a multiple-year national socio-economic plan, or its legislative acts reduce constitutional powers of the President. The President is empowered to introduce martial law for three months. Its extension, limited to another three months, requires the consent of both Senate and Sejm. Although the President has veto power virtually over all policymaking, his veto may be overridden by a two-thirds vote in the Sejm. In addition, his powers are restricted by the provision that executive orders, except for active actions concerning foreign policy and national security, have to be countersigned by the Prime Minister. Thus the Accords grant significant powers to the President in order to "assure stability of the state and decisionmaking in the case of a prolonged deadlock in the Sejm or the Senate, or a protracted cabinet crisis."¹⁹

The judiciary is to be independent. According to the Accords, the National Judiciary Council, consisting of judges designated by a joint assembly of Supreme Court, Supreme Administrative Court and of common courts, is to assure independence of the judicial branch of the government. The National Judiciary Council will recommend candidates for judges to be appointed by the President. The independence of courts is to be backed by the constitutionally guaranteed irremovability of judges.

The legislative branch of the government, the National Assembly, consists of two chambers: the Sejm and the Parliament. A functional division between them has not been clearly specified in the Accords. The Senate will have legislative initiative and will control observance of human rights and of socioeconomic programs. If the Senate opposes a law enacted by the Sejm, then it has to be passed by at least two-thirds votes in the Sejm. The Sejm is to retain its prerogatives in appointing a Cabinet and controlling state budget. However, the appointment of the Sejm Ombudsman and of the President of Supreme Chamber of Control are to be approved by the Senate.

¹⁹ Ibidem, p. 5.

In all, the reform brings about a revolutionary change in the rules of the political system. The government will become partly accountable to the people instead of solely to the Politburo. These rules, however, are restricted to the very top of government structure and have yet to permeate throughout a whole system of governance.

Poland has not yet become a parliamentary democracy as neither trade union pluralism nor considerable freedom of expression are substitutes for comprehensive democratic institutions. Its foundations are not as yet based on constitutional order and the rule of law but on the whims of the rulers who control the state repressive apparatus. The martial law judicial legislation is still in effect and courts and judges are not independent. The size of repressive apparatus is in line with a police state. Although substantial dents in the state's monopoly over mass media have been made, access is highly restricted and subject to negotiations with the authorities.²⁰ Although there has been some progress in granting freedom of associations, a political party cannot be legally established. Finally, the economic system remains firmly in the administrative grip of a vast state bureaucracy.

The political reform of government creates an adequate forum for developing a program of radical restructuring of the economic system. This will certainly prove to be much more daunting a task than political reforms which could be decreed from above. The transition from bureaucratic to market mechanism is a direct threat to a wide range of social groups, cutting across the constituencies of the Solidarity opposition as well as of government coalition. These narrow interest groups will have to be sacrificed to establish a viable economy.

In contrast to the political component, the economic provisions are general, internally inconsistent and do not devise a program of de-etatization of the economy.²¹ All the major deficiencies of "real socialism" stem not from narrow-mindedness or incompetence of policymakers but from the fusion of the state and economy. This fusion is accountable for shortages and rationing, economic inefficiencies, extensive patterns of patron-client interaction, corruption, preference accorded to import-substitution orientation, etc. The crux of the matter is that, without overhauling the administrative mechanism in the economy, a parliamentary democracy may remain an elusive goal for three reasons. First, galloping inflation and growing shortages of basic consumer goods may easily destabilize a transition by triggering violent explosion and a return to dictatorship.

Second, since the nonreformed economic system is an invitation to clientelism and corruption, it will sooner or later release similar forces that have plagued Polish society for more than four decades.

²⁰ The state sets conditions and frequency of the opposition access to television. The government has retained a hierarchical structure limiting freedom of expression through censorship and monopoly over rationing paper, a commodity in short supply in Poland.

²¹ One may easily identify the reasons for it. They include: a lack of historic precedent of transforming command economy into a market economy; a rather unusual position of Solidarity simultaneously embodying objectives of a trade union, social movement and political party; unwillingness of Solidarity representatives to make any commitments which would affect a whole society without public mandate; lack of economic expertise and indispensable information.

Third, direct involvement of the state in the economy politicizes the process of distribution of resources and makes consensus and stability impossible. As a result, the combination of a reformed government with a nonreformed economic system is bound to hit sooner or later the same limits that prompted General Jaruzelski to start a dialogue with the opposition.

The economic provisions of the Accords have been divided into two categories: the first, systemic, deals with change of the institutional economic framework; and the second, redistributive, focuses on modifications in current economic policy. The first category has been divided into three groups dealing with self-management, property rights, competition and appointment of managers. The second includes such macroeconomic measures as a reallocation of investment to energy-saving and consumer goods producing sectors at the expense of energy and coal mining, the changes in the budget allotments in favor of housing, environmental protection, pensions, etc.

The first category is a mutually agreed declaration of intent concerning the shape of a desired new economic order identified in very general terms. The vision does not mark any significant departure from the concept of the Second Stage of Economic Reform adopted, albeit not implemented, in 1987. It promises a new economic order based on market and self-management,²² diversity of ownership, demonopolization, privatization and a greater reliance on non-political criteria in personnel policies. In a marked departure from the concepts popular during Solidarity period in 1981, direct industrial democracy based on enterprises run by workers' council is no longer the only pillar of a new order, since the already enacted or discussed laws allow for a greater variety of organizational forms and various schemes or privatization. The rules concerning the sale of state-owned enterprises or majority of their stocks to the public are to be specified by a new National Assembly.

Organizational innovations aiming at reducing the powers of executive branch over the economy and especially the state-owned sector are not likely to accelerate overhauling of the administrative economic system. The National Capital Assets Fund, for instance, will replace by the end of 1990 the so-called founding organs which greatly contributed to recentralization of controls over the state-owned sector after short-lived attempt at devolving economic powers in 1982-83. Its board of directors is to be appointed by parliament thus providing for some independence from the government.²³ In a similar vein, the President of the Central Bank will no longer be a member of the cabinet. The rationing, administrative involvement in price, exchange rates and interest ratesetting as well as government contracts are to be phased out before 1991.

The inclusion of the issue of nomenklatura in a set of systemic measures of the new economic order is rather surprising. Including

²² An interesting provision concerns the establishment of a nationwide union of self-management activists legally empowered to assess the blueprints of legal acts concerning economic policy and reform. Workers' councils are also to be established in private enterprises employing more than 100 employees with foreign enterprises are excluded unless their managers agree.

²³ The agreement notes that the government coalition would like to postpone the decision whether the Fund should be outside of the executive branch of government, a solution recommended by the Solidarity opposition, or not until further analysis.

this issue in the system reform package could be only justified by showing that directors of state-owned enterprises are the main interest group opposed to de-etatization of the economy. But this would need to be shown. One might easily identify other more powerful groups opposed to marketization, e.g., workers employed in large obsolete plants. In addition, unless the administrative economic system is overhauled, an enterprise is likely to fare better with a director who, thanks to his network in the state administration, can negotiate tax rates or secure supplies of rationed goods.

Although the measures recognize that demonopolization and de-etatization of the economy are a necessary condition for competition and market clearing prices, they offer no guidelines on how to create a new economic order. Their discussion does not consistently address the issue of what changes have to be made in a decision environment of enterprises to assure their autonomy from the state.²⁴

It is also surprising that the negotiators have failed to address a need to overhaul an anachronistic tax system existing in Poland. Taxes are a very powerful tool of indirect control by the state. They also trigger public interest in the ways that monies are spent at local and central level, which is an important aspect of democracy. The state deprived of it is usually tempted to resort to direct controls. In addition, the inequalities in incomes, which substantially increased in the 1980's, are in part caused by the corrupted system of tax levying and collecting. Therefore, the establishment of modern tax system is a prerequisite to transition to a market economy.

The systemic category seems to either ignore or contradict the second category of recommended economic policy actions presented in the chapters on standard of living and equilibrating the economy.²⁵ There is a conspicuous absence of guidelines on how to control prices, combat inflation, cope with the international debt, and simultaneously marketize the economy. Indexation of wages, set at 80 percent of quarterly increases in cost of living, in supply-constrained economy is likely to fuel inflation and therefore make impossible the introduction of market clearing prices. A failure to extend indexation to exchange and interest rates creates yet another impediment to marketization by increasing price distortions.

The set of policy recommendations concerning the increased budget expenditures on housing, environmental protection, pension, wage indexing and increased wage rates for some workers will increase the budget deficit. It is rather unlikely that adequate savings could be made as a result of promised macroeconomic corrections like a shift in investment outlays in favor of energy-saving endeavors and consumer goods industries and cuts in defense expenditure. Some Polish economists argue that they promise more

²⁴ It is noteworthy that neither competitive environment nor the abolishing of nomenklatura are sufficient for a meaningful autonomy of economic actors. Other necessary conditions such as efficient system of financial intermediation, unambiguously specified ownership rights, bankruptcy, labor market are not mentioned.

²⁵ Rather an unusual set of characteristics of the actors participation in the negotiations is accountable for it. Because of a spiral of simultaneous inflation and shortages, the discredited ruling party and Solidarity representatives uncertain of their social mandate could hardly come up with a viable program.

than the economy can deliver.²⁶ As Waclaw Wilczynski summed up, ". . . for the sake of sociopolitical realism, we maintain economic fiction."²⁷ But, on the other hand, a price for economic realism has often been a violent explosion.

These additional claims on depleted economic resources may delay reform since the organizational transition is likely to require some extra resources, for example, to tackle with bankruptcies and labor displacement, a likely result of demonopolization.

The threat of an approaching economic crisis and new opportunities offered by political restructuring may help develop a consensus on the necessary institutional and political changes. But neither the opposition nor the government-coalition has a draft of a sequence of measures that would lead the economy through the institutional transition. Without a comprehensive program, social support will not be forthcoming, however.

PROSPECTS FOR STABLE TRANSITION

The transition is fraught with uncertainties and dangers. Its stability and success heavily depends on the political evolution in the Soviet Union, Western support and the ability of the major domestic actors, the government-coalition and the Solidarity opposition, to develop a bipartisan political and economic program of moving away from "real socialism." Once the declared objective of a new order is achieved, even adverse external influences will be less likely to trigger political instabilities. In the meantime, the lack of visible external support for stopping the process of transition offers hope that cooperative relationship between the Communist parliamentary majority representing a minority and minority representation of an overwhelming majority will prevail.

Although both sides have great stakes in the success of the evolution toward parliamentary democracy and market economy, the transitory political and economic system that has emerged as a result of the Accords creates a very unfavorable environment for the transition. First, in contrast to Western societies where freedoms in the public arena are accompanied by market imposed discipline in the economy, Poland still lacks both. Shortage of labor has removed a very powerful constraint on bargaining between employers and employees. Since no improvement in standards of living is likely to occur soon, the moral authority of Solidarity or of the Church may not suffice when triple inflation is accompanied by shortages and falling wages. There is then a risk that Poland would plunge into violent labor unrest.

Second, in the absence of a market, the forthcoming competition between Solidarity and OPZZ official trade union may contribute to the increased militancy of the work class. As the National Executive Commission of Solidarnosc stated:

²⁶ For instance, Kleer (1989) estimated that the fulfillment of 235 tasks spread over a period of 3 years would cost about ZL5 trillion, more than \$1.5 billion and TR350 million, even after deducting benefits from conversion of military production for consumption uses or cutting investment programs in coal mining and energy.

²⁷ See his intervention in the discussion "Czas przeobrazen" (The time of Transformation), *Zycie Gospodarze*, No. 18, 1989.

Our Union has been provoked to organize strikes in many regions and industrial branches. The activists of OPZZ (official trade union-B.K.), those who sought to prevent the "roundtable" accord, played an active role. We must not succumb to these provocations. Poland has to rebound from the economic crisis. At present, economic chaos would lead to political chaos.²⁸

In their quest for membership, the two trade unions may seek to outbid each other in populist demands. The conflict has already emerged during the roundtable negotiations when the official trade union OPZZ pressed with a demand of equal inflation recompensation.²⁹

Third, the ideas of democracy and politics understood as the art of compromise have yet to permeate the society. By becoming a responsible part of the government genuinely seeking solutions to Poland's multiple problems, Solidarity risks to alienate those who condemn any cooperation with the "reds."³⁰ It will have to convince its followers that a cooperative spirit in parliament does not amount to a cooptation by the authorities. The low election turnout of 62.1 percent despite strong appeals from Solidarity leaders, should serve as a warning to both the government coalition and the opposition that a sizable proportion of the population has refused to become involved in the political process.

Fourth, in spite of the changes in the structure of government, the organizing principle of state socialism, that is the fusion between the state and the economy, has remained intact. Because of the absence of autonomous economic system, the state, of which the Solidarity opposition has become a very important part due to its landslide victory, is involved in day-to-day management of the economy thus being a party to inevitable conflicts over resource distribution. The only solution is to speed up the implementation of economic reform measures. The dilemma the opposition may face is that successful reforms may give some legitimacy to the government-coalition parties and increase their electoral changes in 1993, while a firm refusal at cooperation may erode the regime and assure Solidarity's victory.

Solidarity's leaders have repeatedly emphasized during the roundtable negotiations and after the elections that they want to cooperate with the authorities, provided political reforms are continued, and their immediate goal is not to seize power but to prevent a "disappearance of Poland." As Solidarity strategist Bronislaw Geremek stated it:

The costs for Solidarity are high and the risk is very great. But Solidarity has decided to spend some of its considerable moral capital on this, because what is at issue is saving the country.³¹

²⁸ The resolution of the "Solidarity" National Executive Commission adopted on May 13, 1989. Quoted from *Gazeta Wyborcza*, Warsaw, May 15, 1989, p. 2.

²⁹ Quotas or lump sum payments for each employee would be equal to the product of the consumer price index multiplied by average salaries. Given a likely triple digit inflation, the adoption of this system which would soon lead to equal pay.

³⁰ Note that the decision to start a dialogue has produced cleavages within both the government-coalition and the Solidarity opposition. For instance, the activists from the official trade union OPZZ, probably in a silent alliance with some groups from the party-state apparatus, sought to undermine the roundtable negotiations by organizing strikes and pressing with populist demands whose implementation would be fatal to an ailing economy. The radical Solidarity opposition accused Lech Walesa and his advisers of selling the movement to the Communists. See the declaration, issued on 18 December 1988, of a self-appointed "Solidarity" Working Group headed by Andrzej Gwiazda, reprinted in *Polityka*, No. 2, 1989, p. 6.

³¹ Bronislaw Geremek's comment on Polish "Round-Table" Talks (*The Washington Post*, Feb. 16, 1989).

Fifth, although the structure of a new political system which rests on a triangle consisting of President, Senate and Sejm has been defined, the major actors have yet to adapt their organizational practice to parliamentary system, especially the Communist Party which has held power for the last forty-two years. In the final analysis, the success of transition will not be shaped by the institutional evolution of Solidarity, which will have to make a choice among its many faces of social movement, trade union and political party, but mainly by the transformation of the Communist Party into a parliamentary party. The process will be completed when its loss of power will not amount to a collapse of parliamentary system of government.

The Communist Party is not institutionally prepared to become a parliamentary force, as some Communist leaders admit.³² This is a party of middle-aged bureaucrats³³ and of nomenklatura, attracting members not because of strength of its programs and ideological identity but because it has offered privileged access to scarce resources and positions. Its only appeal derives from control of positions, the so-called nomenklatura system, throughout state administration, state-owned business, Army, education, etc. Its membership consists mainly of bureaucrats, many of them retired, managers from the state-owned sector, Army officers, and employees of the party administration. Although less than 20 percent of party members strongly disagreed with the resolution of the Xth Plenum approving legalization of Solidarity,³⁴ one may suspect that they hold strategic positions in the state and, thereby, may effectively resist its transformation into a social-democratic or "Euro-Communist" Party. On the other hand, taking into account a firm commitment of the party leaders controlling the Army and internal security forces and that 70 percent were in favor of democratization, their resistance is likely to be overcome.

Although the challenge of transition is formidable and the threats are multiple, the process that has already revamped Poland's political landscape may be difficult to reverse. This is not only because the alternative to political and economic reforms is popular explosion and a deep crisis or the persistent inability of the government to mobilize society. First, as a result of the elections, a situation has emerged which is highly conducive to sustaining change toward democracy. The elections testify to unexpectedly sophisticated, given the legacy of more than 40 years of Communist rule, Polish political culture. Despite strong temptation to renounce the national list of unopposed government candidates, about 6 million people voted in its favor displaying an ability to think in political terms and to control emotions. No matter how humiliating a defeat was for the party, the list fell short of passing

³² A problem recognized by Politburo member Janusz Reykowski: "We want constitutional amendments on [political—B.K.] parties, which would mean inter alia a new concept of the role of the PUWP [Communist party—B.K.]" Interview for *Polityka*, No. 16, 1989, p. 7.

³³ In 1987, for instance, more than half (53.5 percent) of the party members were above 50 years old. Calculated from data in *Rocznik Statystyczny* (Statistical Yearbook), Central Statistical Office, Warsaw, 1988, p. 35.

³⁴ According to intra-party survey quoted by Janusz Reykowski in an interview for *Polityka*, No. 16, 1989, p. 7.

the 50 percent threshold by about 4 percent for the majority of the candidates.

Second, poor showing of Solidarity or turnout below 50 percent would be a clear signal that Solidarity, which has displayed a lot of self-restraint and moderation, is not able to fill the center of a political spectrum and would not qualify as a partner in governing Poland. By the same token, the fact that almost 12 million (70 percent) cast their ballots for Solidarity candidates has shown popular support for the political process initiated by the Roundtable Accords. Although 27.9 percent refrained from voting, in view of the overwhelming support for "Walesa's team," their rejection of the newly emerging political process may be temporary.³⁵

Third, the first postwar limitedly free and nonrigged elections were bound to be a form of referendum on the Communist rule and, therefore, the authorities may find some consolation that nonetheless 3.4 million, or 20 percent voted in their favor. The crux of the matter is that the Communist Party has a good chance of performing better in the next truly free elections, which should provide its leadership with an incentive to reform the party. On the other hand, Solidarity being a part of a broadly conceived government is likely to antagonize some of its supporters. Excluding a series of policy blunders by the government-coalition, which would probably bring back dictatorship, Solidarity is unlikely to copy its electoral performance in 1993.

CONCLUSION

While all political ingredients of the present situation point toward stability and irreversibility of the process set by the Accords, the economy presents the greatest danger to the transition. The danger is threefold. First, a rapid decline in real personal incomes may trigger uncontrolled popular uprising, which will bring dictatorship.

Second, reform during economic crisis may initially contribute to the fall in output. The declining inventories of raw materials and other industrial inputs and triple-digit inflation combined with growing shortages of basic consumer commodities offer little breathing space for economic institutional experimenting. Yet without overhauling the existing economic system, macroeconomic corrections recommended in the agreement may bring only temporary improvement and at the expense of the increased cost of adjustment in the future. The lack of progress in liberating the economic system from direct state intervention will push Solidarity to become involved in day-to-day management, rationing, etc., which will inevitably deprive it of popular support that it now enjoys. With Solidarity weakened, there would be no political force to support the transition to parliamentary democracy and markets.

Third, it remains to be seen which identity of Solidarity will and what kind of links will develop between Solidarity as a trade union and Solidarity as a parliamentary opposition. The danger is that while its commitment to democracy will be maintained the commit-

³⁵ It is worth noting that a dissident Working Commission of Solidarity, which has rejected negotiations with the authorities, sent a telegram to Lech Walesa with congratulations on the results of the elections.

ment to a market economy remains to be tested. During the round-table negotiations, the Solidarity opposition was more committed to the notion of welfare state than the government coalition, the official trade union representatives excluded.

The configuration of economic and political factors offers unique and historically unprecedented opportunity for the West to affect political outcomes in Poland. The potential to influence is not marginal or with uncertain long-term effects, as this was the case with sanctions in the past, but crucial and yielding immediate effects. The unique feature of the current situation is that the active use of economic statecraft would be designed not to change or modify political developments but *to remove destabilizing hurdles* to the process already underway.

THE ECONOMICS AND POLITICS OF ECONOMIC REFORMS IN BULGARIA ¹

By Marvin R. Jackson ²

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SUMMARY

After tinkering since 1978 with how to impose a hard budget constraint on enterprise management, Bulgaria's leadership launched a serious reform program in 1986 that involves (a) disbanding branch industrial ministries, (b) organization of a two-tier banking system, (c) change in planning emphasis from direct targets to setting interest rates and exchange rates, taxes and subsidies, accounting normatives and other "indirect indicators," (d) increasing

¹ Background research was done with the financial assistance of the National Council for Soviet and East European Research and the Volkswagen Foundation, neither of which bear any responsibility for the views expressed herein.

² Professor of Economics, Arizona State University, Tempe. The author wishes to thank Ilse Grosser of the Vienna Institute for International Economic Comparisons, who shared her excellent papers on the Bulgarian reforms, and Stefan Donev of the Federal Institute for International and East European Studies, Cologne, who provided invaluable source materials.

roles for economic organizations in price setting, choice of suppliers and markets, exporting and importing, (e) economically meaningful exchange rates, (f) worker elections of managers, and (g) increased roles for personal and cooperative business. By 1988 most new institutions were in place and critical phases of transition began that, given the need to overcome significant structural deformations, could last at least 10 years.

Although the Bulgarian economy has not performed well, economic crisis has not motivated reforms. Nor has any evident political crisis under the continuity of Zhivkov's rule. Bulgaria is a case of trying economic reforms without crisis and, so far, without political change.

I. INTRODUCTION

According to the official line, Bulgaria has been undergoing continuous reforms since party chief, Todor Zhivkov, first made major policy decisions in 1956 (he actually stepped into the top job 2 years earlier). While the country did develop quickly in the early years of his rule, this was more due to investment policies than organizational innovation. In organization, Bulgaria's propensities have been for orthodox central planning of large-scale units.³

In 1978, possibly in phase with the Soviet reforms of 1979, the Bulgarian leadership began to emphasize a qualitatively different approach, self-management and self-finance. But it took 7 years before ideas were turned into any significant organizational change.

What follows will describe the main reform measures, then speculate on the politics and motivations behind the reforms. Finally, the main technical problems of managing reforms, especially in the face of initial structural malformations, will be analyzed.

II. ECONOMIC REFORMS OF 1986-87

The sense of change in the Bulgarian approach to organization in 1978 was in the announcement that "an economic approach to management" would be applied in agriculture in 1979 and then decreed for application in all sectors in 1982. The decree on the new system stressed a hard budget constraint, with self-financing of investments and of wages out of sales income, not subsidies from the state budget.⁴

The new principles suffered technical defects in price setting, financial linkages to foreign transactions, conflicts between central bodies and enterprises, and other problems. Added political resist-

³ Mark Allen, "The Bulgarian Economy in the 1970's", in *East European Economies Post-Helsinki*, a compendium of papers submitted to the Joint Economic Committee, Congress of the United States (Washington, DC: U.S. GPO, Aug. 25, 1977), pp. 670-681; and Michael Kaser, "The Industrial Enterprise in Bulgaria," in Ian Jeffries (ed.), *The Industrial Enterprise in Eastern Europe* (New York: Praeger, 1981), pp. 84-94; and John R. Lampe, *The Bulgarian Economy in the Twentieth Century* (London: Croom Helm, 1986).

⁴ For details on the reforms from 1978 to 1985, see Ilse Grosser, "Der Neue Okonomische mechanismus in Bulgarien," *Forschungsberrichte* Nr. 98, Wiener Institut für Internationale Wirtschaftsvergleiche, September 1984, and "Wirtschaftsreformen in Bulgarien", *Europäische Rundschau*, 13:1 (1985), pp. 89-104; and Marvin R. Jackson, "recent Economic Performance and Policy in Bulgaria," in *East European Economies: Slow Growth in the 1980's*, Vol. I of selected papers submitted to the Joint Economic Committee, Congress of the United States (Washington, DC: U.S. GPO, Mar. 28, 1986), pp. 23-58.

ance meant that little was done to apply the new concepts in practice.

The present measures adopted in 1986 and 1987 approach reforms in three directions: ⁵ (1) granting rights and duties to "self-management economic organizations" or SEO's; (2) reorganizing central bodies; and (3) elaborating instruments of indirect economic regulation.

A. SELF-MANAGEMENT ECONOMIC ORGANIZATIONS

Most self-management organizations are in industry and agriculture, but now the new principles are extended to local governmental, research, educational and cultural organizations. The designation extends down to subunits of enterprises, the brigades, and up a hierarchy to combines and amalgamations, and newly formed associations, discussed below. Self-management includes: ⁶

- (1) The right to worker-elected managers;
- (2) The obligation of self-financing from sales income, subject to central quotas for the distribution of income, and payment of taxes and other deductions into the state budget with possible bankruptcy procedure, reorganization or dissolution, if unable to meet financial obligations; ⁷
- (3) The right to distribute net residual income according to determined quota limits, with wages a residual category based on performance norms;
- (4) The right to propose maximum prices for products and services, and to sell at prices contracted with customers, provided they are within established maximums;
- (5) The right to choose suppliers and outlets for products and services, both domestic and foreign ("without any territorial or departmental limitation");
- (6) The right in the case of foreign trade, to work through specialized foreign trade organizations or have direct contacts with foreign customers and suppliers;
- (7) The right to borrow and the obligation to repay funds for investment, both domestic and foreign currencies, subject to availability of funds from retained earnings or bank credits; and
- (8) The right to organize joint ventures with other Bulgarian or foreign companies, and to sell and otherwise dispose of assigned property.

In addition, two other components are under consideration. One is a formal transfer of social property to labor collectives and the other is worker investment in their enterprises of up to 20 percent of capital. ⁸

⁵ Besides Decree 71 of Dec. 29, 1986, and discussions in Sofia in June 1987, this is based on material in Marvin R. Jackson, "Bulgaria's Attempt at Radical Reform," *Berichte des Bundesinstituts für ostwissenschaftliche und internationale Studien*, No. 2 (Cologne: BIOst, 1988); Ilse Rosser, "Bularische Aussenwirtschaftsreformen in den achtziger Jahren," in *Außenwirtschaftssysteme und Außenwirtschaftsreformen sozialistischer Länder*, edited by Maria Haendcke-Hoppe (Berlin: Duncker & umbott, 1988), pp. 143-159; Rosser, "Bulgarien 1987/88," pp. 27-36, and Ivan Agelov, *Strategija nakachestveni promeni* [The strategy for qualitative change], (Sofia: Parizad, 1987).

⁶ *Durzhaven vestnik*, No. 3, Jan. 13, 1987, pp. 3-30.

⁷ Bankruptcy is discussed in *Sofia News*, June 24, 1987.

⁸ Radio Free Europe, *Bulgarian Situation Report/13* (May 20, 1987), p. 15; and *Pogled* (Sofia), June 20, 1987, pp. 12-13.

A special variation of self-management proposes turning state property over to small labor units, either cooperatives or individual families. In the case of industry, this would amount to the state renting equipment for a share of products from it. In agriculture, sharecropping on state-owned land will be offered to both individual peasant families and small cooperatives. The extent and definition of leasing privileges is still under discussion.

B. RESTRUCTURED ORGANIZATIONS

Organizational restructuring includes: (1) the central bodies, (2) the banking system, and (3) the economic self-management units.

1. *The central economic bodies*

From early in 1986 when the branch ministries were formally disbanded until August 1987, an interim economic council consolidated central functions and personnel. Then a super Ministry of the Economy and Planning was set up. It merged remnants of the branch ministries in the Economic Council with finance, planning, pricing, research oversight, and domestic trade. Separate ministries serve foreign trade, agriculture and the environment.

2. *The banking system*

The major change in banking separates the business lending function from central bank functions in The National Bank and turns it over to a recently expanded network of "commercial" [*tor-govski*] banks that accept investment deposits from SEO's and provide SEO's on competitive principles. They number 10 institutions, including The State Savings Bank in operations with small-scale economic organizations and the Foreign Trade Bank in its operations other than foreign exchange. Seven other new banks are affiliated with the industrial associations, but not restricted to business with them. All commercial banks are SEO's.⁹

3. *The economic self-management units*

Economic self-management units are organized in relatively complicated networks. All lower organizations now belong to one of nine branch "associations" [*asotsiatsiia*]¹⁰ that provide joint technological, investment and marketing policies, coordinate activities, stimulate competition between member enterprises, provide joint services in the field of training, and acquire scientific and technological information.¹¹

An "association" is operated on self-management principles, but does not directly organize material production. The first level of

⁹ Radio Free Europe, *Bulgarian Situation Report/9* (Oct. 5, 1987), pp. 11-13; and Renzo Daviddi, "Monetary Reforms in Bulgaria" a paper presented to the Workshop on Financial Reform in Socialist Economies, European University Institute, Florence, Oct. 12-16, 1987.

¹⁰ The term, "associations of a new type," is used to differentiate the new organizations from former smaller immediate management units under the branch ministries. The new associations were first set up in April 1986, but have been redefined since January 1987. The best recent description, including lists of member economic organizations, is published as an annex in *Rabotnichesko Delo*, Apr. 24, 1987.

¹¹ According to a recent report, an association also was able to decide on the closing of an unprofitable enterprise (as reported in Radio Free Europe, *Bulgarian Situation Report/5*, (July 8, 1987), p. 4.

members of associations are some 128 *obedineniia*, "amalgamations,"¹² plus 10-15 special institutes and centers. They are joint management units for the second level organizations, the "enterprises" [*predpriiatii*] and "combines" [*kombinati*]. There are more than 2,000 of these units in Bulgarian industry alone (not counting cooperative enterprises), an average of 20/25 per *obedinenie*. Within enterprises an even lower unit, the brigade, is also organized on self-management principles.

C. INSTRUMENTS OF "INDIRECT CONTROL"

Central administration is to be turned into a system of indirect control of the behavior of SEO's by manipulating taxes, interest rates, competition policy, and pricing.

1. Planning

Plans will continue to be drawn up, but with decreasing components of direct physical targets and stressing setting interest rates, taxes and subsidies, etc., in all 12 categories of indicators. The state's immediate interests are to be served through binding "state economic contracts", similar to the *goszakazy* in the U.S.S.R. State contracts are used for nationally significant investment projects, national defense, and "for honouring of international commitments"—assumed to include trade with other socialist countries that presently takes 70-80 percent of Bulgaria's exports. The plans for 1987 and, to a slightly lesser extent, for 1988 were drawn up in the old way and dominated by state contracts. But "free contracting" between SEO's is to become dominant in the next 3 years.¹³

2. Investment Allocation and Commercial Banking

The share of investments financed from the state budget and allocated centrally will fall and the share financed from retained earnings and bank credits is to rise.¹⁴ Fiscal reforms are reducing state claims on SEO income while credits come from the new commercial banking system. Both banks and SEO's are to be free to do business with any other banks and SEO's. Also, they can participate in domestic and foreign joint ventures.

The planned supply of loanable funds falls into two categories. "State credits" finance centrally approved projects having payout periods longer than 10 years or that can not meet the terms required by the commercial banks. "Normal credits" are competitively allocated according to commercial terms.

3. Wages, Net Income and Taxes

After payment of some taxes, the net income of SEO's must be distributed according to centrally determined quotas for depreciation, renewal of capital and new technology, reserves (a risk fund),

¹² This author and others had previously translated *obedineniia* as "association." Obviously, this should no longer be used because of the existence of the *asotsiatsiia*.

¹³ Interview with Emil Hristov, BCP Central Committee Secretary, Oct. 16, 1987 (Sofia: Sofia Press, 1987), pp.4-5.

¹⁴ There may also be created means for workers to invest in enterprises, up to 20 percent of nonborrowed capital funds. If such a measure comes about it will be mostly a labor incentive. Actually it is probably an inefficient means to allocate financial capital.

and social funds for members.¹⁵ Only then can wages be distributed, as a residual. But no matter how large the residual, the wages fund for all personnel is limited to the amount paid in a previous year plus (or minus) a centrally determined percentage of any increase (or decrease) in total income of enterprise. Also, if the wages fund should grow faster than real labor productivity, the excess will be taxed away, a device to keep wages from rising because of price increases.

There will be recommended wage levels for individuals reflecting working conditions, seniority, and other factors, but actual wage payments are to be based as far as possible on performance or piece rates. Also, labor within economic organizations is to be grouped in brigades working on contracts with the larger organization. Management wages are to depend only on the total volume of profits and the rate of profitability (profits as percent of total income), subject to the fulfillment of contracts and state orders.

4. Prices

Until 1987 central state organs determined virtually all prices. This will continue to be the case for some 120 basic consumer goods whose prices are scheduled for restructuring after 1990. Until then, according to Zhivkov, an appropriately "democratic" system for price setting will have to be decided.¹⁶ Central or regional authorities will also continue to set some wholesale prices for many mining, agricultural and forestry products. In both cases, subsidies will be used if needed to keep prices at present levels.¹⁷

Reform of all other wholesale prices between January 1, 1988, and the end of 1990 is a foundation block of the reforms. According to the chairman of the Committee on Prices (now under the Ministry of Economics and Planning), on January 1, 1988, new prices were already set for 75 percent of Bulgarian products, with a net effect of reducing prices for 43 *obedinenii* and raising them for 65 others.

The new system calls for these prices to be set by producers and registered as maximum list prices with the price authorities. But actual prices are to be negotiated in contract bargains between seller and buyer.

The maximum list prices are to be based on estimations of prices that could be obtained on international markets, with due adjustment for quality and services, considering the exchange rate (see below) and unusual factors of international supply or demand. *It is stated that domestic cost calculations are to play no role at all in justifying a registered price.* The idea is that if costs are higher than the appropriate relative international price expressed in *leva*, the product should not be produced unless special approval is given for (a) allowing temporary prices higher than the international reference price, (b) subsidies from the state budget, or (c) closing or reorganizing a facility.

¹⁵ Provisions for a value-added tax are being prepared and could make Bulgaria the second after Hungary to make use of a form of taxation that could be eventually harmonized with taxes in the EEC.

¹⁶ *Rabotnichesko Delo*, Nov. 20, 1987.

¹⁷ Interview with Emil Hristov in June 1987 (Sofia: Sofia Pres, 1987), p. 12.

5. Foreign Exchange System and Exchange Rates

Plan targets will no longer be set for foreign currency earnings required from exporters or expenditures permitted by importers. Instead, the central authorities will establish (a) basic and premium exchange rates for the dollar and the ruble, and (b) quota shares of export receipts that must be sold to the state at the basic rate, or of imports that can be paid for out of foreign currency purchased at the basic rate.

Although it has been said that since the beginning of 1987 Bulgarian exporters have been permitted to keep 60 percent of their exchange earnings, the regulations allow quotas to be differentiated by *obedinenie*.¹⁸ By adjusting quotas, the central authorities can vary the average price of foreign exchange to the SEO's, thus affecting the incentive to export or import.

No figure has been given for the ruble exchange rate; probably it remains the existing official rate of 1.3 *leva* per ruble. An initial basic rate of 1.5 *leva* per dollar has been set for both exports and imports, with premium rates generally twice the basic rates.¹⁹ However this summer (1988) the device of an auction was used that resulted in higher rates than 3 *leva* per dollar.²⁰

Premiums paid or received on foreign exchange enter business costs and can change total revenue in domestic currency. But in list price formation only the basic exchange rates are valid. Bulgarian authorities claim that the old system of multiple "internal foreign exchange coefficients" used in planning and domestic pricing of traded goods is being eliminated. Although a state secret, they were said to range from 1.5 to 2.2 *leva* per dollar, reflecting differences in domestic and world market prices structures.²¹

III. REFORM POLITICS AND MOTIVATIONS

The Bulgarian reform package offers a significant possibility for changing the country's economic organization. At the same time, there are ample possibilities that purely technical problems can delay turning principles into practice or lead to unintended results, either of which could provide reasons for abandoning the reform effort, as had been done before. Even if the reforms have the effects intended by their authors and sponsors, some groups in the country may find this to their ideological disliking or suffer relative reductions in income or status, and they may resist reforms.

It is clear, therefore, that the likely technical problems of reforms will interact with their political context. One needs to ask why have the reforms been undertaken? Who will gain or lose? Who is for and against reforms? And what are the elements of the political system in Bulgaria that will determine how opposing interests are arbitrated in the next few years?

¹⁸ The Minister of Foreign Economic Affairs was recently reported to have said that since 1987 Bulgarian exporters had the right to keep 60 percent of export proceeds, thus implying that the quota was not differentiated. *Frankfurter Allgemeine Zeitung*, Feb. 25, 1988.

¹⁹ The figure of 1.5 *leva* per dollar was given by Emile Hristov of the Bulgarian Central Committee in a Sofia press conference on Oct. 19, 1987, and reported by Agence France Presse; see *Neue Zürcher Zeitung*, Oct. 23, 1987.

²⁰ *Otchestven Front*, Aug. 7, 1988, p. 4.

²¹ Grosser, "Bulgarische Aussenwirtschaftsreformen . . ." p. 158.

A. SOVIET CONNECTIONS AND INTERNATIONAL ECONOMICS

Zhivkov solidified his initial party leadership back in the late 1950's and early 1960's with the help of the Soviet Union and has since followed Soviet policy and sought Soviet advice in nearly every major decision. It is said that the Soviet ambassador attends Politburo meetings. And, for example of a special sign of filiality, in 1984, Zhivkov called off a visit to West Germany as part of a Soviet campaign against basing intermediate range rockets there.

In the case of reforms, Bulgaria's first attempt in 1966 (abandoned in 1968), followed chronologically the Soviet reforms of 1965. Those decreed for 1982 followed Soviet reforms of 1979. The latest coincidence is that Gorbachev first visited Bulgaria in October 1985, just a few months before the current reforms were launched.

Whatever might be the actual linkage of reforms in the two countries, it is fair to point out that in each case Bulgarian measures, as in the present reforms, have gone further and have been consistently developed than those of the Soviet Union. Perhaps Bulgaria, with less complex issues at stake and with a smaller circle of decisionmakers, can move faster than the Soviet Union. Interaction has also gone on in other ways.

One is the problem of Bulgaria's unsatisfactory foreign economic balances. In 1978, its debt to the West had reached the danger level and a program of rapid repayment enacted, one that would have been impossible without Soviet help. Not only was Bulgaria allowed to import much more than it exported, but the price of imports from the Soviet Union were below world market levels. With Soviet support, Bulgarian net debts to the West were nearly liquidated by 1984. But that got rid of the symptoms instead of curing the problem.

Bulgaria has not been able to reverse deteriorating market positions in the West, even though it has "gone multinational".²² As learned elsewhere in Eastern Europe, such policies do not help unless matched by corresponding internal reforms. Now the debt problem is repeating itself.²³ In 1987 Bulgaria's balance of trade with the developed West reached a second straight record deficit of \$1.3 billion even though real imports fell an estimated 3 percent. So net debt shot up from only \$148 million at the end of 1984 to over \$3,000 million, putting the country into the "to be carefully watched" category of credit risk.²⁴

In contrast to the weak performance in highly competitive markets, Bulgaria's trade surplus with LDC's rose in 1987 on the basis of sales of arms and industrial equipment and a 37-percent decrease in imports of oil. Now Bulgaria, debtor to both the West and the Soviet Union, has accumulated around \$5 billion in outstanding credits to the LDC's.²⁵ Is this a carefully thought out way to

²² Carl H. McMillan, *Multinationals from the Second World* (London: Macmillan, 1987), pp. 38-40.

²³ For further documentation and discussion of this side of Bulgarian reforms, see Marvin R. Jackson, "Bulgarian Economic Reforms and the GAAT," *Sudost Europa*, 36:9 (November 1987), pp. 544-559.

²⁴ *PlanEcon Report*, IV:22-23 (June 3, 1988); and *Ost Wirtschafts Report*, No. 19 (Sept. 23, 1988).

²⁵ *PlanEcon Report*, IV:22-23 (June 3, 1988).

assure a future supply of raw materials? Or, could it suggest excess industrial capacity whose products are unacceptable in the Soviet Union or unneeded at home?

Bulgaria usually balances trade with the other members of the CMEA, but with the Soviet Union it accumulated since the early 1970's nearly \$4 billion in trade deficits. Even though its Soviet deficit has been reduced in the last 2 years, a big question remains. Why has Bulgaria not earned its way with the Soviet Union when the cream of its industry is aimed that way? In fact, even in Soviet trade Bulgaria has relied too much on energy and materials intensive exports.²⁶

In spite of Soviet help, Bulgarians often try to downplay the satellite role. For example, Zhivkov is reported to have commented to British Foreign Secretary, Geoffrey Howe, in February 1985 that "Our first colony is the Soviet Union. It gives us raw materials, like your colonies gave you, and we sell it back manufactured goods and exploit it as a market for our exports."²⁷ When they had given much and received little back from Bulgaria, Soviet leaders must have found this remark out of place. No wonder, then in July 1985, the Soviet ambassador took the unusual step of openly criticizing in the Bulgarian press the low quality of Bulgarian exports to the Soviet Union and the lack of class consciousness of Bulgarian workers. Gorbachev was said to have repeated the criticisms in his visit later in the year.²⁸

B. BULGARIAN POLITICAL REFORMS

The most recent Zhivkov-Gorbachev contact came in October 1987, as a hurried, unexpected visit of Zhivkov to Moscow. The Western press speculated that Zhivkov had been called to assure Soviet leaders that the party's "leading role" was not endangered by Bulgaria's own version of political *perestroika*.²⁹ It has included:³⁰

(1) A decision by the Politburo outlawing excess pomp and identification of political personalities in public celebrations and places;

(2) A proposal, not yet enacted into law, to separate high level party and state functions, so the party could concentrate on basic issues, instead of daily administration;

(3) Similarly, a proposal to limit high office to two or at most three 5-year terms;

(4) Possible elimination of the Council of State as an unnecessary parallel to the Council of Ministers and the National Assembly;

(5) Election of local officials beginning in 1988 under new rules calling for multiple candidates;

²⁶ J.M. Montias, "Industrial Policy and Foreign Trade in Bulgaria," a paper presented to the Wilson Center (September 1987).

²⁷ Radio Free Europe, *Bulgarian Situation Report/15*, Sept. 24, 1985, p. 51.

²⁸ Radio Free Europe, *Bulgarian Situation Report/11*, Nov. 7, 1985, p. 4.

²⁹ *Financial Times*, Jan. 29, 1988.

³⁰ Reported among others by Radio Sofia, Feb. 1, 1988; *Frankfurter Allgemeine Zeitung*, Jan. 29, 1988; *Neue Zürcher Zeitung*, Jan. 30, 1988, and Feb. 20, 1988; and Agence France Presse, Feb. 26, 1988.

(6) A proposed passport law granting every citizen the right to an external passport valid for 5 years; and

(7) A law providing indemnification of individuals who have been damaged by state or economic bodies.

Some measures are not to be decided until the 14 Party Congress in 1991. But even if all reforms were now in practice there is hardly any danger to the party, the more so because *glasnost* is all but absent. A step toward a more open press and freer intellectual criticism of the party and the bureaucracy was taken with an April 1987 party secretariat statement on news reporting. And parts of the Bulgarian press took advantage of it. However, by April 1988, a reaction set in that led to the sacking of some more aggressive journalists and editors, culminating in the purge of the Party Secretary for ideology in July.³¹

The reaction also seems to have grown out of the issue of the pollution of the Bulgaria city, Ruse, by Romanian chemical works across the Danube. After spontaneous demonstrations in the fall of 1987, the cause was taken up by unions of both the artists and the writers. Finally the State responded by placing the problem on the agenda of a meeting between the two countries' prime ministers in February and in May 1988, the Politburo created a new ministry for environment, land and water. In the meantime, some intellectuals and journalists, including the wife of Stanko Tolorov, chairman of the National Assembly, were disciplined for having participated in the public outcry.³² The incident, it is said, may have counted in his subsequent withdrawal from the Politburo, where his tenure was only next to Zhivkov's.

C. ZHIVKOV AND OTHERS AT THE TOP

There is no doubt that Bulgarian politics center on Todor Zhivkov and extend around him to a small group of other Politburo members and personal advisors. Zhivkov, now 77 years old, stepped into the job as General Secretary of the BCP in 1954 and since the early 1960's has been unchallenged leader of the country, holding also the position of Chairman of the Council of State since its creation in the early 1970's. His age and length of service are both advantage and disadvantage.

Being so closely tied to the formation of present Bulgaria, Zhivkov surely wants to leave the country a progressive, socialist heritage. At the same time, reforms can not be leveraged on a break with the past as in the Soviet Union. Zhivkov is Bulgaria's Communist past and the official line is that since 1956 he has already done in Bulgaria what Gorbachev wants in the Soviet Union.

Zhivkov is man who seems to take more pride in practical politics than in new schemes or ideology. In economics he believes that people should work hard and earn their pay with products of good quality. He also set on avoiding what he calls market anarchy. And although any ideas of reforms have had to have his approval, it is difficult to imagine that he has authored or originally proposed any. Their source remains unclear.

³¹ Radio Free Europe, *Bulgarian Situation Report/4*, Apr. 8, 1988, pp. 3-7, and *Bulgarian Situation Report/5*, May 27, 1988, pp. 3-8.

³² Radio Free Europe, *Bulgarian Situation Report/5*, May 27, 1988, pp. 9-14.

The leadership below Zhivkov was jolted in July 1988 by the two deletions from the Politburo. One was Todorov, who remains National Assembly Chairman. His tenure in high party office goes back to the 1950's and included being Prime Minister from 1971 to 1981. Perhaps even more important was the purge of 52-year-old Politburo member Aleksandrov, who also lost the job as Party Secretary for party affairs. Western analysts have seen Aleksandrov as a possible Zhivkov successor and major supporter for reform, so his removal is widely seen as a sign of slowing change in the country.³³

The remaining Politburo includes only one really old Zhivkov colleague, four members who came in in the mid-1970's just before the 1978 proposals for a new economic mechanism, and four members with tenures dating since 1980. Three are also candidate members, all of whom were appointed in 1979 or later. By typical standards in Eastern Europe, the average age is young. In this, Zhivkov was no Brezhnev and did not hesitate to get rid of older associates and bring younger ones into the management of the system underneath him.

The question is, who of those in this group have been or will be significant advisors to Zhivkov on the further evolution of reforms in Bulgaria? Possibly the senior man is Grisha Filipov, who back in 1965-68 was head of the reform commission. Filipov, educated as an economist but reported to be a conservative in economic matters, became a Politburo member in 1974 and Prime Minister from 1981 to 1986. He served as Party Secretary for Economics, recently undertook a coordinating mission to Moscow, and now has taken Aleksandrov's old job as Secretary for Party Affairs. In addition, there is Ognyan Doynov, godfather of the Bulgarian Industrial Association and in the Politburo since 1977. He served a long stint as Minister for Machine Building and then took over the Economic Council when the branch ministries were dissolved. The present Prime Minister, Georgi Atanasov, is a trained engineer, but his office has actually housed the working group under Professor Iliev (not a member of Politburo but former chairman of the State Planning Committee) that is said to have actually written the reform legislation. This group also has consulted and advised Zhivkov directly. The present Minister of the Economy and Planning, 45-year-old engineer Ovtsharov, was a relatively unknown and is not a member of the Politburo.³⁴

It is possible that none of the present Politburo members has taken a hand in the details of reform proposals or has actually wished to be too closely associated with them. Supporting reforms when there seemed to be a consensus that "something has to be done" would not have required this. The Politburo may be a filter from the idea makers to Zhivkov. Such a role would better fit

³³ Apparently Aleksandrov, like a predecessor in the rumor mills as a Zhivkov successor, Alexander Lilov, purged in 1983, keeps his membership in the party central committee. This suggests that the sins of both were more professional than political. But one usually knowledgeable reporter, Viktor Meier of the *Frankfurter Allgemeine Zeitung*, has said that Aleksandrov had faced trumped up charges concerning his father's activity as a policeman in the pre-Communist regime. *Frankfurter Allgemeine Zeitung*, Aug. 23, 1988.

³⁴ These and other political changes are discussed in Radio Free Europe, *Bulgarian Situation Report/7* (Aug. 21, 1987), pp. 3-23.

anyone hoping to be available for Zhivkov's job final becomes open. That calls for a low risk profile, not outspoken support of reforms.

D. THE PASSIVE POLITICAL PARTICIPANTS

The political role of the rest of the Bulgarians, even with a few political reforms, remains a passive one. This is not just because they have no legal political instruments. Also because they are unlikely to undertake mass protest as an alternative. On the other hand they are the human factor that Gorbachev emphasizes and must not passively resist if reforms are to be a success.

1. *Living Standards and Consumer Interests*

The average Bulgarian probably cares little about *glasnost* or environmental protection and is surely not about to risk much testing the existence of democracy. Right now there are too many other immediate problems. Two out of the last three years brought energy shortages, requiring rationing of light and power consumed by households. And domestic food supplies have also been disrupted, requiring emergency imports, and making a chronically undermanned service sector function even worse.³⁵ All of this despite officially reported real income increases of 2 percent in 1986 and 3 percent in 1987.³⁶

Part of the problem of shortages is, as Zhivkov himself recently admitted, that consumer prices are "the most deformed of all."³⁷ Nevertheless, he has chosen to not irritate the people with consumer price adjustments even though the state will have to subsidize producers and leave the people with the irritations they know how to cope with—the shortages and other means of nonprice allocation such as queuing, tipping, and privileged access.

2. *Workers, Managers and Bureaucrats*

Maintenance of the present system of consumer prices will surely hinder revitalization of personal and cooperative farm and service sectors.³⁸ Also, as recognized by some Bulgarian economists, it will neutralize the effects of greater financial incentives to workers and managers neutralized.³⁹ The new law limiting enterprises to producing only 20 percent of their output as luxury goods will have a similar effect.⁴⁰

More immediate pressure may be felt by workers whose wages, working conditions and jobs must all be affected if the reforms are

³⁵ *Stuttgarter Nachrichten*, Feb. 17, 1988; and Ilse Grosser, "Bulgarien 1987/88" in *Die wirtschaftliche Entwicklung in den sozialistischen Ländern Osteuropas zur Jahreswende 1987/88*, edited by Klaus Boiz (Hamburg: Verlag Weltarchiv, 1988), p. 16.

³⁶ *PlanEcon Report*, VI:8 (Feb. 26, 1988).

³⁷ *Raboticheskoto Delo*, Nov. 20, 1987.

³⁸ How far Bulgarian consumer prices are out of line with market clearing prices is an empirical question. In the case of some food product like fresh meats recent price increases may have been enough to eliminate queues according to the author's observations in 1985 and 1986. Also, see, Michael L. Wyzan, "Bulgarian Agriculture Since 1979: Sweeping Reform and Mediocre Performance (So Far)," a paper presented at the Eighth International Conference on Soviet and East European Agriculture, Berkeley, Aug. 7-10, 1987, pp. 24-25.

³⁹ See Angelov's discussion of "economic incentives and the equilibrium between money and goods in the market" in *Strategia* . . . , pp. 64-65.

⁴⁰ *Agence France Presse*, Jan. 6, 1988.

to be successful. It is no surprise that the initial transition evoked some labor unrest.⁴¹

The reform system will try to contain major strains within the brigade system by giving the brigades responsibilities, as collectives, in distributing its wages fund among members. Also, brigades have the right to keep and distribute wage savings when less labor is used that implies they may have some rights over who can be members. Since the average brigade in industry in 1986 had only 35 members, it would be small enough to effectively police and discipline members if given the rights to do so.

A problem is that the brigade ought to also sharpen the members' collective interests against other brigades and higher authorities. The initial focus of these interests is the enterprise council and the process of managerial selection about which little is known. If the Bulgarian enterprise is evolving into "a set of contracts among the factors of production," as the firm in capitalism is seen in the property rights literature, then the council's rules and its composition become very important.⁴² Also, there are unanswered questions about the future role of Bulgarian trade unions and if they will continue to act as agents of the state or if they will acquire some new role for workers and enterprises.⁴³

In the past when someone was blamed for economic problems it was usually either bureaucrats or managers. Under the reforms so far, the former in both central and regional government administration seem to have been the main immediate target of reforms. According to one report, around 30,000 persons have been freed for reassignment.⁴⁴ That is a very large number, considering that only about twice that number were recorded as employed in "administration" in 1986 (although other related categories were probably involved). Nearly 19,000 alone came from the reduction of regional administrations from 28 to 9 announced in the summer of 1987.⁴⁵

Most of the redundant bureaucrats are being reassigned to economic organization. The transition could hardly be an easy one because there is also pressure to reduce jobs in higher economic management and administration.

Already by 1987, according to an interview with Emil Hristov, a Central Committee Secretary, the number of management positions at the level of associations and *obedineniia* had been cut from 13,150 to 12,276 with redundant persons reassigned to lower management jobs.⁴⁶ At the same time, there may be job expansion at the level of enterprise. In 1988 new enterprises were being created at a rate of some five per week.⁴⁷

⁴¹ Radio Free Europe, *Bulgarian Situation Report/5* (July 8, 1987).

⁴² See, for example, the discussion of optimal membership in a company board of directors in Eugene Fama, "Agency Problems and the Theory of the Firm," in *The Economic Nature of the Firm*, edited by Louis Puterman (Cambridge: Cambridge University Press, 1986).

⁴³ So far the trade unions have replaced the central committees organized on branch lines, following branch industrial ministries, with "voluntary associations" of an uncertain structure. See the report on the most recent trade union congress in Radio Free Europe, *Bulgarian Situation Report/3*, May 20, 1987, p. 12.

⁴⁴ *Rabotnichesko Delo*, July 13, 1988.

⁴⁵ *Rabotnichesko Delo*, July 13, 1988: the text of the decree on regional reorganization, see *Durzhaven Vestnik*, No. 67, Aug. 28, 1987.

⁴⁶ Although to cushion the impact, they are allowed to keep their higher salaries for 1 year and then will receive 10 percent more than the normal salary in the new job. *What Are the Immediate Objectives of Restructuring?*, (Sofia Press, 1987), P. 17.

⁴⁷ *Ost Wirtschafts Report*, No. 9 (Sept. 23, 1988), P. 366.

Those managers keeping jobs, especially the old-style, typically authoritarian ones, must be finding adjustment to the circumstances of worker-management difficult. In the first elections at the end of 1986, out of 50,000 brigade leaders and 4,500 company managers facing election, only 1,250 failed to win.⁴⁸

Managerial-level employment adjustment required by reforms occur in a longer developing context where the number of industrial enterprises declined between 1975 and 1986 while white collar employment in the sector remained constant. In industry this defines conditions for intensified competition among qualified persons and especially greater difficulty of upward mobility by younger managerial cadres.

If the Bulgarian leadership supports the more appropriate directions of restructuring (as shown below), the best opportunities for ex-bureaucrats and young well-trained managers alike would be outside of industry proper in the area of business services—marketing, finance, technical consulting, personnel relations, all kinds of activities that were neglected under the old system or wrongly subsumed under central administration. Perhaps in return for having to learn about business and of accepting risk, more enterprising Bulgarians may have a chance to make a fast *lev*—that is, if Zhivkov's rather dogmatic views on profits do not take it all away. One cannot forget that new law on prices in January 1988 saw 45 managers fired for price abuses.

IV. PROBLEMS AND QUESTIONS ABOUT THE REFORM'S IMPLEMENTATION AND FURTHER DEVELOPMENT

Aside from ideological diehards, the amount of resistance to Bulgarian reforms will depend on expectations of the amount and smoothness of the coming adjustment process required to shift the present economic structure to one more able to compete in the world markets. The amount of adjustment required depends on how badly malformed is the present Bulgarian economy. The smoothness of adjustment, political issues aside, will depend on the technical quality of the new system and how well it is administered during transition.

A. THE EXTENT OF STRUCTURAL DEFORMATION AND POLITICAL DISEQUILIBRIUM

Discussion of economic reforms in Eastern Europe usually concentrates only on institutional changes, ignoring how badly deformed were economies under the traditional central planned system and orthodox policies. *Perestroika* can not be limited to organization, but also to the structure of production, capital and labor. Bulgaria is no exception.

To begin with, it ranks next to Romania among the CMEA six, the Soviet Union and Yugoslavia in being the most "overindustrialized," given its level of development. That means its shares of labor and capital in industry are too large and its commitments to services (trade, private and government services, finance, transport

⁴⁸ Interview with Peter Dyulgarov, Chairman of the Central Committee of Trade Unions (Sofia: Sofia Press, 1987), P. 14.

and communications, etc.) are too small. Within industry, Bulgaria may be somewhat less overburdened by too much "heavy" industry, but it has obvious "red elephants" in metallurgy and machine building, while branches closer to its comparative advantages are too small. Its shares of resources in agriculture are not out of line, given level of development, but too much reliance has been placed on capital investments in agriculture and too little on complementary rural services and too little on effectively motivated and educated labor. Bulgaria's overall foreign trade dependency is almost normal for a country at its level of development, but it does far too much business with CMEA partners, especially with the Soviet Union.⁴⁹ Such connections lock Bulgarian enterprises into unprogressive technologies without market challenges. In too many cases products delivered to the Soviet Union could not be exported on world markets at prices covering cost of production. Besides, Bulgarian managers have learned little about competition in world markets.⁵⁰

Because of structural deviations, if domestic prices are aligned with international prices at an appropriate exchange rate, as proposed, some lines of production will show up as redundant with costs far higher than prices, while others will reveal shortages with potentially large profits. While some immediate adjustments and shifts of capacity are possible, there will be some disequilibrium that require longrun adjustment. In such cases, if the impact of the new price system is not cushioned by appropriate subsidies and taxes significant unemployment will occur in some cases simultaneously with excess profits in others. This would not be politically acceptable. The problem is, can painful adjustment be avoided while moving ahead with reforms?

B. THE PRICE AND EXCHANGE RATE SYSTEMS

One of the first questions to ask is what is the price and profitability level created by the basic exchange rates. To illustrate, assume a product can be sold for \$3 per unit internationally, so with an exchange rate of 1.5 *leva* per dollar, the product's list price will be 6 *leva*. Now under the new system neither wages nor prices of some raw materials will be changed, so only part of costs will be influenced by the exchange rate. Suppose costs include 4 *leva* of wages, 1 *lev* of fixed-price materials, and 1 *lev* of materials whose price is influenced by the exchange rate. An enterprise that produces and sells this product will just break even. But if the exchange rate were only 1.0 *leva* per dollar, the enterprise would make losses. And if the exchange rate were higher than 1.5 *leva* per dollar, it would make profits. Notice that if all cost elements were dependent on the exchange rate, only the price and not profitability would depend on the exchange rate.

⁴⁹ To the author's surprise his opinion was published in Bulgaria in an article "Bulgaria's CMEA Trade Is No Longer an Advantage," in *Sofia News*, July 22, 1987, p. 4.

⁵⁰ The concepts of too large, too small, or normal used in this paragraph refer to standards obtained from regressions of the particular variables against per GNP per capita and size of population across a large sample of countries. For further explanation, source materials and evidence on Bulgaria, see, Marvin R. Jackson, "Economic Development in the Balkans Since 1945 Compared to Southern and East-Central Europe," *East European Politics and Societies*, Fall 1987, pp. 393-455.

Assume that all products subject to the new wholesale, list prices are arrayed in order of profitability. Some will be relatively very profitable and others will be relatively unprofitable. Now according to the Minister for the Economy and Planning in February 1988, 96 percent of Bulgarian firms "can be self-financing under world market conditions."⁵¹ It would seem then that basic exchange rates had been set so as to make almost all enterprises initially profitable, although, of course, each enterprise probably has both profitable and unprofitable products in its assortment.

Another question is how the system manages in the face of significantly different relative prices in the CMEA and in world markets. Even if a realistic cross-exchange rate between the ruble and dollar is selected, the use of a single dollar rate and a single ruble rate, as Bulgarian authorities have insisted they use, would result in two prices expressed in *leva* for nearly all goods because of the differences in relative prices in the two international systems. However, in a November 1987 speech to the Party Central Committee, Zhivkov stressed that the limit of international prices should "before all include the socialist 'market' [*pazar*]." This suggests that both "markets," perhaps in proportion to Bulgaria's trade, are used to establish some sort of average price. That would mean the ratio of lev price to dollar price, or *lev* price to ruble price would differ for each product which is equivalent to continuing to use the old-style supplemental exchange coefficients.

Quite apart from the valuation issue, there will be a major problem balancing the relative incentives to provide exports to or use imports from CMEA and Western markets or buy and sell in the home market.⁵² In this case, there is the possibility in the new system of varying incentives to import and export by changing the quotas for basic and premium exchange rates (explained on p. —). It also appears that state contracts will be used to provide export and supply imports from CMEA. Whether this will be stimulated by prices and financial subsidies or forced on enterprises by administrative decision is not known.

A third question is that the use of premium exchange rates suggests that excess demand for dollars exists at the basic rates of 1.5 *leva*. That is, if enterprises were free to buy and sell at that rate, the quantity demanded would be much greater than the quantity supplied. So premium rates are both offered and charged to balance them. A single "equilibrium" rate between 1.5 and 3.0 *leva* could also do this, but would not permit selective subsidies and taxes provided in the system.

C. THE EXTENT OF MONOPOLY, COMPETITION AND CENTRAL DIRECTION IN THE NEW SYSTEM

The complexity of establishing workable price and exchange rate systems probably increases the dangers of the reform from other

⁵¹ *Frankfurter Allgemeine Zeitung*, Feb. 29, 1988.

⁵² Two evidences of such behavior have been cited. One is reports from Hungarian and Czech trading partners that Bulgarian firms are uninterested in doing business [*Frankfurter Allgemeine Zeitung*, Sept. 19, 1988] and the other that Bulgarian agricultural organizations have neglected domestic markets for excessive exporting [*Stuttgarter Nachrichten*, Feb. 17, 1988]. Apparently, the country's supplies of garlic simply disappeared for a while in one instance in 1987 related to the author.

directions. One is monopoly behavior on the part of the SEO's. Structural monopoly tends to be high given Bulgaria's small size, past propensity for large-scale units, and low-trade shares with the West. Zhivkov emphasized this fact in November 1987 and sounded almost like a member of the American FTC in recommending the promotion of competition through some combination of (1) breaking up uneconomically large enterprises, (2) creating new ones, (3) using import competition, (4) encouraging foreign joint ventures, (5) use of "free-trade" zones, etc. His "structuralist" approach was accompanied by another progressive idea, that using more easily measured taxes and subsidies when regulation is needed rather than compromising the price system with directed controls.⁵³

Still, a sign of the persistence of the old "administrative" approach was in the January 1988 law against monopoly pricing. It not only provided stiff penalties when prices were found to be too high (45 managers were fired and enterprises fined 1.7 million *leva*), but it also limited firms to producing only 20 percent of their total output as more profitable "luxury" goods.⁵⁴ It is also a bad sign that ideological foot dragging may be holding up the solution to local monopoly problems with the proposed expansions of the role for the personal and cooperative sectors in supplying food and services.⁵⁵

Administrative approaches will surely encourage the tendency of central bodies to interfere with self-management organizations. Worries over such tendencies, according to Mr. Zhivkov, motivated a regulation restricting the industrial associations to a maximum of only 70 professional employees.⁵⁶ Also, some effort has been made to staff associations with persons from the provinces rather than with former ministry officials.⁵⁷

The problem of lingering central interference is exacerbated by the need for some gradual devolution of decision rights during the transition phase of the reforms. The worry, given Hungary's experience, is that measures intended to be temporary end up as a way of avoiding structural adjustment and international competition. Central authorities start looking for ways to expand their functions while economic organizations eagerly present new cases where exceptional help is needed. Bulgarian organizations will surely do so no less than their Hungarian counterparts. In the end, the test may be how dedicated to the cause of economic reforms is the party leadership.

⁵³ Rabotnichesko Delo, Nov. 20, 1987.

⁵⁴ Agence France Presse, Jan. 6, 1988.

⁵⁵ On new regulations for the private sector, see *Durzhaven vestnik*, 1987:48 (June 23); this and earlier regulations are discussed in Radio Free Europe, *Bulgarian Situation Report/6*, (July 24, 1987), with additional background in Ilse Grosser, *Private Landwirtschaft in Bulgarien*, in *Giessener Abhandlungen zur Agrar- und Wirtschaftsforschung des europäischen Ostens*, Vol. 154 (Berlin: Duncker & Humblot, 1988).

⁵⁶ Rabotnichesko Delo, Mar. 6, 1987.

⁵⁷ Rabotnichesko Delo, Aug. 14, 1987.

RECENT BULGARIAN ECONOMIC PERFORMANCE

By Michael L. Wyzan*

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I. SUMMARY

This paper describes and evaluates Bulgarian economic performance during the turbulent 1980's. This period is characterized by an extraordinarily far-reaching and complex economic-reform program moving forward in fits and starts, bad weather every other year, earthquakes, and industrial accidents.

Western scholars are critical of the secrecy that envelops many seemingly innocuous matters and of the lack of informativeness of much of what the Bulgarians publish. However, Western calculations may be even less reliable.

On the positive side, NMP and industrial output grew rapidly; plans were met for NMP, retail trade, household income, and foreign trade; meat consumption rose; and labor-productivity growth in material sectors was high.

On the negative side, crops did poorly—consumption per capita of fruit and vegetables declined; retail prices of electricity and water rose; plans for housing construction, capital investment, and foreign-trade turnover were unmet and some key output targets in the next 5-year plan are too high; and large deficits appeared in capitalist trade, especially with developed countries.

II. BACKGROUND

A. ONGOING REFORMS

This paper is concerned primarily with the performance of the Bulgarian economy in the mid- and late 1980's, rather than with the ebb and flow of economic reform during that period. In any

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case, the latter is treated in detail in the paper by Marvin Jackson in this compendium and elsewhere.¹

The current operating document for the economy is *Pravilnik za Stopanska Deinost* (hereafter, *Pravilnik*), which went into effect on January 1, 1988. It outlines new operating procedures that subject "self-managing economic organizations"—the current appellation for enterprises—to "economic" as opposed to "administrative" regulation.² The state regulates economic activity using such tools as price setting, interest rates, valuta coefficients, and normatives regulating deductions of net income into funds, amortization, and so on. Wholesale prices are to reflect world prices. A sales tax has replaced the turnover tax, and three other new taxes have come into being.

Competition is to be employed throughout the economy to determine which organization is to receive state plan tasks, conclude contracts for material-technical supply, carry out investment projects, provide investment finance, conduct research activities, open retail outlets, and provide insurance.

Eight commercial banks are to perform basic banking services for enterprises, and are to compete with each other to determine which of them will cooperate with a given enterprise. A number of changes have made in the area of foreign trade, including broader rights to participate therein for economic organizations, increased emphasis on exchange rates—which have been simplified and the lev brought closer to convertibility—and tariffs, creation of free trade zones, and enhanced regulatory encouragement of joint ventures. A 1987 decree encourages private and cooperative activities in a number of spheres.

B. IMPORTANT EXOGENOUS EVENTS

In addition to the aforementioned reforms, an unusually large number of events presumably exogenous to the economic system per se, such as severe weather and industrial accidents, took their toll on economic performance, especially during 1985–87. The most obvious such event was the eerie weather pattern which saw severe weather conditions in odd-numbered years alternate with favorable ones in even-numbered ones.

The year 1985 stands out as a particularly trying one. The winter of 1984–85 was unusually severe. The Sea of Azov and the Danube River froze, preventing Soviet coal shipments, and domestic mining was also hampered, leading to sharp reductions in the supplies of coal available for electricity generation. A very dry 1984 had already reduced water levels in dams used for hydroelectric-power generation. As a result, electricity-rationing procedures were introduced, the prices of electricity and drinking water were raised sub-

¹ Two valuable in-depth studies are Richard Crampton, " 'Stumbling and Dusting Off,' or an Attempt To Pick a Path Through the Thicket of Bulgaria's New Economic Mechanism," *Eastern European Politics and Societies*, vol. 2, No. 2, 1988, pp. 333–395; and Marvin Jackson, "Bulgaria's Attempt at 'Radical Reform,'" *Berichte des Bundesinstitut für ostwissenschaftliche und internationale Studien*, 1988, No. 2. A particularly up-to-date look at the reforms is Ilse Grosser, "Economic Reforms in Bulgaria," *The Vienna Institute for Comparative Economic Studies*, March 1988.

² *Pravilnik za Stopanska Deinost* (Sofia: Ministerski Suvet, February 1987). The rationale behind *Pravilnik* (1987) and the thinking of Bulgaria's leading reform economist are on display in Ivan Angelov, *Strategiia na Kachestveni Promeni* (Sofia: Partizdat, 1987).

stantially, and plan fulfillment was very poor, especially in the first quarter. There was a severe drought in the summer of 1985, leading to considerable shortfalls in agricultural production and grain imports from Great Britain and Yugoslavia.

The year 1986 saw better weather—aside from heavy snowstorms in February and torrential rains during the grain harvest, but the nation lived through, in addition to the aforementioned organizational upheaval, two earthquakes and two major industrial disasters. The former, which struck the town of Strazhitsa in February and December, are said to have caused damage of upwards of 200 million leva.³ The accident in April at the Soviet nuclear power plant at Chernobyl⁴ caused great concern among the population—which had not abated by the author's visit to the country in June of 1987—and adversely affected exports of fresh fruit and vegetables to Western Europe. On November 1, Bulgaria had its own major industrial accident, when an explosion at the Devnia Chemical Combine killed seventeen workers.

Although 1987 was highly eventful in terms of economic reform, it was rather less so with respect to natural and other calamities than 1985 and 1986. Agriculture did suffer under relatively unfavorable conditions; e.g., fruit was damaged by late-spring frosts and once again there was summer drought. Nonetheless, Western observers are more inclined to blame systemic factors such as low procurement prices⁴ and a "chaotic harvest that forced thousands of students to remain in the fields until December,"⁵ perhaps due to rapid and confusing institutional change, for poor 1987 agricultural performance.

Problems with electricity generation continued, as restrictions were placed on the consumption thereof in Sofia in October. A landslide in August at the Maritsa Iztok open-pit coal mine contributed to the problem. A major ecological issue came to a head during the year, as protests erupted in Ruse in September over the catastrophic damage inflicted upon the city by emissions of chlorine gas from a plant across the Danube in Giurgiu, Romania. The average worker in Ruse is said to lose 9.5 workdays per year due to lung problems.⁶

Throughout the period covered by this study, and especially beginning in 1985, there have been persistent reports of shortages of basic items, such as meat, soft drinks, sugar, fruit and vegetables, cooking oil, toilet paper, and various types of clothing.⁷ One of the objectives of Section IV below will be to ascertain whether this problem shows up in the official statistical record.

III. THE QUALITY OF ECONOMIC DATA

Before discussing Bulgaria's recent economic performance, a word is in order on the quality of official data thereon. Western scholars have long been critical of both the secrecy that envelops

³ Crampton, " 'Stumbling and Dusting Off,' or An Attempt To Pick a Path Through the Thicket of Bulgaria's New Economic Mechanism," p. 358.

⁴ Radio Free Europe Research, Bulgarian SR/11, Nov. 20, 1987 (hereafter, RFER).

⁵ RFER, RAD Background Report, BR/250, Dec. 30, 1987.

⁶ RFER, Bulgarian SR/2, Feb. 11, 1988.

⁷ See, e.g., RFER, Bulgarian SR/9, Sept. 25, 1986.

many seemingly innocuous matters and lack of informativeness of much of what is published. To quote PlanEcon: ⁸

To put it bluntly, Bulgarian economic information policy is an unmitigated disaster. Quarterly, mid-year, and end-year economic reports are totally uninformative, written in a manner that is reminiscent of Stalinist Romania rather than those supplied by other CMEA countries, and contain mostly political propaganda rather than honest, critical assessment of the country's economic achievements and problems . . . [The] Statistical Yearbook . . . and Foreign Trade Yearbook . . . are poorly designed, badly outdated in terms of content and layout, and far less useful than comparable publications released by . . . [Czechoslovakia, Hungary, Poland, and Yugoslavia] . . . or even by the Soviet Union (at least in the case of Foreign Trade Yearbook).

These data problems seem most severe with respect to foreign-trade data. There are few data on such matters as the relative importance of traded commodities in value terms and the commodity composition of trade with particular trading partners, and none at all on certain commodities, such as petroleum, on the size of hard currency credits given and received, nor on the financial balance sheets of the Ministry of Foreign Economic Relations.⁹

Information on exchange rates has been harder to come by than for perhaps any other East European country. Questions relating to exchange rates are particularly telling, given the intention under the reforms to introduce a single ruble rate for CMEA trade and a single dollar rate for Western Trade.¹⁰ Even with this simplification, however, the average effective exchange rate still varies by commodity, complicating Bulgaria's attempt to join GATT.¹¹

Problems of data availability are probably less severe outside the area of foreign trade. For example, the Bulgarian statistical yearbook, *Statisticheski Godishnik na Narodna Republika Bŭlgaria* (hereafter, *SGNRB*) contains far more information on the movement of retail prices than does *Narodnoe Khoziaistvo SSSR* (hereafter, *Narkhoz*), the Soviet statistical yearbook. Particularly noteworthy is the publication of price indices—calculated on the basis of data from 66 cities—for 16 products sold on cooperative markets (e.g., see p. 364 of the 1987 edition).¹² Virtually all agricultural data are provided separately for the state and private sectors. Furthermore, *SGNRB* never went through the shrinking act that *Narkhoz* did in the late 1970's and early 1980's.

In addition to the question of data availability, there is, of course, the issue of the reliability of official figures. One can only guess at how "real" indices, i.e., those expressed in "comparable" prices, are actually calculated. Western observers suspect that understatement of inflation is the reason why aggregate real indices often outperform their major constituent parts expressed in physical terms. For instance, PlanEcon views officially reported indices

⁸ PlanEcon Report, Vol. III, No. 21, May 21, 1987, p. 12. Emphasis in the original.

⁹ Ibid., and RFER, Bulgarian SR/7, July 30, 1980. All data on petroleum and nonferrous metallurgy are apparently viewed as state secrets, as is information on the locations of gas and oil pipelines, airports, and railway stations, and the power of radio and television transmitters.

¹⁰ A figure of 1.5 leva per dollar has been given for nonsocialist trade beginning January 1, 1988; see Jackson, "Bulgaria's Attempt at 'Radical Reform,'" p. 26. It was announced in June 1988 that the ruble will be worth 1.05 leva; see Sofia News, No. 26, June 29, 1988.

¹¹ Jackson, "Bulgaria's Attempt at 'Radical Reform,'" p. 39.

¹² On the other hand, agricultural procurement prices have not been published in many years. See RFER, Bulgarian SR/11, Nov. 20, 1987. It is not even possible, as it is for the U.S.S.R., to deduce such prices for individual crops from the nominal value of the procurements and the physical quantity procured thereof, since there are no data on these items either.

of both state retail prices and cooperative-market prices as considerably understated.¹³

On the other hand, major known increases in retail prices published in the press do show up on official indices, although the two sources may differ as to timing and magnitude. By way of illustration, it is known that the prices of electricity and drinking water to residential consumers rose 41 percent and 40 percent, respectively, on October 1, 1985.¹⁴ The official price index for residential electricity rose 11.9 percent in 1985 and 33.2 percent in 1986; the figures for drinking water are 14.2 percent in 1985 and 36.9 percent in 1986.¹⁵

The availability and reliability problems have other dimensions. Occasionally, there are major unexplained changes in the data on a particular phenomenon between succeeding issues of a given publication or between two different publications. There are also instances of wildly implausible year-to-year changes in certain categories; see, e.g., the data in Table 1 below on net material product (NMP) in the trade sector.¹⁶

Furthermore, the articles appearing in the press that provide the plan indicators for the following year describe a number of categories that exist neither in the plan-fulfillment reports nor in the statistical publications published after the year in question. There are targets in the Ninth Five-Year Plan (1986-90) for such items as high-quality steel, microelectronics, and light chemicals.¹⁷ But none of these categories appears in the physical-production statistics for industrial products contained in *SGNRB*.¹⁸ This practice obviously limits our ability to evaluate plan fulfillment at anything but the most aggregative level.

One particularly interesting development on this front has been the appearance in recent years of frank expressions of dissatisfaction with the quality of Bulgaria data by several prominent Bulgarian observers. In September 1985, Angelov accused the statistical authorities of "creat[ing] an illusion of prosperity that . . . does not exist."¹⁹ More recently, he has written the following:²⁰

[N]ever in the past ten years or so has there been more than a 55 to 60 percent fulfillment of the physical indicators set by the State Planning Committee[.] But in value terms according to the official reports the plans are always fulfilled and over-fulfilled. It is not difficult for a knowledgeable economist to draw the appropriate conclusions.

In a July issue of *Narodna Kultura*, noted journalist Baruh Shamliiev blasted the official secrecy regarding such matters as retail prices, consumption per capita of important products, real

¹³ See, e.g., PlanEcon Report, Vol. IV, No. 8, Feb. 26, 1988.

¹⁴ RFER, Bulgarian SR/11, Oct. 7, 1985.

¹⁵ Statisticheski Gokishnik na Narodna Republika Bŭlgariia 1987 (Sofia: Tsentralno Statisticheskovo Upravlenie, 1987), p. 363.

¹⁶ See Marvin Jackson, "Recent Economic Performance and Policy in Bulgaria," in East European Economies: Slow Growth in the 1980's, Volume 3—Country Studies on Eastern Europe and Yugoslavia, a compendium of papers submitted to the Joint Economic Committee, Congress of the United States (Washington, DC: Mar. 28, 1986), p. 29; PlanEcon Report, Vol. IV, No. 8, Feb. 26, 1988; and Section IV below for a discussion of this issue.

¹⁷ See Rabotnichesko Delo, Dec. 25, 1986, and Dec. 26, 1986.

¹⁸ See, e.g., SGNRB, 1987, pp. 213-219.

¹⁹ Ivan Angelov, "Intensifikatsiia, Efektivnost i Ikonomicheski Klimat," Trud, Sept. 20, 1985, p. 2.

²⁰ Ivan Angelov, "Ikonomicheskata Logika na Noviaa Ikonomicheski Mekhanizŭm," Novo Vreme, No. 2, 1988, p. 7.

national income, poverty, and the financial condition of individual enterprises, including the subsidies that they receive.²¹

IV. PERFORMANCE

We now turn to an evaluation of the performance of the Bulgarian economy during the mid to late 1980's.²²

A. GROWTH, STANDARD OF LIVING, INFLATION, AND OTHER AGGREGATE MATTERS

Bulgarian and Western estimates of value-added in production in Bulgaria during the Eighth Five-Year Plan (hereafter, FYP; 1981-85) and 1983-87 are presented in Table 1. The official growth rate of NMP, while seemingly respectable at 3.2 percent per annum, is well below the 6.1 percent achieved during 1976-80.²³ The continuing importance of agriculture to the overall economy is in evidence; 1983 and 1985, years of severe difficulties for this sector, have lower NMP growth rates than do better years on the farm.

TABLE 1.—ALTERNATIVE ESTIMATES OF REAL GROWTH RATES OF VALUE-ADDED IN PRODUCTION

	[In percent]						
	Shares ^{1, 2}	1982-85 ³	1983	1984	1985	1986	1987
I. Bulgarian official data:¹							
Net material production.....	100.00	3.72	3.02	4.61	1.78	5.33	5.10
Industry.....	60.10	6.94	8.50	6.48	4.90	5.71	6.30
Construction.....	9.60	5.42	2.76	4.20	4.84	2.00	3.64
Agriculture.....	14.90	-2.98	-16.28	11.66	-20.60	22.41	-12.36
Forestry.....	.40	1.91	-.39	7.75	-.09	.00	.....
Transportation.....	6.40	3.63	1.73	2.72	-1.33	2.94	2.00
Communications.....	1.20	7.60	10.23	9.69	6.03	9.09	.....
Trade, et cetera ⁴	5.40	-.06	19.12	-21.36	33.60	-17.74	41.40
Other material sectors.....	2.00	-.81	-4.60	-5.33	1.59	-9.93	5.00
II. Western calculations:							
Gross national product.....	100.00	.77	-1.92	3.20	-3.25	2.20	.....
Industry.....	35.06	1.71	1.82	1.98	-.54	1.25	.....
Construction.....	6.68	-.37	-.64	.37	-2.48	.47	.....
Agriculture.....	27.23	-1.60	-12.37	9.69	-15.66	6.50	.....
Forestry.....	.41	-1.46	1.99	-1.48	.00	-.25	.....
Transportation.....	7.39	1.41	1.60	1.89	-.85	.47	.....
Communications.....	.41	.66	1.43	-.28	.19	.38	.....
Trade, etc.....	7.18	1.77	-.88	1.32	2.87	3.04	.....
Other material sectors.....	.37	3.31	4.27	.99	2.44	-3.14	.....
Housing.....	4.44	2.28	2.28	2.31	2.10	1.82	.....
Communal services.....	2.85	1.33	-.36	2.74	3.25	1.46	.....
Finance.....	.22	1.67	.00	1.94	1.09	.27	.....
Other non-Government.....	.31	-.40	4.29	5.14	7.06	.20	.....
Government.....	7.12	1.24	1.34	.44	1.32	.69	.....

¹ All official Bulgarian data are in 1982 "comparable" (stipostavimi) prices.

² Western shares based on 1975 adjusted factor cost.

³ by statistical method.

⁴ Includes material-technical supply and procurement.

Sources: All official Bulgarian data for 1981-85 and 1983-86 are from SGNRB, 1987, p. 156. The official 1987 figure on net material product is from SS, 1988, pp. 80-81. The remaining official data for 1987 are from PlanEcon Report, Vol. IV, No. 8, Feb. 26, 1988, p. 7. Western calculations are derived from Thad Alton et al., Occasional Papers Nos. 95-99 of the Research Project on National Income in East Central Europe, OP-95, p. 9.

²¹ RFER, Bulgarian SR/7, July 30, 1988.

²² For examinations of its performance during earlier periods, see Jackson, "Recent Economic Performance and Policy in Bulgaria," pp. 23-58; and Marvin Jackson, "Bulgaria's Economy in the 1970's: Adjusting Productivity to Structure," in East European Economic Assessment, Part 1—Country Studies, 1980, a compendium of papers submitted to the Joint Economic Committee, Congress of the United States (Washington, DC: Feb. 27, 1981), pp. 571-618.

²³ Jackson, "Recent Economic Performance and Policy in Bulgaria," p. 29.

The official data for 1986 and 1987 show considerably faster NMP growth than the Eighth FYP average. Although this is plausible in the former year, when agriculture enjoyed a strong recovery, the 5.10 percent growth rate for 1987 is more surprising in view of that year's agricultural difficulties.

Looking at the specific sectors, industry grew during 1981-85 at almost exactly the same annual rate as it did during the previous FYP;²⁴ it slowed only marginally in the 2 following years. Enormous instability in agriculture's contribution to national income is evident and predictable based on what we know of climatic conditions.

Equally volatile but far more difficult to explain is the performance of the sector that includes trade, material-technical supply, and procurement. Two explanations have been offered. PlanEcon suggests that some activities may have been transferred to industry in 1984, but this seems unlikely given that real industrial growth was close to the long-term norm that year; the same may be said of 1986.²⁵ Alternatively and more plausibly, both PlanEcon and Jackson suggest that the volatility of the trade sector may be due to major year-to-year changes in the internal prices of exports and imports.²⁶

The alternative Western estimates presented in Table 1 are the work of L.W. International Financial Research, Inc. They are formed by "developing independent estimates of output growth for the various production and service sectors, then aggregating the sectors into an index of GNP in terms of factor costs," which are calculated for 1975.²⁷

The factor-cost weights, as shown in the first column of Table 1, differ radically from the official ones for 1982. As Alton et al. acknowledge, the factor-cost method always enhances the contribution of agriculture, and reduces that of industry, relative to the official method.²⁸ Although such an approach has some merit, e.g., because it eliminates the untoward effects of the turnover tax, the continued use of 1975 weights clearly overstates the importance of agriculture to what has become an industrialized economy. Moreover, Boretsky has recently shown that a similar method used by the Central Intelligence Agency to estimate Soviet national income results in a major underestimation of GNP when applied to the U.S. and West German economies.²⁹ The differences between the

²⁴ Reported by Jackson, "Recent Economic Performance and Policy in Bulgaria," p. 29, to be 6.8 percent.

²⁵ PlanEcon Report, Vol. IV, No. 8, p. 7.

²⁶ *Ibid.*, and Jackson, "Recent Economic Performance and Policy in Bulgaria," p. 29. As pointed out by the latter, this phenomenon may not show up in foreign-trade statistics, which are reported in rubles or dollars.

²⁷ Thad Alton et al., Occasional Papers Nos. 95-99 of the Research Project on National Income in East Central Europe (L.W. International Financial Research, Inc., New York, 1987), OP-95, p. 1.

²⁸ *Ibid.*, OP-97, p. 2.

²⁹ Michael Boretsky, "The Tenability of the CIA Estimates of Soviet Economic Growth," *Journal of Comparative Economics*, Vol. 11, No. 4, December 1987, pp. 517-542.

official estimates and those by Alton et al. have always been particularly large in the Bulgarian case. As can be seen from Table 1, the latter show little real growth of GNP or its major component sectors, with occasional years of declining output.

Table 2 shows that Bulgarian plans have generally been rather realistic, except, of course, for agriculture where climatic problems can hardly be predicted. The 1981-85 FYP was very accurate with respect to NMP, underpredicted the growth of real industrial output, nominal retail-trade turnover, real household income per capita, and real foreign-trade turnover, while overpredicting real agricultural growth, housing construction, and nominal capital investment.

TABLE 2.—COMPARISON OF PLANNED AND ACTUAL ECONOMIC RESULTS

(Percent growth unless otherwise noted)

Years	Net material ¹ product		Gross industrial ¹ output		Gross agricultural ¹ output		Housing ² construction	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
1981-85 ³	3.70	3.72	5.06	4.34	3.40	-0.28	72,000	68,642
1983	3.80	3.02	4.80	4.30	2.70	-7.20	73,000	69,745
1984	3.80	4.61	5.80	4.20	3.70	7.00	72,100	68,930
1985	4.10	1.78	5.20	3.20	N.A. ⁴	-12.30	78,900	64,870
1986-90 ³	5.38	.....	4.89	.....	10.00	.....	80,000	.....
1986	4.00	5.33	4.50	4.00	7.40	11.70	57,400	54,198
1987	5.20	4.76	N.A.	3.30	N.A.	-4.30	76,400	61,603
1988	6.10	.....	5.00	.....	5.50	.....	81,000	.....

Years	Retail trade ⁵ turnover		Real household ¹ income per capita		State sector ⁶ capital investment		Foreign trade ¹ turnover	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
1981-85.....	3.90	4.44	2.80	3.67	7,400	7,326.02	6.96	10.14
1983.....	4.10	3.82	2.60	2.73	7,540	7,240.30	8.00	8.82
1984.....	4.20	3.52	2.50	2.92	8,150	7,263.90	8.10	8.60
1985.....	4.50	4.90	3.00	2.84	8,650	7,995.30	4.50	7.65
1986-90.....	4.56	.....	3.37	.....	10,600-11,200	.....	6.50	.....
1986.....	4.50	7.16	2.00	2.81	9,150	8,545.20	5.00	-0.37
1987.....	5.00	3.92	4.10	3.80	N.A.	9,552.10	N.A.	2.84
1988.....	N.A.	.....	3.30	.....	10,500	.....	N.A.	.....

¹ In comparable prices.

² Number of units.

³ Annual rates. Plan targets for 5-year plans (FYP) for items expressed as growth rates, when not taken directly from sources, are calculated by assuming that the total growth projected to occur from the last year of the previous FYP to the last year of the FYP in question occurs at a constant, annually compounded rate. For example, the 5.38 percent annual growth of NMP during 1986-90 is derived from the fact that NMP is supposed to be 30 percent higher in 1990 than in 1985. Thus, $(1+r)^5=1.3$, which implies that $r=0.0538$.

⁴ Figure was never, to author's knowledge, publicly disclosed.

⁵ Current prices. Investment is in million leva.

Sources: All actual growth rates for 1981-86 are derived from SGNRB, 1988, pp. 85, 143, 156, 207, 253, 270, 344 and 384; all actual 1987 growth rates are derived from SS, 1988, pp. 68, 80, 104, 105, 128, 129, 156, 176, and 200, and SS, 1987, p. 76. 1981-85 plan targets are from Rabolnichesko Delo (hereafter, RD), Dec. 11, 1981. 1983 plan targets are from RD, Dec. 16, 1982. 1984 plan targets are from Radio Free Europe Research (hereafter, RFER), Bulgarian SR/3, Feb. 15, 1985. 1985 plan targets are from RD, Nov. 27, 1984, translated in Foreign Broadcast Information Service (hereafter, FBIS), FBIS-EEU-84-234, Dec. 4, 1984. 1986-90 FYP targets are from RD, Dec. 26, 1986. 1986 plan targets are from RD, Dec. 13, 1985, translated in FBIS-EEU-85-247, Dec. 24, 1985. 1987 plan targets are from RD, Dec. 25, 1986. 1988 plan targets are from RD, Dec. 11, 1987. A small number of items are from RFER reports rather than the Bulgarian press.

In recent years, as part of the deemphasis of annual plans under the reform effort, annual plan indicators have been harder to find. From the annual average targets in the 1986-90 FYP and what little we know about recent annual targets, it appears that agricul-

ture, housing construction, capital investment, and foreign-trade turnover may be trouble spots in the coming years.

Table 3 contains information on the final uses of national income. One use of such data is examine the effects of repayment of international debt. NMP used is the difference between NMP produced and the sum of the trade surplus and losses to the economy from disasters, accidents, theft, and so on. When NMP used grows more slowly than NMP produced, it often reflects the necessity to run trade surpluses to pay off international debt. As it turns out, the 1976-80 FYP showed a considerable—2.8 percentage point—disparity between the annual growth rates of the two NMP measures,³⁰ as did 1982-83, as shown in Table 3. However, during the 1981-85 FYP as a whole, their growth rates were virtually identical and every year during 1984-86 saw NMP used actually grow faster. Interestingly, 1987 shows a return to the 1976-80 pattern.

TABLE 3.—ALTERNATIVE ESTIMATES: FINAL USES OF NATIONAL PRODUCT

	(In percent)							
	1981	1982	1983	1984	1985	1981-85	1986	1987
I. BULGARIAN DATA								
A. Real growth rates:								
NMP produced.....	5.00	4.30	3.02	4.61	1.78	3.72	5.33	4.76
NMP used.....	7.70	1.80	1.30	5.40	2.30	3.70	8.40	2.30
Material ¹ consumption.....	5.30	3.70	2.90	4.90	3.30	4.02	3.60	6.90
Real household income.....	6.20	4.41	2.96	3.14	2.80	3.90	2.77	3.93
Net investment ²	14.80	-3.30	-3.60	6.20	-8.0	2.66	23.80	-3.00
Gross fixed capital investment ³	4.13	5.82	.53	.28	8.61	3.87	7.83	7.78
B. Share of unfinished ⁴ investment.....	13.28	5.39	7.37	12.87	16.95	11.17	21.91	5.85
II. WESTERN ESTIMATES								
A. Real growth rates:								
GNP.....	3.00	2.80	-1.92	3.20	-3.25	.77	2.20	.....
Gross production domestic. used.....	5.50	2.80	-3.80	3.63	-3.19	.99	3.08	.....
Private consumption.....	2.10	1.20	.09	2.25	1.69	1.47	1.08	.....
Selected ⁵ government.....	2.00	2.40	.53	1.13	1.03	1.42	1.11	.....
Residual ⁶	14.70	5.80	-14.22	8.54	-16.67	-.37	1.01	.....

¹ Fond potreblenie.

² Fond natrupvane.

³ Kapitalni vložhenia.

⁴ Difference between gross fixed capital formation and fixed capital put into operation (vstvredni v deistvie osnovni fondove) as a fraction of the former.

⁵ Includes administration, justice, internal security, education, culture, health, and social welfare.

⁶ Includes gross investment, science, defense, elements of government consumption other than those listed in note 5, and errors and omissions.

Sources: Figures on NMP used are from PlanEcon Report, Vol. IV, No. 8, Feb. 26, 1988, p. 7. Other official data for 1981-86 are from SGNRB, 1987, pp. 36, 85, 143, 156, and 160, and the corresponding 1987 figures are from SS, 1988, pp. 68, 80, and 176. Western calculations are derived from Thad Alton et al., Occasional Papers Nos. 95-99 of the Research Project on National Income in East Central Europe, OP-97, p. 8.

Table 3 also provides some insight into government policy on consumption and investment. Material consumption and net investment sum to NMP used, and can thus provide us with a crude indication of divergent trends in the relative emphasis on these two competing categories. Material consumption moves fairly closely with NMP produced; its 4 percent annual growth rate during 1981-85 is virtually identical to that during the previous FYP.³¹ Net in-

³⁰ Jackson, "Recent Economic Performance and Policy in Bulgaria," p. 31.

³¹ Ibid.

vestment is far more volatile, and seems to have borne the brunt of balance-of-payments adjustments. As a share of NMP used, it was 0.236 in 1985, compared with 0.267 in 1981, although it did rise to 0.269 in 1986.³²

Real household incomes may be a better indicator of the standard of living than material consumption, since the latter leaves out services and savings. As it turns out, although real household incomes grew at rates faster than or equal to those for material consumption from 1979–1983, since 1980, material consumption has always grown faster. This may suggest either growing problems in the service sector or declining annual additions to savings balances, of which the former seem more likely.

The official data on consumption and real incomes paint a surprisingly rosy view of the development thereof, considering the objective difficulties of the economy in the 1980's. The only alternative numbers come once again from Alton et al., and are presented in the lower half of Table 3. These tell roughly the same story as the official data on the relationship between NMP produced and used, although 1983 is the only year for which the former grew faster than the latter. The Western estimates of the growth of private consumption, however, are considerably below the official ones.³³

Physical data on food consumption per capital show declining consumption of bread, ripe beans, vegetables, and fruit over 1982–86, and rising consumption of meat, fish, milk, and eggs during this period. This is not surprising in view of the greater success of the livestock sector in recent years.³⁴

Turning to inflation, the skepticism of both Bulgarian and Western observers concerning the official estimates thereof has already been mentioned. During 1981–85, the average annual rates of overall retail price-inflation and retail-food-price inflation were both only 1.52 percent. However, 1986 did see retail-price inflation of 3.5 percent and 4.3 percent, respectively.

More disaggregated data show a number of items—e.g., bread, rice, eggs, wool fabric, soap—for which there were no retail-price increases during 1980–86. Among food products, the greatest inflation in this period took place for "other summer fruits" (92.5 percent), coffee (58.8 percent), and oranges (42.5 percent), and among nonfood items, for bricks (39.1 percent), lime (37.9 percent), and tiles and slabs (36.8 percent). The cooperative markets saw price increases ranging from 25.4 percent for live chickens to –16.8 percent for eggs over this period.

The large price hikes for electricity and water in 1985–86 have already been mentioned. Most consumer services saw little or no price increases. Thermal energy, apartment rents, radio and television taxes, domestic railroad fares, intercity bus transport, urban

³² Calculated on the basis of data in PlanEcon Report, Vol. IV, No. 8, Feb. 26, 1988, p. 7. Note that the official data on gross fixed capital formation, which includes depreciation but excludes inventory changes, show it growing very rapidly in every year since 1984. Until 1987, this investment "boom" was associated with unusually high rates of unfinished investment.

³³ The methods employed by Alton et al. to obtain these data are similar to those used to derive those on value added presented in Table 1 and the same caveats apply.

³⁴ SGNRB, 1987, p. 100. See also Wyzan, "Bulgarian Agriculture Since 1979: Sweeping Reform and Mediocre Performance (So Far)."

mass transit, and the services of shoemakers all went for the same prices in 1986 as they did in 1980.³⁵

B. PRODUCTIVITY

No examination of the growth of national income and its components would be complete without a discussion of trends in factor productivity. Table 4 presents information on the growth of employment and of labor productivity. One is struck by the slow growth of total employment, which was only 0.25 percent higher in 1987 than in 1981. Since 1983, total employment in material production has actually fallen by 80,700; the loss of 103,100 agricultural jobs more than accounts for this decline. The latter is the result of shifting national priorities which have left only 20 percent of the labor force—and only 8 percent of fixed capital investment³⁶ (see Table 5)—in agriculture.

TABLE 4.—CHANGES IN EMPLOYMENT AND LABOR PRODUCTIVITY

	1981	1982	1983	1984	1985	1986	1987
I. Employment (thousands):							
Total.....	4,073.3	4,100.3	4,113.6	4,098.0	4,094.7	4,076.5	4,083.6
Material sectors.....	3,272.0	3,389.9	3,398.2	3,369.8	3,354.3	3,325.0	3,317.5
Industry.....	1,389.9	1,402.0	1,412.2	1,409.6	1,411.1	1,403.0	1,422.3
Agriculture.....	947.1	937.6	924.6	899.4	878.8	848.1	821.5
Construction.....	346.3	349.0	353.8	355.3	360.6	359.2	359.1
Trade, et cetera ¹	343.4	352.7	357.2	355.9	355.2	360.7	361.4
Nonmaterial sectors.....	701.3	710.4	715.4	728.2	740.4	751.5	766.1
Education.....	249.2	254.2	257.6	261.0	264.2	269.2	269.8
Health, et cetera ²	191.2	195.6	196.3	198.1	201.0	201.8	207.7
II. Employment growth (annual percent):							
Total.....	1.0	1.0	.0	.0	.0	-1.0	.0
Material sectors.....	.9	.5	.3	-.8	-.5	-.9	-.2
Industry.....	2.0	.0	1.0	.0	.0	-1.0	1.4
Agriculture.....	-1.0	-1.0	-1.0	-3.1	-2.1	-3.3	-3.1
Construction.....	1.0	1.0	2.0	.0	1.9	-.9	.0
Trade, et cetera.....	1.0	3.0	1.9	-.9	.0	1.9	.0
Nonmaterial sectors.....	2.5	1.3	.7	1.8	1.7	1.5	2.0
Education.....	3.0	1.9	1.0	.9	1.9	1.8	.0
Health, et cetera.....	3.0	1.9	1.0	.9	1.9	.9	2.9
III. Growth of labor³ productivity (annual percent):							
Material sectors.....	3.9	3.5	2.9	5.1	2.1	5.2	5.3
Industry.....	3.4	4.0	3.8	4.3	3.5	3.4	3.4
Agriculture.....	7.4	8.2	-4.2	10.5	-10.1	14.0	-1.7
Construction.....	6.0	3.8	1.8	4.5	.0	5.1	3.7
Retail trade.....	2.6	2.1	.6	2.9	2.4	.9	.....

³⁵ Prices are from SGNRB 1987, pp. 359-64. When one compares inflation rates for the same items in the state stores and on the cooperative markets, no pattern emerges. The State flour price was the same in 1980 and 1986, while the 1986 cooperative flour price was 3.4 percent higher than 1980's. But state egg prices were unchanged, while cooperative egg prices fell 16.8 percent.

³⁶ This figure is the lowest among European members of the Council for Mutual Economic Assistance (CMEA); see U.S. Department of Agriculture, Economic Research Service, Eastern Europe: Situation and Outlook Report, RS-86-5 (Washington, DC, June 1986), p. 9. In view of the persistent food problems of recent years, especially with respect to fruit and vegetable consumption per capita, it may be argued that this shift has been premature.

TABLE 4.—CHANGES IN EMPLOYMENT AND LABOR PRODUCTIVITY—Continued

	1981	1982	1983	1984	1985	1986	1987
IV. Share of growth of net material product attributed to:							
Increased productivity	78.8	84.3	90.4	111.6	116.7	97.4	102.7
Increased labor	21.2	15.7	9.6	-11.6	-16.7	2.6	-2.7

¹ Includes material-technical supply and procurement.

² Includes social insurance, physical culture, sport, and tourism.

³ Based on the growth of value-added for the total material sectors category and on the growth of gross output for the 4 individual sectors.

Sources: Data for 1981-86 on employment are from SGNRB, 1987, p. 110, and, on employment growth, p. 111. 1987 figures on both matters are from SS, 1988, pp. 42-43. 1981-86 labor-productivity data are from SGNRB, 1987, p. 158 for material production, p. 225, for industry, p. 298, for agriculture, p. 260, for construction, and p. 354, for retail trade. 1987 labor-productivity data are from SS, 1988, p. 84 for material production, p. 119, for industry, p. 146, for agriculture, and pp. 122-23, for construction. The 1981-86 figures in Part IV are taken directly from SGNRB, 1987, p. 158, and those for 1987 are from SS, 1988, p. 84.

An interesting trend is the relatively rapid employment growth in the nonmaterial sectors. Employment has risen since 1981 in all subsectors thereof—including the two presented in the table—except for management, wherein employment declined by almost 13 percent between 1980 and 1985 before rising somewhat in the 2 subsequent years.³⁷ It is worth noting that the trend toward increased relative employment in the nonmaterial sphere has not been matched by any similar movement in fixed capital investment, as can be seen from Table 5 below.

It is not surprising that in view of the respectable rates of output growth, as officially measured at least, and the negligible growth of employment, official estimates of the growth of labor productivity are also respectable. This is certainly true in industry, while agricultural labor productivity trends are dominated by the weather's effects on gross output.

The figures in Part IV of the table suggest that economic growth has been of an intensive nature. In 1987, e.g., value added in material production rose 4.76 percent in nominal terms,³⁸ while employment in material production fell 0.84 percent. On the other hand, the nominal value of the total capital stock in material production grew 5.18 percent that year.³⁹ Thus, capital productivity fell 0.42 percent. Nonetheless, given reasonable suppositions about factor shares, a fair degree of technological progress is evident from the official data.⁴⁰

C. INVESTMENT PRIORITIES AND ECONOMIC RESTRUCTURING

As in the U.S.S.R., restructuring (*preustroistvo*) has been a major goal of Bulgarian economic policy in recent years. Since it began in early 1986, a great many formal manifestations thereof have been in evidence—new councils, economic associations, and ministries have been set up, enterprises have become “self-managing” and their workers have become “managers” of state property, and proposals have been made to reorganize many social organizations, in-

³⁷ SGNRB, 1987, p. 110, and Statisticheski Spravochnik 1988 (Sofia: Tsentralno Statisticheskoe Upravlenie), p. 43 (hereafter, SS).

³⁸ SS, 1987, p. 76, and SS, 1988, p. 80.

³⁹ SGNRB, 1987, p. 142.

⁴⁰ This implication of the official data is at variance with the results of a formal study employing production functions for 1950-80; see Robert Jerome, “Estimates of Sources of Growth in Bulgaria, Greece, and Yugoslavia, 1950-1980,” ACES Bulletin, Vol. 27, No. 3, Fall 1985, pp. 31-82.

cluding the trade unions and the Communist youth organization.⁴¹ And, as mentioned above, there is the *Pravilnik*, a new basic operating document for the economy.

What sort of concrete evidence is there of the progress of restructuring? In the short run, the organizational changes are often seen by both Western and Bulgarian observers as disorienting to economic decisionmakers and hence a cause of poor performance. We have already mentioned the chaotic harvest conditions of 1987. More broadly, the head of one of the new associations created in 1986 referred in December of that year to continual "reorganizations . . . [which] are becoming a national calamity."⁴² On the other hand, it will be recalled that official aggregate growth statistics do not show anything untoward happening in 1986 and 1987, except for the poor harvest in the latter year.

Another matter that can be examined in searching for the effects of restructuring is evidence of changing priorities. In his speech at the 13th Party Congress in April 1986, Party leader Zhivkov stressed the importance of achieving a "scientific and technological revolution," which he equated with establishing "mature socialism."⁴³ This stress on high technology is particularly noteworthy as regards Bulgaria's trade relationship with the U.S.S.R., to which it exports rapidly increasing quantities of data-processing and telecommunications equipment, robots, and laser optics.⁴⁴ There has even been some success in exporting robots to Great Britain.⁴⁵

Here again, aggregate statistics tell us relatively little. The data in Table 5 reveal that the share of material production in total fixed capital investment rose 3.6 percentage points over 1981-87; the share of industry rose 4.9 percentage points. Among the industrial branches, the energy sector saw its investment share almost double, while, rather surprisingly, the share of the important machinebuilding and metalworking (MBMW) sector actually fell after 1983. The investment share of electrical equipment and electronics, another locus of new technology, was one percentage point higher on the average in 1986-87 than the average for the previous FYP.

TABLE 5.—STRUCTURE OF GROSS FIXED CAPITAL INVESTMENTS

	[In percent]						
	1981	1982	1983	1984	1985	1986	1987
i. Economic sector:							
Material production	70.9	71.0	69.9	71.1	72.3	70.9	74.5
Industry	43.4	45.2	43.5	45.3	46.8	48.5	48.3
Construction	2.8	2.8	3.4	3.3	3.7	3.6	4.0
Agriculture	8.3	7.8	7.8	8.0	8.0	6.5	8.2
Transportation	11.5	9.8	9.5	9.2	8.5	7.0	10.0
Communications	1.3	1.5	1.4	1.5	1.3	1.3	1.5
Trade, et cetera ¹	3.1	3.4	3.5	3.1	3.3	3.3	1.9
Nonmaterial sectors	29.1	29.0	30.1	28.9	27.7	29.1	25.5
Housing	13.7	13.3	14.0	13.9	12.8	13.0	11.2
Science .....	.8	1.1	0.8	1.1	1.1	1.1	0.7

⁴¹ RFER, Bulgarian SR/7, Aug. 21, 1987.

⁴² RFER, Bulgarian SR/4, June 24, 1987.

⁴³ RFER, Bulgarian SR/4, Apr. 22, 1986.

⁴⁴ RFER, Bulgarian SR/7, July 29, 1988.

⁴⁵ Christian Science Monitor, Nov. 15, 1984.

TABLE 5.—STRUCTURE OF GROSS FIXED CAPITAL INVESTMENTS—Continued

	[In percent]						
	1981	1982	1983	1984	1985	1986	1987
Education	2.0	2.0	2.2	2.4	1.9	1.8	1.8
Culture and art	2.0	1.0	.9	.8	1.2	.7	.7
Health, et cetera ^a	1.2	1.8	2.4	2.1	2.0	2.3	1.8
II. Industrial branch:							
Energy	12.8	11.5	13.6	18.8	26.9	22.9	22.7
Mining	6.4	7.4	6.6	5.8	5.9	6.7	7.5
Ferrous metallurgy	7.2	6.4	6.0	6.5	7.1	7.6	6.0
Machine building/metal working	23.2	24.2	26.3	23.0	20.3	19.3	21.4
Electrical equipment/electronics	5.7	7.3	9.9	8.5	7.5	9.3	8.3
Chemicals/rubber	11.0	10.0	8.5	8.7	6.9	7.5	7.8
Construction materials	5.1	4.6	4.0	3.0	2.1	2.1	4.2
Textiles	2.8	2.4	1.9	1.8	2.2	2.6	2.4
Food	6.3	6.2	5.8	6.2	5.9	6.0	5.7

^a Includes material-technical supply and procurement.

^a Includes social insurance, physical culture, sport, and tourism.

Sources: SGNRB, 1987, p. 148, for economic sectors, and pp. 192-193, for industrial branches, for all years except 1987, for which the data are from SS, 1988, p. 71, for economic sectors, and p. 96, for industrial branches.

A better way to examine the progress of the high-technology orientation is to examine the actual and planned growth rates of the outputs of categories of products, as is done in Table 6. Unfortunately, as pointed out earlier in the paper, the Bulgarian statistical authorities make it very difficult to evaluate plan fulfillment for specific products. The table does show that the indicators for the gross output of MBMW have not been fulfilled in recent years. The growth target for this sector for 1986-90 seems wildly optimistic.⁴⁶ The performance of electrical equipment and electronics has been far better, with substantial overfulfillment of the 1981-85 plan and slight overfulfillment of a very ambitious 1986 plan. Nonetheless, here too the enormous 1986-90 growth target seems unreachable.

TABLE 6.—ACTUAL AND PLANNED GROWTH RATES OF GROSS INDUSTRIAL OUTPUT

Branch	[In percent]					
	Actual			Planned		
	1981-85 ^a	1986	1987	1981-85 ^a	1986	1986-90 ^a
Energy	4.6	2.2	13.4	5.4	6.8	.....
Mining .....	.7	9.6	5.7	.....	.....	.....
Ferrous metallurgy	2.7	4.0	.2	5.4	.....	.....
Machinebuilding/metalworking	6.4	4.0	5.1	8.5	9.2	9.2-9.9
High-quality steel .....	.....	.....	.....	.....	.....	6.5-6.7
Robots .....	.....	.....	.....	.....	.....	24.6-26.2
Agricultural machinery .....	.....	.....	.....	.....	.....	9.2-9.9
Shipbuilding .....	.....	.....	.....	.....	.....	7.0
Household appliances .....	.....	.....	.....	.....	.....	8.5
Electrical equipment/electronics	13.3	12.0	10.9	8.5	11.3	26.2-27.7
Microelectronics .....	.....	.....	.....	.....	40.0	32.0
Chemicals/rubber	7.0	4.9	1.9	7.7	5.4	.....

⁴⁶ Among the most rapidly growing individual articles within MBMW during 1980-86 were drills, buses, cars, trucks, stable compressors, and wire. Automated technological lines and modules for mechanized processing, calculating machines, televisions, telephones, and washing machines were dynamic elements of the electrical equipment and electronics sector. See SGNRB, 1987, pp. 213-215, and SS, 1988, pp. 113-114.

TABLE 6.—ACTUAL AND PLANNED GROWTH RATES OF GROSS INDUSTRIAL OUTPUT—Continued

(In percent)

Branch	Actual			Planned		
	1981-85 ¹	1986	1987	1981-85 ¹	1986	1986-90 ¹
Light chemicals.....						9.2-9.9
Pharmaceuticals.....						24.6
Construction materials.....	1.4	5.7	-7	4.6		
Wood.....	2.9	.8				
Paper.....	3.5	-.5	.8			
Glass.....	2.0	-.4	3.5			
Textiles.....	3.2	2.4	4.1			
Clothing.....	3.6	6.1	1.3			
Leather.....	6.0	3.9	5.2			
Printing.....	2.5	.0	3.2			
Food.....	2.1	1.5	.6	4.0		

¹ Annual rate. See note 2 to Table 2 for derivation of 1986-90 planned rate.

Sources: All actual data for 1981-86 are from SGNRB, 1987, p. 210; the actual figures for 1987 are from SS, 1988, p. 109. 1981-85 plan targets are from RD, Dec. 11, 1981. 1986-90 FYP targets are from RD, Dec. 25, 1986, 1986 plan targets are from RD, Dec. 13, 1985, translated in FBIS-EEU-85-247, Dec. 24, 1985.

D. FOREIGN TRADE AND BALANCE OF PAYMENTS

Table 7 presents data on Bulgarian foreign trade balances during the 1980's. A number of trends are evident. 1986 and 1987 saw a reversal of the large trade deficits that Bulgaria had built up with the other socialist countries—and especially with the U.S.S.R.—since 1978. On the other hand, with the nonsocialist countries, the surpluses of the early 1980's had become a small deficit by 1985 and much bigger deficits thereafter.

TABLE 7.—CHANGES IN FOREIGN-TRADE BALANCES

	1980	1981	1982	1983	1984	1985	1986	1987
I. FOREIGN-TRADE BALANCES								
Socialist countries (million rubles):								
Exports.....	N.A.	5,239.3	5,978.4	6,948.4	7,542.0	8,137.6	8,539.9	8,769.2
Imports.....	N.A.	5,776.3	6,521.0	7,346.6	7,888.0	8,527.8	8,516.6	8,645.3
Balance.....	N.A.	-537.0	-542.6	-398.2	-346.2	-190.2	23.3	123.9
Nonsocialist countries (million dollars):								
Exports.....	N.A.	3,302.7	3,262.8	2,856.8	3,149.2	3,073.5	2,380.6	2,786.1
Imports.....	N.A.	2,655.7	2,622.7	2,475.8	2,557.8	3,150.5	3,474.8	3,146.9
Balance.....	N.A.	647.0	640.1	381.0	591.4	-77.0	-1,094.2	-360.8
II. QUANTITY INDICES								
CMEA trade:								
Exports.....	100.0	106.0	122.2	134.2	137.4	149.7	151.9	160.7
Imports.....	100.0	101.7	103.4	109.3	110.6	113.9	114.3	117.3
Non-CMEA trade:								
Exports.....	100.0	113.4	117.1	107.9	119.7	123.7	102.2	106.8
Imports.....	100.0	134.8	143.9	149.8	156.8	201.1	222.4	198.4
III. PRICE INDICES								
CMEA trade:								
Exports.....	100.0	102.1	101.6	108.2	114.6	113.5	117.2	114.2
Imports.....	100.0	113.4	126.4	134.6	142.8	146.1	149.2	147.7

TABLE 7.—CHANGES IN FOREIGN-TRADE BALANCES—Continued

	1980	1981	1982	1983	1984	1985	1986	1987
Terms of trade.....	100.0	90.0	80.3	80.4	80.2	77.7	78.6	77.3
Annual change.....	-5.8	-10.0	-10.8	.1	-0.3	-3.1	1.2	-1.7
Non-CMEA trade:								
Exports.....	100.0	95.3	90.7	85.9	85.4	81.0	78.4	86.0
Imports.....	100.0	94.2	86.7	79.7	78.6	75.1	74.6	76.2
Terms of trade.....	100.0	101.2	104.6	107.8	108.6	107.8	105.0	112.9
Annual change.....	-2.2	1.2	3.4	3.1	.8	-7	-2.6	7.5

Sources: Foreign-trade balances are from PlanEcon Report, Vol. IV, Nos. 22-23, June 3, 1988, p. 7, and quantity and price indices are from p. 22 of same.

The quantity and price indices in the table go a long way toward explaining the behavior of the trade balances. In CMEA trade, real exports grew 61 percent over 1980-87, while real imports grew only 17 percent.⁴⁷ Such growth was necessary for Bulgaria to achieve its favorable socialist-country trade balances after 1986, because the terms of such trade were moving against it during the entire period.⁴⁸

On the other hand, favorable movement in the terms of trade vis-a-vis nonsocialist trading partners allowed the nation to avoid running deficits therewith through 1984. This occurred even though in real terms imports from such partners rose 57 percent and exports thereto increased only 20 percent between 1980 and that date. However, since 1984, Bulgarian hard-currency trade has been afflicted by rapid increases in import quantities—especially in 1985, stagnating export quantities, and unfavorable terms-of-trade movements.

Space limitations preclude breaking down these aggregative trade data by commodity or trading partner. A few observations will have to suffice. Real exports to the developed West have stagnated during the 1980's, and reexportation of imported Soviet oil continues to account for 40 percent thereof. There has been some cutback in real imports from the West after the enormous increase therein in 1985 following the terrible harvest that year. Even so, PlanEcon foresees "severe payments difficulties . . . in three of four years if [Bulgaria] continues the pattern of deficits observed since the second half of 1983."⁴⁹

Although there was substantial improvement in 1987 in the non-socialist trade balance, it was entirely the result of a near quadrupling of the trade surplus with the Third World. This was achieved by rapid growth of exports to the less-developed countries of investment machinery and equipment and of arms, and a large decrease

⁴⁷ The fact that the trade balances are reported for socialist and nonsocialist countries, whereas the quantity and price indices are reported for CMEA and non-CMEA trading partners, reflects yet another peculiarity of Bulgarian data. The Bulgarian publications reporting these figures—Iznos i Vnos and Statisticheski Izvestia, respectively—provide them only this way.

⁴⁸ As pointed out by PlanEcon, however, the 1.7 percent deterioration in CMEA terms of trade in 1987 is difficult to believe, in view of the 9 percent drop in the cost of imported Soviet oil and the substantial improvement in the ruble terms of trade for Poland and Hungary. PlanEcon also doubts that Bulgaria's CMEA exports grew faster its than CMEA imports in 1987, as indicated by the official data. See PlanEcon Report, Vol. IV, Nos. 22-23, pp. 2 and 12.

⁴⁹ *Ibid.*, p. 6.

in imports of Middle Eastern oil. As pointed out by PlanEcon, running trade surpluses with Middle Eastern nations may prove to be of little value to the Bulgarian economy—IOU's from cash-strapped oil-producing countries cannot be used to pay off Bulgaria's own loans from Western banks.⁵⁰

As far as the commodity composition of trade is concerned, the fastest growing export categories (to all countries combined) during 1981–86 were machinery and equipment (9.8 percent annually), industrial consumer goods (9.4 percent), and agricultural nonfood raw materials (6.4 percent); live animal exports have declined drastically (22.3 percent). The fastest growing import categories were repair and services (17.4 percent), food raw materials (13.2 percent), and construction materials (11.1 percent). Imports of machinery and equipment rose 8.8 percent annually over this period.^{51 52}

V. CONCLUSIONS

The 1980's have been a highly eventful period for Bulgaria, what with an extraordinarily far-reaching and complex economic-reform program moving forward in fits and starts, bad weather every other year, industrial accidents, and so on. It is surprising how little of this upheaval is reflected in the country's official economic statistics. To be sure, the crop sector has performed very poorly—indeed, consumption per capita of fruit and vegetables is declining—and there have been major increases in the prices of electricity and water to households. Plans for housing construction, capital investment, and foreign-trade turnover have been underfulfilled. Furthermore, large deficits have appeared in trade with the nonsocialist countries and it is possible that foreign-debt problems may reappear after a decade's hiatus.

Nonetheless, none of these phenomena strikes one as particularly threatening. It is interesting to speculate as to why the official picture seems relatively benign. It may well be that the problems with the official data discussed above deprive them of the ability to describe the situation accurately. But the reliability of the only available alternative estimates may be equally questionable if not more so. It thus seems that a wait-and-see attitude toward the unfolding economic drama in Bulgaria is in order, pending more reliable information. Perhaps the reforming zeal will one day infect the Bulgarian statistical authorities.

⁵⁰ *Ibid.*, pp. 9–10.

⁵¹ *Ibid.*, p. 25. These data are in real terms, but see *ibid.*, p. 24, for a critique of the derivation thereof.

⁵² One last foreign-trade fact: net debt to the Bank for International Settlements area countries reached \$4 billion in 1987, after being only \$148 million in 1984. The 1981–85 average was \$855.4 million. PlanEcon Report, Vol. 14, No. 8, p. 5.

CZECHOSLOVAK ECONOMIC REFORM: THE SEARCH FOR MINIMUM MARKET APPROACH

By Zdenek Drabek*

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SUMMARY

The purpose of this paper is to assess the recent proposals for economic reform in Czechoslovakia, which are contained in the Government-approved document "The Guidelines for Securing Complex Reconstruction of the Economic Mechanism." They call for a decentralization of the present highly centralized system of economic management to increase the efficiency of resource allocation—the main objective of the reform. However, the proposed measures are unlikely to make a significant impact. The reform moves in the direction of a more market-oriented approach but retains heavy influence of administrative resource allocation through central planning. If implemented in their present form, incentives will continue to be distorted and weak, structural policies biased and inefficient and macroeconomic policies neglected and with serious shortcomings. The implementation of the reform will be very difficult, partly because of the flaws in the proposal, partly because of internal opposition.

I. INTRODUCTION

The current economic reform in Czechoslovakia is not entirely a recent phenomenon but it has gained a considerable momentum over the last year or so. The beginning of the reform can be traced

*World Bank. Views expressed in this paper are personal. They do not necessarily reflect the view of the World Bank or its affiliates.

as early as January 1, 1978, when the Government approved a decree calling for a "Comprehensive Experiment for Controlling Efficiency and Quality of Production" and which was applied to 12 producer associations, 9 trade organizations and 21 research and development institutes. The decree was followed by the adoption of the "Set of Measures to Improve the System of Planned Management of the National Economy After 1980" (January 1, 1981), "Measures to Improve the System of Planned Management of Agriculture" (September 17, 1981), and by an extension in 1983 of the reform experiment into the foreign trade sector.

The reform intensified after the 17th Party Congress, which was held in March 1986, and which led to the adoption of the "Principles of Restructuring the Economic Mechanism (January 1987). This was followed by the completion of various draft laws, which were released for public debate in the course of the year (on state enterprises in July 1987, on agricultural cooperatives in September 1987 and on nonagricultural cooperatives again in September 1987). A degree was adopted on July 13, 1987, to regulate the activities of the private sector. The discussion of reform proposals culminated in the Resolution of the Central Committee of the Party about Complex Reconstruction of the Economic Mechanism (December 1987), and in the publication of approved Guidelines for Securing Complex Reconstruction of the Economic Mechanism (February 1988). The Guidelines represent the basic document of the reform, which seeks to define the objectives of the reform, the new role of public enterprises, planning and economic policy. In addition, it provides a timetable for broad measures. It is expected that the Guidelines will be translated into further specific measures; the first of such documents published so far is the Principles of Reconstruction of Organizational Structures of Enterprises, Reallocation and Compensation of Released Employees (Decree 40 of the Government, 1988).

The aim of the reform is what is known in centrally planned economies (CPE) as "general intensification of the economy," which has been normally understood to mean greater productivity of production factors to generate faster growth of output for a given factor employment. The messages provided by the document suggest, however, that the reformers had a broader concept in mind, one which includes an economic reform that is conducive to faster growth of technical progress and "improvement in the quality of life," which in the economist's parlance may be loosely translated as better satisfaction of consumer demand and reduction of external costs of economic growth. Nevertheless, I shall assume that the general aim of the reform is to put in place a system of economic management that will stimulate economic growth more efficiently than in the past.

The purpose of this article is to evaluate the reform proposals as contained in the Guidelines. The discussion is divided into three main sections. The following Section II outlines the principal political constraints on the introduction of economic reform. The discussion of Section III takes the assessment into the area of economic policy and that of Section IV into the area of institutional reform to ascertain the extent to which the policy reforms and institutional changes respectively are likely to be conducive to efficient eco-

conomic growth. Terms of implementation are part of Section V and Conclusions can be found in Section VI.

II. POLITICAL CONSTRAINTS ON ECONOMIC REFORM

The first issue confronting Czechoslovak policymakers is the question of urgency of economic reform. In contrast to the situation in Poland and Hungary, the burden of external debt is small and is not, therefore, the underlying factor that would call for a fundamental change in the overall economic strategy. In the absence of further external borrowing, the need for servicing heavy external debt would call for a strategy that would increase current account surpluses (reduce current account deficits) and domestic savings (reduce domestic dissavings), and restrain domestic absorption. Restrain in domestic absorption brought about by a restraint in domestic consumption would be as unpopular in Czechoslovakia as it is in other countries, in which the external imbalance is brought under control through the restraint of consumption of the population. Alternatively, restraint in absorption brought about by a restraint in investments would further endanger domestic growth and would be equally unpopular by the policymakers.

Pari passu, the internal economic scene is probably also seen by many politicians as well as economists as manageable. The economy operates at full employment, that is without open unemployment, and the inflation is kept low, according to official statistics at least. The perceptions of hidden inflation, which is believed to plague many CPE's, remain muted in Czechoslovakia. There is a sharp disagreement among economists about the state of equilibrium in the economy.¹ Moreover, since domestic growth performance has probably not yet reached crisis proportions, many Czechoslovak politicians do not perceive the need for economic reform as urgent.²

This reluctance to reform the economy is magnified by two country-specific factors; difficulty in justifying an economic reform that would resemble in any way the previous attempt, which was abruptly finished with the Soviet invasion in 1968, and which has essentially remained a "skeleton in the closet" ever since. The Government's official position toward the 1968 reform was originally very negative, but the position has been recently considerably modified. By separating the content of the reform, the authorities have accepted some "positive elements" of the reform, from the control over the reform movement, which they perceived to be completely mismanaged in the past. This has been also reflected in a relaxation on economic writings, and it has resulted in coverage of

¹ For examples of two studies reaching different conclusions, see V. Dlouhy, "Disequilibrium Models of the Czechoslovak Economy" in W. Charemza and C. Davis (Eds.) *Modelling Disequilibrium and Shortage in Centrally Planned Economies*; London: Chapman and Hall, 1988 and K. Janacek and H. Zelenkova, *K Rovnovaze Vnitřního Spotřebitelského Trhu*; Prague: Ekonomický Ústav, Study No. 292, 1988.

² Recent economic performance is discussed in detail by J. Brada in this volume. In a separate article, he argues that Czechoslovakia does not have the objective conditions, which seem to drive the current reform movement in the Soviet Union. See J. Brada: "Gorbachev and Prospects for Economic Reform in Czechoslovakia"; *Harvard International Review*, Vol. X, (November 1987), No. 1, pp. 18-21. Compare, however, writings of, for example, J. Kosta and F. Levčík: *Wirtschaftskrise in den Osteuropäischen RGW-Ländern*, Kùln, 1985.

subjects virtually taboo only some months ago.³ The second factor has been the departure from power or the country of many vocal proponents of economic reform, which has considerably weakened the domestic political pressures for radical change. As a result, economic reform does not have aggressive support within the Party apparatus, which is responsible for the formulation reform.

The third political factor constraining the pace and content of economic reform is more familiar and has been also common in other CPE's, which have been trying to decentralize their economies. There is a resistance to economic reform from Government institutions, which are likely to lose power following decentralization of economic decisions, as well as from public enterprises, which could lose considerable amount of protection and, therefore, privileges by a move to greater enterprise autonomy. The resistance to reform is well recognized even by the Government. A recent editorial in *Rude Pravo* noted that "the most difficult objective to achieve will undoubtedly be self-financing by public enterprises. Many enterprises underestimate this matter. They believe that they will have more resources for investment, for importation of machinery and equipment, and they do very little to reduce production costs and increase utilization of their capital assets."⁴ There is also a deeply rooted fear of unemployment and inflation, which tends to restrain even those economists who are actively supporting the need for reform. The Government and the Party remain committed to full employment and price stability and are not currently prepared to experiment with reform proposals that might jeopardize these objectives. As a result, the choice of economic instruments continues to be highly biased toward reliance on direct control measures (i.e., planning) to maintain control over the economy. For these as well as ideological reasons, some areas remain outside not only reform proposals but even most discussions, such as property rights or factor markets. In sum, the formulation of the blueprint for economic reform has been severely constrained by strong political factors, which has resulted in a half-hearted attempt for reform so far. I shall return to these political issues in the last section of this paper.

III. ECONOMIC POLICIES

The half-hearted nature of the reform proposal emerges in three principal areas of issues, which economic reform typically tries to address: economic policy distortions, institutional weaknesses and deficiencies in macroeconomic management. I shall define economic policies in the following discussion to include a set of Government measures and regulations, which affect the level and structure of incentives faced by economic agents (enterprises and households), the level and structure of investments and, consequently, the future production structure, and the macroeconomic balances (such as external accounts, employment or the price level). Institutional reform will be defined here to include Government measures

³ A recent article of Turek, for example, calls for "a complete withdrawal of central plan from its role as direct coordinator." See O. Turek: "Hospodarska Politika v Obdobi Prestavby Hospodarskeho Mechanizmu"; *Politicka Ekonomie*, Vol. XXXVI, (1988), No. 6, p. 579.

⁴ See *Rude Pravo*, July 20, 1988, p. 1.

and regulations, which affect the response of economic agents to incentives, their investment decisions, and those which the Government chooses to regulate macroeconomic balances (i.e., the role of direct control, that is "planning," and that of the market). This section covers the three areas of economic policy identified above, the institutional issues are left for the next section.

On the first sight, the scope of the reform proposal concerning economic policies is quite wide. Aspects of the reform have been even compared with the 1968 reform.⁵ The blueprint includes proposals to modify economic policies with intended impact on incentives as well as demand management. It includes comments on fiscal and monetary policies, wage and exchange rate policies and price policy. It includes also various structural policies—investment and regional policies, employment and labor policies, technology and social policies. However, some policies have been elaborated in the Guidelines in much greater detail than others, and various elements of the reform are not even covered. Some of the elements will be identified later in the text.

A. INCENTIVES

Price Policy

Price incentives are expected to play a greater role, but their effectiveness will be limited, and may even accentuate existing distortions. The Government anticipates that the role of price incentives will increase in future as a result of its plan to decentralize the economy, reduce the importance of central planning and to give autonomy to public enterprises. The Guidelines foresee, therefore, a liberalization of prices leading to a dual price system; most prices will continue to be fixed, but will be subject to a new wholesale price reform (originally scheduled for January 1989 but full implementation delayed). For short-term fluctuations, it will be possible to reflect "temporary changes in economic conditions by means of deviations from base prices (i.e. through surcharges and discounts to base prices), normally determined on contractual basis by the seller and buyer." For the new price system to have a positive impact on resource allocation it is vital, therefore, that the new system of incentives will eliminate whatever distortions existed in the incentive system currently in place, and that the reform does not introduce new distortions.

On both accounts the current proposals fall far short of a reasonable alternative. Even though basic distortions of the price system in Czechoslovakia are well known, the knowledge has not been translated into the new proposals. A rational price system should properly reflect not only the supply (i.e., real costs) as well as demand (i.e., market clearing) conditions but, ideally, the system should be also incentive neutral. For example, the price system should avoid to generate incentives, which have an antiexport bias, or pro-import-substitution bias or bias against innovations and technical progress. The current proposal provides few indications that this issue is being even addressed. This is a very disappointing

⁵ See J. Slama: "Československa Ekonomická Reforma 60tych Let a Současné Reformní Pokusy"; Mnichov: Osteuropa Institute, mimeo, 1988.

feature of the reform because probably a majority of economists in Czechoslovakia would like to see the end of costs-plus pricing procedures.⁶

The impact of price incentives will be also weak. This reflects the insistence of the Government to continue the procedure of price fixing, albeit probably on a smaller scale than in the past, and highly restricted scope for profit opportunities even in situations in which price flexibility is permitted. The extent to which prices will be negotiated is not yet known as the details of the price reform will still need to be worked out. It is clear, however, that the authorities have left themselves at least the option of restricting the price flexibility to only a small number of commodities by insisting on price fixing in the case of "important" products. Moreover, the Guidelines further stipulate that even the free price formation will not be free after all, but will be permitted under specific as yet not fully defined conditions. The examples quoted in the Guidelines include surcharges levied in the case of product shortages or under conditions of rising import prices. Both examples reflect not only the authorities' fear of inflation but also their reluctance to recognize the significance of market clearing properties of prices and to allow the proper allocative function of prices.

The continuation of price fixing will also carry along distortions in incentives typical for the existing price system. In addition to the adverse impact of price control on supply response in activities (markets) in which demand is strong, additional distortions arise from the existing methods of price formation. These methods have typically led in the past to various price biases, which favor capital-intensive techniques, encourage use of land and other natural resources and promote artificial transfers of products to higher price categories ("predrazovani"), and discourage, therefore, effective innovations, product improvements and enhancement of product quality and encourage hidden inflation. Insistence on price fixing causes a havoc in trying to decide on the "optimum price formula," it protects inefficient marginal producers and disregards demand considerations. Moreover, the proposed procedures for price reform to be introduced as part of the overall reform tie the new profits of enterprises to their capital stock. This has been rightly criticized as a method of discriminating in favor of capital-intensive industries.⁷ It is also highly distortionary in view of the completely unrealistic prices of existing values of fixed assets. Once again, most of these shortcomings are well known in Czechoslovakia but not necessarily accepted by everyone.⁸

The current reform proposal recognizes the problem of existing large differences between domestic and foreign prices, and calls for a reduction of the gap. However, the proposal lacks the commitment to eliminate entirely the differences. The formation of procurement prices in agriculture, for example, will continue to be based on average cost conditions in domestic production and the

⁶ For a representative position, see, for example, F. Valenta: 'Framework of Economic Reform in Czechoslovakia'; paper prepared for the UNECE Conference on Reforms in European Socialist Countries, Vienna, November 1988.

⁷ See J. Klak: "Merime Vsem Stejne?" *Hospodarske Noviny*, 1987, No. 47.

⁸ See, for example, the discussion *Polemicky o Cenach*; *Hospodarske Noviny*, 1988, several issues.

corresponding foreign prices will be but only one input in the final decision of price setting. Similar qualifications have been made for other price layers ("cenove okruhy") with the additional condition that prices will also have to reflect other objectives of economic and social policy.

The text has not so far identified whether the authorities intend to use world prices or CMEA prices as the basis for foreign prices. The integration of Czechoslovakia into CMEA market would argue for the use of "CMEA prices," as recently rightly pointed out by Brada.⁹ However, since even the CMEA prices are, at least in theory, based on world prices, and since there is also a good "customs union" argument in favor of greater trade with nonsocialist countries, the choice seems straightforward in favor of world prices.¹⁰ But these arguments are purely academic. Clearly, to the extent that the authorities will insist on administrative rather than market-determined price formation, it will be virtually impossible to stipulate the "world prices" for Czechoslovak products except in the case of highly homogeneous products or commodities already traded in world markets. In sum, the domestic price bias, which has favored domestic production rather than imports and production for the domestic market rather than for exports in the past is most likely going to persist.

Exchange Rate Policy

Similar shortcomings pertain into the new exchange rate policy. Even though the Guidelines call in Chapter IV.4 for the introduction of a "uniform, flexible ("pruzny") and realistic exchange rate, a revolutionary proposal by the standards of central planning in Czechoslovakia, the actual policy reform is inadequate. The exchange rate will continue to be determined by administrative measures, while market forces will have only small and distorting influence in this process. This will maintain the arbitrariness of exchange rate, which has characterized it until the present day.

The basis for exchange rate determination will be the adjusted average costs of earning a unit of foreign currency unit from exports, which will provide highly distorted signals. The method is based on the unrealistic assumption of uniform prices of exports in different markets and fully consistent cross exchange rates.¹¹ It also implies unrealistic assumptions about foreign protection and demand elasticities. The crown costs of foreign currency will be expressed in terms of distorted domestic prices.¹² The concept of average rather than marginal costs implies the need for subsidization of marginal producers. The calculation of crown costs of foreign currency from export transactions disregards crown costs of import substitution and it will distort, therefore, effective assessment of

⁹ See J. Brada: "Gorbachev and Prospect for Economic Reform in Czechoslovakia"; *Harvard International Review*, Vol. X, (November 1987), No. 1, pp. 18-21.

¹⁰ Briefly speaking, the argument states that CMEA is an instrument of trade diversion rather than efficient trade creation. Trade with CMEA countries is now regarded as excessive even by many Czechoslovak economists.

¹¹ The shortcoming has been well documented from the Hungarian experience. For further discussion and the implications for the Czechoslovak crown cross exchange rates, see Z. Drabek: "The East European Response to the Debt Crisis: A Trade Diversion or a Statistical Abberation?"; *Comparative Economic Studies*, Vol. XX, (Spring 1988), No. 1, pp. 29-58

¹² See discussion above.

import substituting activities. The methodology will also establish an arbitrary relative price of nontraded goods. Moreover, since prices in the intra-CMEA trade differ from world prices, the authorities are obliged to calculate a variety of exchange rates; one for trade with convertible currency areas (i.e., with nonsocialist countries), another for the so-called transferable rouble and the third set of exchange rates applicable in trade with individual socialist countries. Last but not least, the authorities intend to maintain one rate for commercial transactions and another for noncommercial transactions, further discriminating among different economic activities. Perhaps the only advantage of the new system will be the creation of a more transparent framework to assess the efficiency of foreign trade operations.¹³

Investment Incentives

Right investment incentives will, therefore, increase considerably. However, the proposal seeks considerable decentralization of investments, and importance of the current reform proposal will need to be modified if the investment climate is to be improved and biases in investment decisions minimized. The Guidelines call for decentralization of investment decisions. By transferring under enterprise "jurisdiction" essentially all projects with total value less than 500 million crowns or with foreign exchange content less than 200 million crowns. This increases the pressure on the authorities to rationalize the price and, interest rate and credit policy, the Government management of foreign exchange, foreign investment incentives, and to release other institutional constraints.

Investment decisions will continue to be heavily biased if guided by price signals provided by the new price mechanism. As noted above, the financial returns on new projects will be distorted by the failure of prices to reflect true scarcities if enterprises will appraise projects on the basis of actual prices. Complaints are already voiced in the press that the implementation of the price reform is proceeding too slowly and, more importantly, that not enough attention is paid to the reform of retail prices.¹⁴ In addition, the reformers assumed excessively low rates of return on capital, when they proposed the rate of profit of only 4.5 percent imputed into the administratively determined prices. Some enterprises are already complaining that they will find it difficult to finance even recurrent costs.¹⁵ Severe distortions could also arise from the coexistence of fixed and contractual prices. Clearly, to the extent that "contractual" prices will offer more profitable opportunities, the enterprise investment choices are likely to be scaled correspondingly. Since financial rates of return will not and should not be the guiding principle for investment decisions, the calculation of internal rates of return, the better alternative to financial returns, will be practically impossible in view of the large number of projects.

¹³ The proposal has been already criticized in Czechoslovakia by Vostatek, who calls for purchasing power parity-based exchange rate. See J. Vostatek: "Koncepte Devizovych Kurzu v Presstavbe Hospodarskeho Mechanizmu"; *Politicka Ekonomie*, Vol. XXXVI, (1988), No. 2, pp. 141-154.

¹⁴ See, for example, J. Klak: "Relace Maloobchodnich Cen"; *Hospodarske Noviny*, 1988, No. 35, pp. 8-9. See also my comments on the proposed price reform.

¹⁵ See, for example, the article written on behalf of the cotton industry by J. Cesak: "Moznosti Samofinancovani"; *Hospodarske Noviny*, 1988, series of articles entitled "Polemicky o Cennach".

The bias of investment decisions has in the past arisen also because of the presence of various constraints. Two of these, political interference in investment decisions and foreign exchange constraints, are being addressed in the reform. The impact of political interference, which in the past weakened or negated efficiency considerations in investment decisions, should be lessened by giving "enterprises full rights and responsibility (for their investments) on the basis of agreements with their investment partners." Nevertheless, the interference will not be completely eliminated; the authorities insist on "influencing such enterprise investments towards state programs of development." Clearly, the authorities are not (yet) prepared to permit enterprises to invest in gambling casinos—however high the internal rate of return may be.

The foreign exchange constraint is addressed by giving enterprises the right to open foreign exchange accounts. The additional novelty about this measure is that enterprises will be able to retain, typically for investments, a portion of their export earnings, the rest being taxed away according to predetermined tax rates. While this is a move in the right direction, it has also several shortcomings. The ruling leaves nonexporting enterprises dependent on central authorities' allocations, which will make it more difficult for them to enter the "market" for foreign exchange-intensive investments. Since these are mostly high-productivity and more competitive types of investments, the measure will discriminate against exports and production of modern commodities. The authorities also propose to tax foreign exchange earnings at a uniform rate. This will enforce the already entrenched position of existing big enterprises rather than encouraging small but progressive manufacturing establishments. The procedure will promote enterprises, which may not possess the comparative advantage in their current line of production, and it may discriminate against enterprises, which may be able to exploit future comparative advantages. For the transitional period, the authorities are proposing "individualized tax rates" in order to offset the differences in foreign exchange intensity of individual enterprises.¹⁶ As in the case of all individual rates, this will open room for political bargaining. There should be also a mechanism, which would enable to transfer, at a price, foreign exchange from "liquid" enterprises to those, which have a temporary shortage. It remains to be seen whether such mechanism will be introduced and how efficiently.

Even though the Guidelines propose a much more flexible interest rate policy than in the past, the role of interest rate in investment decisions of enterprises is likely to be dwarfed by the dominance of other factors, such as those mentioned above. Moreover, to the extent that commercial banks were to be truly self-financing financial institutions as proposed in the Guidelines, the interest rate of 6 percent, also stipulated in the Guideline, will be too low. Hence, investment demand will be severely constrained by the availability of credit. This will become an issue for those enterprises that are simply not economically viable and would have to be closed down, phased out or restructured. Investment decisions

¹⁶ See K. Hajek: "Devizovy Normativ"; *Hospodarske Noviny*; 1988, No. 35, p. 1.

under such circumstances will need to be governed by rather different procedures.

Intra-Enterprise Incentives

The effectiveness of price and investment incentives is crucially dependent on the responsiveness of enterprises, that is the responsiveness of both the managers and the workers to the signals external to the firm. The Guidelines propose, therefore, measures, which assume profit maximization of firms, fundamentally different enterprise behavior in comparison to the past. While in a properly functioning market economy the profit motive and the need to survive in the competition with other firms are sufficient conditions for firms to respond to opportunities generated through the systems of incentives, public enterprises in Czechoslovakia have been protected from competition by strict administrative controls of imports and formal elimination of markets for their products. In order to ensure enterprise behavior commensurate with plan targets, the profit motive was replaced with complex schemes of enterprise incentives. Fully aware of these shortcomings, the authorities in Czechoslovakia now propose to introduce various changes in intra-enterprise incentives. While profit maximization is a laudable goal of the public enterprise reform, it is quite evident that the proposed measures will not turn public enterprises into profit maximizers. As we shall see in the discussion of the status of public enterprises further below, the proposed measures will neither allow sufficient income for firms to retain, nor will they give them sufficient freedom to dispose their profits.

B. STRUCTURAL REFORMS

The Guidelines propose to address several structural issues but it is the general question of overall investment policy and strategy, which is arguably the most important structural policy area. Even though employment and labor issues, technological backwardness as well as continued regional disparities are a matter of some concern, the problem of inefficient industrial structure and poor efficiency performance of many public enterprises has plagued the economy for decades and should receive top priority of the authorities. Making these enterprises more efficient and viable again will require new investments (or disinvestments) in addition to various policy and institutional measures and this will call for a complete overhaul of the industrial strategy. The authorities are aware of this prerogative but they have proposed measures which have serious shortcomings.

Industrial Restructuring

The first issue arises in the context of the general question about who will do the restructuring. On this question the Guidelines are very clear when they place the dominant responsibility for restructuring to central authorities. Even though the authorities open enterprises some possibilities to initiate mergers with other enterprises (Chapter II/7), the main elements of industrial restructuring—establishment of new enterprises, bankruptcy and sectoral investment strategy—will lie in the hands of the founders (“zaklada-

telu") of state enterprises, that is in the hands of the state. Given the seriousness of structural problems, ownership of enterprises by the state and insistence on full employment as social priority, some involvement of Government authorities is probably inevitable. It is evident, however, that this involvement is intended by the authorities to be heavy, and in my view, well in excess of a smooth structural transition.

Even though the reform proposal allows for closing down of inefficient enterprises, this will take place only if approved by central authorities. This, in turn, will open up further possibilities for political bargaining between affected enterprises and the authorities, and reduce or eliminate the threat of potential bankruptcy and, consequently, the pressure on enterprises to maintain least-costs operations. Moreover, enterprises have learned over the years very well how to play the game of "restructuring and price reforms, and are already trying to make sure that they will capitalize in various rounds of the reform. For example, an editorial in *Rude Pravo* has recently complained that "many managers are deliberately disguising their reserves . . .," presumably to negotiate the most favorable conditions for price reform and/or subsidy allocations.¹⁷ The monopolization of decisions over sectoral investment strategies and about which enterprises will be allowed to operate and which not carries a tremendous responsibility of deciding which lines of production are worth preserving, or which should be phased out, where is the country's current and future comparative advantage, and who will be effectively prepared to take over the risks of running an enterprise to implement the strategy. It is quite evident that this strategy of "picking winners," which has been pursued in the past, has failed, and there is no reason to believe why the authorities will now be in better position than in the past to predict the future or even avoid the favoritism, which all structural reforms in the past have carried along.

The second important issue of structural reform in Czechoslovakia is the question about "what and who should be restructured," an issue which is far from being settled by the authorities. Even though considerable amount of literature has been written about structural deficiencies of the Czechoslovak economy, very few of these findings have been translated into specific policy actions. There is also a sharp disagreement among Czechoslovak economists and policymakers about viability of many new investment projects such as the Czechoslovak-Hungarian hydroproject in Gabčíkovo, construction of a new aluminum plant in Slovakia and others. Even more basic questions are being asked about the viability of existing plants in such sectors as steel and coal. Undoubtedly, these issues are being addressed in various special studies in different institutes or Government agencies but there is clearly no consensus which direction the structural reform should take.

Perhaps the only area of reform of industrial structure on which there seems to be a general agreement is the need for changes in the organizational structure of industries. The megalomania of the past has resulted in what Czechoslovak economists consider to be

¹⁷ *Rude Pravo*, July 20, 1988, p. 1.

the highest industrial concentration in the world for countries of comparable size and development. This has led to excessive bureaucracy, size of public enterprises, centralization of economic decisions and virtually no competition.¹⁸ The call for lower industrial concentration has been recognized in the Guidelines, which allows for the possibility of entry and exit of firms. I shall return to this issue in the discussion of institutional reform further below.

Need for Financial Restructuring

The absence of an industrial restructuring program is reflected in the intentions to continue with the practice of investment and noninvestment subsidies. This in turn reflect largely very poor financial discipline of public enterprises. A problem that is immense. For example, the share of enterprises with insufficient resources for self-financing account at present for 25 percent of all enterprises under the Czech Ministry of Industry alone. The same problem of similarly large magnitude exists in the Ministry of Construction and Housing in both republics. Even though the Government has adopted the principle of phasing out subsidies, a novel and highly desirable feature of the reform, no firm date has been set out. Without a preannounced policy, which will include a gradual phasing out subsidies to enterprises in need of financial support in the short run, subsidies will protect enterprises from domestic and foreign competition and further reduce incentives to increase their competitiveness. For other loss-making enterprises, the Government should but so far has not adopted the general principle of complete and more-or-less immediate elimination of subsidies. In sum, this will call for a master plan of comprehensive financial restructuring of all loss-making enterprises.

The Link to Price Reform

The feasibility and effectiveness of Government-managed industrial and financial restructuring and structural reforms is closely linked to price reform. The *sin qua non* for a successful industrial restructuring is a system of prices, which provides a reliable basis for project appraisal and an assessment of the viability of existing enterprises. The authorities are, therefore, correct in proposing to start the restructuring process with a price reform. As noted above, however, the price reform is unlikely to eliminate the major price distortions existing in the economy at present. This will call for shadow pricing of every single project or enterprise activity, which may be a candidate for restructuring, a monumental task, and quite clearly beyond the operational capability of the authorities to undertake.

By giving enterprises greater autonomy,¹⁹ the authorities recognize that some of the restructuring process should take place through the efforts of enterprises. This would place greater weight on the role of indirect policy instruments to stimulate industrial restructuring. The two important instruments of restructuring, the

¹⁸ See, for example, B. Satkova and S. Fejfarova: "Co Domyslet? Co Resit?": *Hospodarske Noviny*, 1987, Supplement to No. 21.

¹⁹ This issue is discussed further below.

exchange rate policy and tariff policy, do not receive the required attention in the blueprint. As we have seen above, the new exchange rate regime will provide highly distorted signals for domestic producers. Tariff reform is not even touched upon in the Guidelines. This implies continuation of the present system of administrative control of imports, which completely disguises the level and structure of protection of industrial enterprises and, consequently, the costs of protection. Restructuring becomes extremely difficult in such a setup; enterprises are protected and have little interest to reduce costs relative to their external competitors. They have also little interest to make the system of protection more transparent since this would reveal the costs of their inefficiencies either as high tariff or in the form of subsidies. Moreover, the authorities are prevented even from deciding which enterprises should be restructured due to the lack of transparency.

C. MACROECONOMIC POLICIES

The half heartedness of the reform proposal so far originates, at least in the case of pro-reform-minded economists, in the fear of inflation, unemployment and severe balance of payments pressures, should the process of decentralization proceed "too far." Many economists have been concerned about the size of accumulated cash balances of households and about the recent inflationary growth of credit. Others have emphasized chronic balance of payments difficulties in trade with convertible currency areas.²⁰ While the dangers are quite real, particularly if the authorities were to proceed too fast and adopted measures in wrong sequence, it is also evident that the macroeconomic constraints are stifling both the incentive and structural policies of the reform. This is due to the choice of the macroeconomic policy instruments and their implications for the incentive structure. In doing so, they stifle supply response of enterprises and increase the need to control the macroeconomic imbalances through control of aggregate demand.

Control of Aggregate Demand

The hesitancy to depart from the traditional system of macroeconomic management is evident from the choice of macroeconomic policy instruments. The authorities will continue to rely on direct controls of aggregate demand, which include as in the past (implicit) foreign trade quotas, continued albeit reduced control of inter-enterprise transactions, heavy albeit somehow reduced control over investment and other administrative controls of enterprise operations. These measures are being undertaken in support of the continuation of price controls, as noted above. Nevertheless, the importance of macroeconomic policies will increase. Macroeconomic policies have not been traditionally used to stimulate or contract the economy, but since enterprise autonomy will be increased, so must the importance of macropolicies.

In view of their unwillingness of the authorities to allow prices to "find their own levels," the authorities are forced to supplement direct controls by very strict controls of household incomes and

²⁰ See Brada's paper in this volume for a brief review of the issues.

heavy taxation of enterprises to manage aggregate demand. Income controls will take the form of detailed wage regulations and enterprise taxation, which will result in very limited disposable profits. The emphasis on income and tax policies will represent a continuation of the past policies, and it has been used with some success in the past.²¹ Nevertheless, this is a highly inefficient strategy; there are more efficient ways of controlling aggregate demand and, unlike incomes policies, they do not have adverse effects on supply response.

Monetary Policy

The restraint of aggregate demand takes primarily the form of strict monetary policy. The perception in Czechoslovakia for the role of monetary policy has been traditionally more "monetarist" than in Chicago, and the same philosophy is maintained in the reform proposal. The Guidelines call for a highly conservative monetary policy, which will permit the average growth of aggregate credit at a rate that is slower than the rate of growth of national income in current prices (Chapter III/2.2/d). This is probably an unrealistic objective since it assumes rising velocity of money even though we have no evidence of underlying changes in "fundamentals." Perhaps more importantly, it assumes a fundamentally different behavior of enterprises, which have been the primary users of commercial bank credit, and whose demand for credit has been difficult to contain in the past. Similar attempts have reportedly been made already once in the early 1980's when the monetary authorities were trying to curtail the access of enterprises credit but failed.²² As I shall argue further below, there is very little in the current proposal to assume that the enterprise demand for credit will be dramatically reduced on the account of better financial discipline. On the contrary, since the reform is supposed to gradually phase out subsidies, and consequently enterprise dependence on the budget, their demand for credit is likely to increase.

Furthermore, monetary policy will remain extremely passive and to some extent even a rigid tool of macroeconomic policy. The reluctance to increase the role of market forces reduces the scope both for fiscal and monetary policies. For the short-term management of the economy, the authorities make a distinction between disturbances affecting small number of enterprises, branches or sectors and those which are more widespread and affect the whole economy. They propose to use flexible credit policy only in the former case, while more fundamental disturbances will be addressed through various rationing procedures (e.g., changes in conditions for new credits and investments) and through measures affecting incomes of enterprises (such as changes in the rates of de-

²¹ In his econometric test of consumer markets in the CPE's, Dlouhy argued that the authorities' control over nominal wages together with their ability to maintain supplies of consumer goods have been the sufficient conditions for equilibrium in consumer markets. See V. Dlouhy: "Disequilibrium Models of the Czechoslovak Economy"; in W. Charemza and C. Davis (eds.): "Modelling Disequilibrium and Shortage in Centrally Planned Economies"; London: Chapman and Hall, 1988.

²² The events are described and well-documented in M. Hrnčíř: "From Traditional to Reformed Planned Economy: The Case of Czechoslovakia"; paper prepared for the First United States-Czechoslovak Round table"; Princeton, Sept. 15-17, 1988.

ductions from incomes—"regulacni odvody"). Price adjustments will be used only in the exceptional situations. No new monetary instruments are also contemplated.

Fiscal Policy

Another, and probably more serious consequence of passive monetary policy for demand management will be the need to rely more heavily on budgetary operations to absorb excess cash balances of households and particularly those of enterprises. Given the virtual absence of monetary instruments, the authorities have to resort to taxation of unwanted or unused cash balances. This will mean that taxation which is already quite heavy may have to be further increased. This would adversely affect production incentives. At the same time, the increase in enterprise taxation and budget surplus (reduction of budget deficit) would come at the time of excess demand for goods and services, a situation conducive to new investments, which will be also adversely affected through restraint on Government spending as well as reduced cash balances of enterprises. Moreover, taxation policy cannot be used as effectively and rapidly as monetary policy in targeting its impact, which will further reduce the effectiveness of macroeconomic policy. Even if the Government is successful in "taxing away" excess cash from enterprises, the tax policy will be very limited in the household sector. In contrast, the advantages of a flexible monetary policy are immediately visible; by encouraging demand for interest-bearing assets or for demand deposits through more flexible interest rate policy, the authorities would be much more effective in mopping up excess liquidity.

The third disadvantage of the emphasis on fiscal policy are the implications for the role of the Government in the economy. One adverse effect of this policy orientation will be to maintain high level of Government expenditures which is already excessive and should be reduced.

Supply Policies

Conservative monetary policy and greater role of fiscal policy together with the authorities' objective to stabilize the economy at any costs will have adverse impact on supply response and jeopardize the very stabilization objective. This stems primarily from the increased importance of direct taxation in Government revenues. Since enterprise taxation is also expected to increase, enterprise incentives will be affected adversely. In addition, the insistence on redistributing the bulk of resources through central budgets (i.e., federal and national) will further necessitate the use of direct and indirect taxation, which will further limit disposable incomes of enterprises to a minimum. The result will be the heavy tax burden of enterprises noted above. In contrast, no proposal has been so far made to increase the role indirect taxation, which has a less detrimental effect on enterprise and labor incentives.

As indicated above, the reluctance to use more actively the price system in addressing the problems of market disequilibria means that the authorities are also forced to maintain heavy reliance on income policies. This too, will adversely affect production incen-

tives. In general, the disincentive effect on the supply response will come from three sources: distorted prices, heavy taxation and strict controls over incomes. All these factors will, in turn, adversely affect the willingness of enterprise managers to commercial risks, and seek higher return but riskier types of investments.²³ Similarly, strict control of wage rates, as proposed by the authorities, will reduce labor mobility as well as labor incentives since remuneration will not be sufficiently tied to labor productivity and enterprise performance. These issues will be discussed in more details further below.

Conservative monetary policy could also become a constraint on the growth of decentralized operations of enterprises in the new system. Thus, targeting the growth of credit to the growth of national income indicates that the authorities are very reluctant to use credit to stimulate expansion in enterprise activities. For example, if enterprises have identified new profitable opportunities for investments, they may find to mobilize resources from the banking system, if the rule was to be strictly applied. The problem with the target is not of course, that it rations the quantity of credit indiscriminately rather than the structure of its use. Under the conditions of central planning of Czechoslovakia, the targeting reflects the state of monetary institutions, which remain extremely underdeveloped, and consequently do not allow to use monetary policy more flexible.

Adjustment versus External Borrowing

The adverse implications of stabilization policies could be mitigated by avoiding excessive change in domestic adjustments. Instead, macroeconomic management is characterized by the continued aversion and extreme conservatism of the authorities toward external borrowing. Even though the reform proposal does not elaborate the authorities' longrun external borrowing strategy, the reluctance to borrow is evident from the proposed treatment of temporary disequilibria, which may not necessitate under normal circumstances the need for domestic adjustment. Instead, Chapter III/3/f of the Guidelines stipulates the need for a coordinated and flexible use of all instruments of macroeconomic management under conditions of increasing pressures of macroeconomic imbalances. Such instruments will include taxes, deductions from enterprise funds, interest rates, exchange rate and other instruments of "instruments of financial, credit, wage and social policy as well as employment policy." Moreover, the Guidelines even call for further use of compulsory targets and obligatory norms. This clearly suggests great concern of the authorities to deal with macroeconomic imbalances through domestic measure rather than external borrowing.

Even though external borrowing must always be handled with great caution, the Government conservatism is clearly excessive in

²³ In principle, the riskier investments should carry higher returns. In a distorted price system existing in Czechoslovakia, however, this is not necessarily the case as the prices may reward enterprises with even poor record in technology performance, technology innovations and in product quality. In order to ensure that enterprises make progress and effort in any of these areas, greater risk must, of course, be awarded better.

this respect. External indebtedness of Czechoslovakia is fairly small and provides enough room for further borrowing. Moreover, there is a great need for modernization of industry, which will require Western technology and some financing. Furthermore, domestic savings have been in Czechoslovakia high in the past to finance high domestic investment rates, and *pari passu*, there is a need for faster growth of consumption to provide additional labor incentives. Since investments will have to be high to finance restructuring and modernization of industry, greater allowance for external borrowing should be made. Clearly, by far the best method would have been for the authorities to allow direct foreign investment in the country, but the authorities are evidently not yet ready, as mentioned above.

IV. INSTITUTIONAL SUPPORT

No economic policy can be effective in the wrong institutional environment. It is therefore, disappointing to see that economic policy changes in Czechoslovakia do not receive the proper institutional support in the reform proposals. The achievement of the basic reform objective—higher level of efficiency of the economy—is, therefore, unlikely to materialize on two accounts: poor policies and weak institutional support. In contrast to less developed countries, where the institutional issues of economic reforms are essentially the lack of infrastructure and administrative apparatus, the basic institutional problem in Czechoslovakia is to make the existing infrastructure and administration more efficient. Among these institutional issues, the focal point concerns the status of public enterprises. Nevertheless, more efficient management of the economy will also require developing some institutions, which are currently missing in Czechoslovakia, and which the reform proposals only briefly touch upon. The absence of a meaningful discussion concerning the role of a strong financial system is particularly conspicuous. These topics are covered in the following section.

A. THE STATUS OF NONFINANCIAL PUBLIC ENTERPRISES

The fundamental condition for success of economic reform in Czechoslovakia is a successful reform of public enterprises. The required supply response has to come from a much better financial discipline of nonfinancial public enterprises than in the past in addition to "putting the incentives right." As past experiences with economic reform show, however, better financial discipline cannot be mandated but will require strong motivation on the part of enterprise managers and workers to reduce costs and seek the most profitable opportunities. It is widely recognized that such a motivation is directly related to the freedom of managerial decisions, and to sufficient rewards to enterprises to take business risks. This in turn is related to price incentives discussed above and enterprise taxation, and to the need for enterprises to receive adequate protection from the legal system to carry out their business activities. This sentiment is only partially shared by the authorities who have proposed a change in the status of public enterprises.²⁴ There must

²⁴ The full text of the proposal for a new Law on State Enterprises was published in *Hospodarske Noviny*, 1987, No. 30. The law was approved as of July 1, 1988.

be also penalties for failure, which are strong enough to provide a sufficient threat to enterprise staff of reprisals for poor performance.

Perhaps the most remarkable feature of the new law on public enterprises is the declared objective to increase the autonomy of public enterprises. Paragraph 3 of the proposed law states that "enterprise is a socialist producer of commodities, which undertakes its business activity on the basis of state plan, the principle of trading on its own account (*complete khozraschot*—underlined by ZD) and of socialist autonomy." The objective represents undoubtedly a move in the right direction but, as we shall see further below, the proposal will not lead to a full autonomy of enterprises. The managerial freedom will continue to be restricted, enterprise taxation will be very heavy if not increased, and there are serious doubts whether enterprises will be adequately protected by the legal system to operate in a truly in businesslike fashion. Consequently, this would make the objective inconsistent with the assumption of profit maximizing."²⁵

Managerial Freedom

The current proposal calls for enterprises to be run on the principle of self-management and for main enterprise decisions to be taken by workers councils. Nevertheless, the managerial freedom will be restricted by a variety of factors. The clarity of the draft proposals on the new status of public enterprises is blurred and has been widely criticized by economists closely associated with the reform.²⁶ The new law will also not remove the party interference in enterprise management. Enterprise managers will be selected from candidates with "high political, professional and moral qualities" through a process, in which the party will play a fundamental if not dominant role. That role was explained by K. Urbanek, Director of the Political-Organizational Department of the Central Committee of the Party in an interview with the party organ *Rude Pravo*. "Increasing autonomy and responsibility of new enterprises. . . will increase the pressures on the party organizations. . . . This will call for changes in the structure of the party organization. . . . The party committee in each enterprise will realize the leading role of the party through Communists in the management of enterprises, unify and coordinate activities of party organizations within each enterprise towards fulfillment of economic and social role of public enterprises in accordance with party policy and to realize personnel policy of the party on the level of each enterprise. The committee will also influence the composition of organs of self-management and the selection of enterprise managers and their deputies."²⁷

²⁵ The proposals incorporated in the 1988 published Guidelines appear to be more "radical" than corresponding measures incorporated in the 1987-proposed Law on Public Enterprises. The reform movement in Czechoslovakia is clearly fluid and it is more than likely that many proposals will be modified in final drafts. The reader should be, therefore, aware of these constraints in reading this article. For this reason as well as limitations of space, detailed assessment of the new proposals is not possible. The following discussion will, therefore, refer only to the most salient features.

²⁶ See, for example, "Vedci o Zitrejsim Rizeni," *Hospodarske Noviny*, 1987, No. 44, pp. 8-9.

²⁷ See Jaka Bude: "Stranicka Vystavba ve Statnim Podniku"; *Rude Pravo*, July 21, 1988, p. 3.

The idea of workers councils has been also received with a considerable amount of skepticism within enterprises themselves. An article in *Rude Pravo* has recently admitted that "the creation of workers councils has been marred by formalism and mistrust, when for example enterprises take the easier route and elect only those who occupy already some other functions."²⁸

In addition, new enterprises will be constrained by two additional political factors. Enterprises will operate within the jurisdiction of local councils in accordance with conditions and restrictions defined in the terms of its foundations (The Guidelines, Chapter II/5). The other political factor is the explicit requirement for enterprise managers to recognize interests other than those of the enterprise. Thus, paragraph 23 of proposed law requires that all managers base their decisions on "social interests, state and economic plan and on enterprise interest."

How important will be the political influences on the behavior of public enterprises in difficult to predict at this stage and we shall have to wait and see. There is obviously nothing to preclude enterprises to become "profit maximizers," as assumed in the Guidelines. If one should go by the past experience, however, or by the experience of other CPE's, the conclusion remains a rather distant possibility. As an official commentator noted in Czechoslovak press, "as long as the principle of democratic centralism applies, the enterprise autonomy can be understood only in relative not absolute terms."²⁹ Moreover, the indications are the enterprise managers will continue to have other "arguments in their objective function," among which the profit motive will be only one. As we shall see further below, they will have to satisfy compulsory deliveries to the state and other priority tasks, which will considerably weaken their profit motive.

Financial Management

Financial management of public enterprises will continue to be severely constrained by various administrative regulations. The management will be affected on two levels: generation of resources and their disposal. First, the internal cash generation of enterprises will be subject to continued price controls, as noted above. Since it is not yet known which prices will be affected by price control, it is also unclear how different enterprises will fare. Moreover, affected enterprises will continue to be dependent on subsidies. Second, financial performance will also depend on prices in different markets and the distribution of enterprise deliveries to these markets will be decided to some, as yet unknown extent by central authorities in the form of compulsory deliveries. Once again, this will put different enterprises on different footing and will require different treatment by the authorities. This will be contradictory to the declared objective of the Government to levy uniform taxes on enterprise profits (Guidelines, Chapter IV/6.1/e) to avoid bargaining with enterprises about each individual tax rate, which is highly inequitable and wasteful, and to increase production efficiency.

²⁸ V. Bradac: "Volby Samospravy", *Rude Pravo*, 1988.

²⁹ See "Vedci o Zitrejsm Rizeni," *Hopodarske Noviny*, 1987, No. 44, p. 8.

The use of resources will also continue to be controlled. Wages will be set according to centrally determined rates, with only 10 percent of wages being tied to profits. The enterprise profit will be distributed in the following sequence: payment of interest, deductions from fixed assets, development (investment) fund allocations, profit tax and other payments to the state budget and to budgets of local councils, and to (minimum) allocations to individual enterprise funds. Minimum allocations to the fund of cultural and social needs have to be guaranteed even if enterprise obligations to the Government are not met.³⁰

Enterprise Taxation

The limitations placed on financial autonomy of enterprises stems mainly from increased taxation noted earlier. In addition, in view of the proposed method of price fixing, the rate of taxation will be highly inequitable among different enterprises. This is likely to limit the amount of retained profits by enterprises, and consequently adversely affect their incentives, and restrict resources available for investment. At the same time, increased enterprise taxation is unlikely to dramatically improve utilization of enterprise resources. The enterprise taxation will increase primarily due to the increased role of wage taxes and taxes on fixed assets of enterprises. The wage tax will be levied as a percentage of the wage bill while the rate of tax on fixed assets will be related to the current value of fixed assets as well as resources in the development fund.³¹ Enterprises will be allowed to finance wage taxes from appropriate costs allowances so that the wage tax will have very little effect on enterprise demand for and actual use of labor. The tax on fixed assets will be financed from profits, which will reduce retained profits and should, therefore, be conducive to a better use of fixed assets. Similarly with a land tax, which will be levied on agricultural land. However, as we shall see shortly, this favorable feature of the latter two taxes is offset by the allocative effect of the profit tax. Clearly, the main reason for these taxes is the effort of the authorities to secure sufficient funds for centrally financed investments and other labor-related expenditures.

Enterprises will also pay tax on profits. The tax will be levied progressively or linearly, depending on the nature of the enterprise. The tax base will be normally reduced, *inter alia*, by the amount of paid interest, which will encourage enterprises to borrow, and by the amount of deductions (taxes) on fixed assets, which will also stimulate demand for capital. Neither of these features of the profit taxation is particularly welcome under present conditions, which require best use of scarce capital. Furthermore, depreciation charges will be transferred to central budgets from those enterprises, which will be selected for phasing out, and as a novelty, the authorities plan to levy an "environment tax."

³⁰ For more details, see The Guidelines, Chapter IV/6.3. The use of resources in cooperatives are regulated under specific laws.

³¹ Strictly speaking, the tax on fixed assets is a tax on investments. It is levied not only on fixed assets but also on inventories and financial resources in the development fund. The details of the taxation proposals are in the Guidelines, Chapter IV/6.1.

Other Regulatory Environment

Activities of public enterprises, and consequently their autonomy, will be further restricted by other regulatory interventions. As noted above, the production plans of enterprises will be determined to some extent by compulsory deliveries in the case of "important" products. The compulsory targets and end uses will be selected by the authorities in accordance with their role in personal consumption, domestic production or exports, which will have to be treated preferentially by enterprises.

Another area of regulatory environment concerns entry and exit of firms into and from industries. On entry into industries, the Guidelines are rather vague and brief. The reasons are presumably those noted by a Czech economist, who remarked that "in our development so far enterprises have been 'cancelled' (rusily), but establishment of new enterprises is something completely forgotten in our economic practice."³² In this respect, a hopeful proposal is to allow enterprises to merge with other enterprises, organizations and institutions and even local councils but such mergers will be permitted only if carried out for the purpose of "fulfilling enterprise planned targets" and will be subject not only to registration requirements but also control by the authorities (The Guidelines, Chapter II/7). So far the main justification for controls has been the authorities' concern about emergence of monopolies, but very little attention has been given in the Guidelines to mergers as an instrument of rationalizing enterprise operations and establishing optimal size of production units. For example, the reform calls a comprehensive reorganization of the industrial structure by breaking up large enterprises into smaller units or by consolidating certain production establishments. While major restructuring along these lines is probably desirable in view of the extremely large industrial concentration existing in the economy at present, the major criticism of this effort must be that it will take place, as many times in the past, by administrative fiat rather than as a result of competitive pressures and purely on the basis of economic criteria.³³

B. FINANCIAL ENTERPRISES

As in a number of other areas of the reform, the Guidelines come up with a set of remarkable proposals for a financial reform but these are unlikely to be implemented without a major political commitment and change in political perceptions. The reform calls for a complete separation of central banking functions from commercial banking in the State Bank, and for a creation of other commercial banks.³⁴ The commercial banks will be organized on the

³² See A. Remes: "Bez Podniku Nelze Podnikat"; *Hospodarske Noviny*, 1987, Supplement to No. 21.

³³ Even though not translated into the blueprint, some economists have recognized the effect of market on the optimal size of enterprises. Unfortunately, their voices are only now beginning to make impact. See, for example, W. Komarek: "Czechoslovak Economy: Problems and Perspectives"; paper prepared for the First United States-Czechoslovak Roundtable, Princeton, Sept. 15-17, 1988.

³⁴ A recent meeting of the Federal Government has set a target date for the separation of the two financial institutions: Jan. 1, 1990.

principles of self-financing and *khozrashchot*, and what is known in the West as universal banking; they will be deposit-taking banks, which are allowed to provide both short-term as well as long-term credits. Commercial banks will provide credit denominated in local currency but selected, and presumably specialized banks will be allowed to give foreign currency credits. Commercial banks will be also given opportunity and incentives to expand their business beyond lending to public enterprises and households as the main source of their income. They will be encouraged to expand their lending to the Central Bank through a more profitable and flexible interest rate policy, which the Government hopes to use more effectively than in the past to mop up excess liquidity and mobilize resources for investment.

A financial sector reform along the lines proposed by the authorities will not be successful until two major issues are resolved. The first issue concerns the current relationship of banks with the "real sector." Even though banks in Czechoslovakia may not appear to have a problematic loan portfolio, many and probably a large proportion of their assets would be treated under truly commercial banking procedures as nonperforming. The lossmaking enterprises or other inefficient enterprises are protected by the financial system as long as their demand for cash is satisfied by (additional) credits or subsidies. So far, all inefficient enterprises have been always bailed out, either directly by the Government in the form of subsidies or by banks in the form of credit. Thus, the Government would have to decide first how it chooses to treat these nonperforming enterprises and assets for the banks before it decides to proceed with any other aspect of the financial sector reform.

The second issue concerns the status of banks and their role in the overall financial process. If the reform is to be truly successful, the status of banks will have to change. The reform proposal gives banks much more responsibility for lending operations than in the past. It prohibits banks to lend money in situations arising from fundamental inefficiencies of producers, it allows banks to set conditions for loan repayment in the case of arrears, and perhaps most remarkably, the Guidelines order the banks to decide on credits in accordance to the creditworthiness of their clients. At the same time, however, the measures are not radical enough. While credits should not be advanced to inefficient enterprises, the banks are instructed to provide short-term credit to enterprises, which have "temporary shortages of cash." How many times these short-term credits will be allowed to be rolled over has not been specified. Similarly, the failure to service debt by enterprises will not automatically lead to suspension on credit disbursement; on the contrary, the banks are asked to extend the maturity of loans, albeit at additional costs.

Thus, the message about the financial sector reform has been so far very confusing. In their present form, the institutional changes in the financial sector will not lead to a fundamentally different, and for the efficiency of the economy more conducive banking system. First, it is unlikely that banks will want to take the responsibility of truly commercial banks. The risks are too high politically, if they chose to refuse credit to a politically popular enter-

prise, economically if they were made responsible for closure of factories, as well as commercially, since the currently proposed level of interest rates seems to be too low (about 6 percent for the beginning of the 1990's). Moreover, the blueprint provides so many options for banks to bail out inefficient enterprises and for banks to obtain the necessary resources from the central bank that no significant change in the behavior of banks should be expected. But even if the banks wanted to apply the restrictive credit procedures for which they have been given the mandate, I am skeptical that they will be allowed by the authorities to do so *ad littera*. Clearly, if the Government wanted to close inefficient enterprises, it would not need the banks to do so.

C. CENTRAL GOVERNMENT

Physical Planning

With the decentralization of production decision, the role of planning will be modified but remains confused. While the role of the "center" should decline as more decisions are delegated to enterprises, the responsibility and involvement of central authorities in the economy will increase in specific instances. This sentiment was perhaps best expressed by the Deputy Prime Minister R. Rohlicek, who stated, "As far as central authorities are concerned, it is necessary not only to maintain but even strengthen central management of fundamental strategic and program tasks, maintaining macroeconomic equilibrium and proportionality of economic and social development."³⁵ This will be translated in practical terms into the formulation of compulsory plan targets for enterprises, which will include: (1) specific investment projects to expand or phase out particular production activities; (2) state orders in cases when the purchaser is a state institution such defense, security or for the purpose of building up reserves; (3) distribution of youth to technical schools; (4) compulsory deliveries in physical terms for different end uses of commodities which are in short supply; and (5) specific targets in physical terms for exports and imports from non-socialist countries and value targets for exports and imports from socialist countries. In addition, the authorities will stipulate compulsory limits for: (6) consumption of energy, raw materials and other materials which are in short supply; (7) centrally allocated resources for research; (8) foreign exchange resources for purchases of imports for the domestic market, those for public enterprises, which are unable to generate sufficient foreign exchange from exports and for those which are only importers and for those foreign exchange resources needed for the purchase of capital equipment; and (9) subsidies. The imposition of these limits is dictated by the serious balance of payments situation.

It is evident that the above measures represent considerable involvement of the authorities in the economy. While the involvement should be reduced considerably over the next few years the pace at which this will be implemented is slow. The current plan is to cut the extent of compulsory targets and limits by about 70 per-

³⁵ From his speech reported in *Lidova Demokracie*, June 15, 1988.

cent by the beginning of the next 5-year plan period (Guidelines, Chapter III/2.4/h). Moreover, it is also clear that they left themselves the option of maintaining the present institutional setup if there was to be a deterioration of general market situation. As more and more commodities are found in short supply, the authorities will find it necessary to intervene, and the intervention will be primarily in the form of rationing procedures (increase in the number of material balances and compulsory targets for enterprises in physical terms). To put it differently, the present reform proposals suggest that the authorities are prepared to "temper" with central planning as long as general macroeconomic situation allows it.

The continuation of physical planning will also mean the continuation of the extremely inefficient process of bargaining between enterprises and "the planners," a process that is very well known and understood in Czechoslovakia, and described in the literature.³⁶ The objects of bargaining are just about all plan targets; input allocations, output target, norms, etc. Even though the bargaining process and other shortcomings of central planning are recognized, the discussion about the place of central plan in the economy continues to be pursued vigorously in the media.³⁷

Bureaucratic "Red Tape"

On one level at least, the reform is expected to take a tangible and beneficial institutional turn fairly quickly, and that is the proposed reduction in the number and size of the central apparatus. This measure should reduce the bureaucratic "red tape." On its meeting at the end of May 1988, the Federal Government decided to reduce the administrative apparatus by 30 percent, which will affect institutions of both Governments (both Czech and Slovak—in total 5,800 people) and central administration of various industries. Branch administration of sectors will be reduced by 30 percent, the total staff of the Federal Ministry of Transport and Communication will be cut by 40 percent, and that of Federal Ministry of Metallurgy, Engineering and Electrotechnical Industry by 50 percent.³⁸ It is now obviously vital that these bureaucrats are not put into newly created positions in comparable institutions.

The authorities also hope to stimulate competition among enterprises through the changes in industrial organization discussed above as well as by a more flexible import policy but the degree of competition will be quite clearly very limited. The major reason is presence of highly unprofitable enterprises, which now survive only because of considerable support and protection of the authorities. In addition, the authorities will strictly control not only exit from industries but also the entry, as noted above. There is virtually no room for private initiative except in marginal sectors such as some services. Foreign investments will be limited to joint ventures

³⁶ See, for example, Z. Mlcoch: "Analýza Procesu Planování v Podnikové Sféře"; Prague: Ústav pro Ekonomiku a Řízení Vedeckotechnického Rozvoje, 1983.

³⁷ A good summary of the position of this group is a paper by F. Valenta: "Framework of Economic Reform in Czechoslovakia"; paper prepared for the UNECE Conference on Reforms in European Socialist Countries, Vienna, November 1988.

³⁸ See Rude Pravo, May 27, 1988, p. 1.

controlled by separate legislation. The authorities have placed considerable faith on creation of joint enterprises with enterprises in other socialist countries but the success has been so far very limited. While the authorities hope for the establishments of more than 100 percent joint enterprises, the total number established so far with Czechoslovak participation is meager.³⁹ One reason for this slow pace of establishing joint enterprises is the continued interference of central authorities in such activities; public enterprises will require no permission of central authorities for direct relations, cooperation and specialization agreements in value less than 30 million crowns. And, if as a result of these relations, the enterprises should agree on a commercial deal with their partners, the deals will have to be subject to approval of the Ministry of Foreign Trade.⁴⁰ As noted earlier, foreign competition will continue to be controlled through import restrictions and foreign exchange allocations.

V. IMPLEMENTATION OF ECONOMIC REFORM

The implementation of even this highly circumscribed blueprint for economic reform will be very difficult. This is partly because of the presence of diversified and often conflicting interests of central bodies, and of the party. More radical, better trained, and economically sensible individuals are not those who are drafting the reform proposals, and this will limit their impact on the reform. Another reason is the blueprint itself, which in its present form gives often contradictory signals, and leaves much scope for maintaining status quo. All these issues have been discussed in the previous sections. Additional issues arise in the context of reform implementation. They can be summarized under the following headings; reform experiments, timing and sequencing of the reform.

Experiments

The Government chose to begin the reform movement by testing some of the reform measures in an experimental form on a small number of enterprises. The Guidelines stipulated to expand the experiment to 20 percent of all enterprises by the beginning of 1988 but there has been already some slippage.⁴¹ While such a piecemeal approach to economic reform is economically meaningless, there is also a danger that it could be counterproductive. First, the measures tested in experimental enterprises do not encompass all the measures of the reform, some of which still have to be formulated. The most obvious example of a missing element in the present state of the experiment is the absence of rational prices. Second, the performance of experimental enterprises must undoubtedly be affected by the performance of other enterprises with

³⁹ In total only nine joint enterprises were established on the territory of Czechoslovakia by Apr. 1, 1988, as indicated by F. Valenta: ["Framework of Economic Reform in Czechoslovakia"; paper prepared for the UNECE Conference on Economic Reforms in European Socialist Countries, Vienna, November 1988.] See also V. Samal: "Mezinarodni Hospodarska Sdruzeni"; Rude Pravo, July 15, 1988, p. 6.

⁴⁰ See interview with the Minister of Foreign Trade J. Sterba, "Cilem je Rozvoj Exportu," Rude Pravo, July 14, 1988, p. 1.

⁴¹ In total, 412 public enterprises were selected for the experiment by the time of approval of the new law on public enterprises. See Rude Pravo, July 8, 1988, p. 2.

which the former act as purchasers of inputs, sellers of their output, etc. As it is popular now to say on the streets of Moscow, "trying an economic reform on an experimental basis is like trying to drive on the right-hand side, even though everybody else is driving on the left-hand side." Third, experimental enterprises have been criticizing central authorities for frequent changes in basic conditions of the experiment and for slow reviews of the regulations.⁴² Fourth, unsatisfactory progress of the experiment could be used by opponents of the reform as evidence of the reform failure, even though the real reason may have been quite different.

Sequencing

The third major issue concerning the implementation of any economic reform is the question of sequencing individual elements of economic reform. One of the most worrying aspects of the reform is that the question of sequencing has so far been given virtually no official attention. The only exception is the recognition that price reform must come first before other elements of the reform are introduced. This is undoubtedly the right decision because price reform must precede reform in the real as well as in financial sectors. In contrast, three other known cases of recent decisions would suggest serious flaws in judgment.

One example of poor sequencing is the introduction of the experiment in a limited number of enterprises, as noted above. In the same manner as the authorities propose to introduce overall price reform first, the current experiment should have been preceded by corresponding price rationalization. Another example is the reform of the financial sector which the authorities propose to reform at about the same time as the real sector. As also explained earlier, this sequencing would be simply economically meaningless.

The third case of questionable sequencing is the attempt to address first the incentive structure without adopting appropriate macroeconomic measures. This micro-first approach appears to have two major flaws: by insisting on restricting the market-based approach to macromanagement, the authorities continue to maintain highly distorted system of incentives. In other words, they fail to address fully precisely the area, which they seek to rationalize. In addition, the reform will be ineffective also because the authorities insist on pursuing highly inefficient macroeconomic policies.

The first general question concerning reform sequencing is the concern about macroeconomic implications of economic reform. Economic reform leading towards more market-oriented system need not result in a deterioration of macroeconomic situation. Indeed, the correct management of macroeconomic policies, together with right microeconomic incentives, should be the part and parcel of economic reform. It seems that this point is being realized in Czechoslovakia only slowly.⁴³

⁴² See Rude Pravo; "S. Pripravou Zazit Hned," July 20, 1988, p. 1.

⁴³ An empirical assessment of the Czechoslovak and Hungarian reforms has been attempted by K. Dyba: "Ekonomicka Reforma a Makroekonomicka Vykonnost"; *Politicka Ekonomie*, 1988, No. 6, pp. 669-677. However, a considerable amount of evidence has been collected by the World Bank in the assessment of economic reforms around the world.

Once the principle of market-based approach to macroeconomic management were to be accepted, the authorities may need to properly sequence different elements of the macropolicies. The reform in Czechoslovakia has not even reached the state of discussion of this question until now. The third component of the sequencing package is the order in which one should liberalize different elements of the incentive structure. It is only in this area that the authorities have made a feeble attempt to work out a solution, but this is highly incomplete and erroneous.

Timing

Economic reform can be introduced either gradually, which would allow slow adjustments, or rapidly, which would subject economic agents to a "shock treatment." Examples of both approaches can be found both in socialist and nonsocialist countries. Fairly rapid reforms have been introduced in China and, especially, Viet Nam, Argentina, and Algeria. In contrast, reforms have moved relatively more slowly in, for example, Hungary, where the first steps were taken already in about 1968. The proposal in Czechoslovakia "aspires" to be the slowest as indicated in the Appendix. The Guidelines do not even consider to move beyond price reform, organizational changes and training of cadres before the beginning of 1990s.

Given the reality of political aversion for a change in general and for economic reform in particular, the slow pace of reform in Czechoslovakia has been undoubtedly related to the events in Moscow. The struggle for "perestroika" in the Soviet Union has been fluid and uncertain enough to allow opponents of economic reform in Czechoslovakia to slow down their own process and dilute the proposals to the half-hearted attempt discussed above in the text. At the same time, the economic situation has not created a sufficiently strong sense of urgency among the politicians to drive the momentum of reform internally. The supporters for radical and much faster economic reform do exist but they are still in the wings of political process, exasperated by the slow pace and frustrated by the lack of commitment to a reform which would go beyond the current proposal towards a genuinely market-oriented solution. Even though their voices are heard more and more and often with surprising sharpness, they have been limited so far primarily to professional journals, internal discussion groups or conference papers. This is further complicated by the diversity of views, which always surrounds, to nobody's surprise, discussions of economic reform.

The recent events in Moscow could easily affect the reform movement in Czechoslovakia once again, this time bringing along an ironic twist to the process. The political changes in the Soviet Communist Party have consolidated the positions of reformers in the political leadership of the Soviet Union, and are likely to affect the Soviet relations with allies in Eastern Europe. When the last chapter of the failed economic reform in Czechoslovakia was closed in 1969, many Czechs and Slovaks concluded that the next attempt for liberalization in Czechoslovakia will have to come from the

Soviet Union itself. The history will tell that they might have been right.

VI. CONCLUSIONS

The reform blueprints released by the Government so far represent a relatively striking albeit a mixed bag of proposals for a change in economic management. They cover proposals for policy changes, which address issues of incentives, structural changes and macroeconomic management, and for institutional reforms. On the whole, the blueprint has ingredients for an improvement in the management of the economy. They set a fairly interesting agenda of issues, which go beyond superficial changes of central planning. The proposals call for an autonomy of enterprises to increase their financial discipline and economic efficiency, for liberalization of the pricing mechanism to rationalize the price system and for a decentralization of economic decisions to reduce the highly inefficient bureaucratic meddling in microeconomic management. Perhaps even more significantly, the Government realized that it will need to reform not only the "real" sector of the economy but also the financial institutions to increase "monetization" of the economy. Moreover, the reform proposal reflects a recognition of the Government of serious structural difficulties, and essentially calls for an industrial restructuring strategy, which may involve phasing out or even closing down of inefficient plants.

While the proposals include some positive elements, the reform is unlikely to bring about increased efficiency of the economy. Even though the proposed pace of the reform is much too slow to the liking of the present writer, the issue at stake here is the content of the reform proposals. The incentive structure may be improved with the introduction of "contract prices," but their role will be limited. The remaining components of the price system will retain the major characteristics and shortcomings of the current mechanism. Ultimately, the advantages and disadvantages of this "dual" price policy may be extremely difficult to reconcile, as the Chinese authorities have recently discovered. In addition, even if prices were set "right," the response of enterprises will remain very weak partly because enterprise managerial freedom will continue to be highly restricted, partly because enterprise taxation will be high, and, last but not least, penalties for failure will be small.

The existing perceptions about structural reforms are rather naive. It puts the responsibility for restructuring on central authorities which implies "picking" winners, a task they had performed poorly in the past as evidenced by the serious structural disequilibria, and they are unlikely to do a better job in the future. This does not deny, of course, a role for the Government in the restructuring process but that role should be limited to providing temporary relief and assistance in the transitional period and to creation of the right regulatory and competitive environment. In addition, the restructuring of industries and enterprises will be futile in the presence of major price distortions. Investment decisions will continue to be biased, and it will be impossible to ascertain viability of financial enterprises without "shadow pricing" all transactions in the economy.

Last but not least, the reform makes very little impact on the future conduct of macroeconomic policy. As a result, the authorities are unlikely to be more effective in controlling aggregate demand, even though they may be able to prevent open inflation by controlling prices and by their reliance on direct controls. At the same time, however, these policy measures will adversely affect incentives and will have detrimental impact on the supply response of enterprises.

The implementation of the reform will be also very difficult. The signals provided by the blueprint are sometimes contradictory, and imprecisely spelled out, which will provide opportunities for different interpretations and therefore delays. There are also inconsistencies between some policy measures, which could have conflicting impact if fully implemented. No serious thoughts have so far been given to issues such as sequencing of the reform, better conduct of macroeconomic policies, coordination between macro- and micro-economic policies. In addition, opposition to reforms is coming from different strata of the society, whose interests are deeply entrenched in the present inertia. The sailing will be undoubtedly rough even if good economic policies and institutions were to be found.

APPENDIX. TIMING OF PREPARATORY STEPS FOR ECONOMIC REFORM (SELECTIVE STEPS)

1. Transfer of selected branches to experimental status (January 1, 1988).
2. Implementation of new rules for credit policy (January 1, 1988).
3. Implementation of new wage policy (January 1, 1989).
4. Assessment of performance of experimental enterprises (April 30, 1989).
5. Adjustment and introduction of new depreciation rates (May 31, 1989).
6. Draft program for rationalization of turnover tax (2nd semester, 1989).
7. Draft program for reduction of noninvestment subsidies (rules: June 30, 1989, details: June 30, 1990)
8. Implementation of new foreign exchange norms toward nonsocialist countries (selected branches: January 1, 1989, all branches: January 1, 1990).
9. Implementation of wholesale price reform (January 1, 1989).
10. Introduction of uniform exchange rate (June 30, 1988).
11. Tax on wage fund and profit tax (draft proposal: January 1, 1989, implementation: January 1, 1991).
12. New interest rates (December 31, 1988).
13. Draft proposal for separation of central banking and commercial banking (May 31, 1988).
14. Draft proposal for changes in central administration and industrial structure and for manpower planning (1988).

CZECHOSLOVAK ECONOMIC PERFORMANCE IN THE 1980'S

By Josef C. Brada ¹

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SUMMARY

The Czechoslovak economy grew slowly in the early 1980's due to a deflationary policy aimed at restoring equilibrium in the investment sector and reducing the country's hard currency debt. To some extent these objectives were fulfilled, but the economy underwent no fundamental restructuring or improvement in economic efficiency. Although there are domestic reserves that can be tapped to produce faster rates of growth and although imports of western machinery and equipment can be increased, the failure to eliminate longrun barriers to growth and international competitiveness suggests that the effect of policies intended to produce an economic expansion will be short lived.

I. CZECHOSLOVAK ECONOMIC GROWTH IN THE 1980'S

A. AGGREGATE GROWTH

Czechoslovak economic growth in the 1980's reflects both the operation of long-term trends in the economy the effects of shorter-term forces, including exogenous shocks and macroeconomic policy. As Table 1 shows, the growth of Net Material Product (NMP) in the 1981-85 Five Year Plan continued a slowing trend that began in the 1960's. This long-term slowdown in economic growth is due to a number of factors, among them an aging population; a capital stock that is both overage and technologically unsuited to the requirements of the economy; and a failure to move resources from

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sectors that are technologically stagnant and internationally uncompetitive to those where factor productivity is growing rapidly and where demand is increasing. In addition, the natural resource base of the economy has declined at an accelerating pace, creating higher input costs as well as grave environmental problems. The problems are all the more troubling because labor productivity growth has slowed despite the continuing increases in capital per worker, suggesting fundamental problems in generating technological progress and in stimulating the economy through capital formation.

TABLE 1.—REAL AGGREGATE GROWTH IN CZECHOSLOVAKIA

	1971-75	1976-80	1981-85	1981	1982	1983	1984	1985	1986	1987
Growth rate (percent/year):										
Net material product.....	5.7	3.6	1.8	-0.1	0.2	2.3	3.5	3.0	2.6	2.0
Employment.....	.5	.8	.7	.7	.4	.4	.9	1.0	1.3	.8
Fixed capital stock.....	5.4	5.6	4.8	5.6	4.7	4.5	4.7	4.7	4.6	
Output/worker.....	5.2	2.8	1.1	-.8	-.2	1.9	2.6	2.0	1.3	1.2
Capital/worker.....	4.9	4.8	4.1	4.9	4.3	4.1	3.8	3.7	3.3	
Gross investment.....	8.2	3.5	-1.0	-4.6	-2.3	.6	-4.2	5.4	1.4	3.7
Ratio of net investment to net material product (percent).....	20.2	20.1	14.2	16.3	15.2	13.6	12.9	13.0	17.9	18.2

Sources: Federální Statistický Úřad, Historická Statistická Ročenka ČSSR. (Prague: SNTL-ALFA, 1985.) Federální Statistický Úřad, Statistická Ročenka ČSSR 1987. (Prague: SNTL-ALFA, 1987.) PlanEcon Report, Vol. IV, No. 6 (Feb. 12, 1988.)

The record for the 1980's also shows the workings of two sets of shorter run influences: exogenous shocks and economic policy. Among the external events influencing economic performance in the 1980's were rising energy prices which, under the CMEA pricing formula, continued to increase through the 1980's, as well as restrictions imposed by the Soviet Union on its exports of petroleum to Czechoslovakia. The recession in Western Europe and the deflationary policies implemented by many CMEA countries limited the demand for Czechoslovak exports at a time when the inclination both of western bankers to lend and of Czechoslovak leaders to borrow reached their nadir, thus restricting needed imports.

Nevertheless, the bulk of the difficulties encountered by the economy in the 1980's stemmed from internal factors and policy mistakes rather than from external factors.² The genesis of these problems lay in the policies followed in the 1970's. The fifth Five Year Plan (FYP) was reasonably well conceived but implemented in a rather inflationary way that led to excessive investment. The sixth FYP (1976-80) was *ex ante* infeasible and led to excessive outlays on capital formation, so that the share of net investment to NMP reached a peak of 21.8 percent in 1977 and declined only slightly in 1978.³ In 1979, in response to the disequilibria created

² Support for this assertion can be found in Karel Dyba and Václav Kupka, "Přizpůsobení československé ekonomiky vnějším nárazům." *Politická ekonomie*, Vol. 32, (1984), pp. 43-55; Ivan Šujan, "Analýza podielov jednotlivých faktorov na spomalení tempa rastu českoslovenkej ekonomiky v rokoch 1975-1980." *Politická ekonomie*, vol. 30, (1984), pp. 545-610; and Ivan Šujan, "Analýza príčin spomalenia rozvoja čs. ekonomiky v r. 1980-1985." *Politická ekonomie*, vol. 35, (1987), pp. 289-307.

³ The macroeconomic feasibility of the fifth and sixth FYP's is examined in Josef C. Brada, Arthur E. King, and Don E. Schlagenhauf, "Policymaking and Plan Construction in the Czecho-

Continued

by the plan, evident for example in the volume of incomplete investment projects, as well as to the deteriorating external situation, a policy of macroeconomic deflation was adopted. Thus for 1979 and 1980 met investment levels were nearly 10 percent less than they had been earlier in the FYP period.

As can be seen from Table 1, this deflationary policy continued until 1985. During 1981-85 gross investment declined in 3 of the 5 years and the ratio of net investment to NMP was well below the levels of the previous decade. This policy had some success in reducing the backlog of unfinished investment projects, in protecting living standards, and in reducing domestic absorption to free up resources for export. These success were purchased at the cost of virtual economic stagnation for the 1980-82 period, including virtually no increase in NMP and a deferral of the renovation of an aging and inefficient capital stock.

The resumption of economic growth in 1983, followed by even better performance in 1984 and 1985 appeared to have vindicated the deflationary policy of the previous 5 years. The FYP plan for 1986-90 called for NMP to grow at an annual rate of 3.4 to 3.5 percent and for investment levels to be raised. While the later objective has been met, the former has not. Growth of NMP in 1986 and 1987 decelerated despite relatively large increases in the labor force. The plan for 1988 calls for a growth of NMP of 2.7 percent. This suggests that the entire FYP will be underfulfilled since it is inconceivable that the economy could grow at a rate in excess of 5 percent for 1989 and 1990. Indeed the question is whether the deflationary policies implemented at the beginning of the decade have not, in fact, reinforced the longrun slowing trend of the economy rather than setting the stage for a reversal of the country's economic decline.

B. INDUSTRY

A comparison of Tables 1 and 2 reveals that it is the performance of the industrial sector that largely determines the growth of aggregate output. Consequently the discussion of economic policy and the resulting pattern of growth in the 1980's of the foregoing section applies to industrial performance as well. While the deflationary policies of the early 1980's reestablished some measure of macroeconomic equilibrium, they failed to achieve any great restructuring of industry away from energy intensive "smoke stack" industries toward less energy and material-intensive "high tech" sectors. Nor was much success achieved in creating conditions favorable to fostering "intensive development," or growth based on increasing factor productivity rather than on the growth of factor inputs. Restructuring was hampered both by the decline in investment funds and by the political power of the well established traditional industries. Intensive development was blocked by the failure to reform the dysfunctional system of economic management and, as we shall see below, by the macroeconomic policies in force during the 1980's.

slovak Fifth and Sixth Five-year Plans." In Joint Economic Committee, United States Congress, *East European Economic Assessment, Part I*. Washington: U.S. Government Printing Office, 1981.

TABLE 2.—GROWTH OF CZECHOSLOVAK INDUSTRY

	1971-75	1976-80	1981-85	1981	1982	1983	1984	1985	1986	1987
Growth rate (percent/year):										
Gross industrial output.....	6.7	4.7	2.7	2.1	1.1	2.8	4.0	3.5	3.2	2.3
Employment.....	.6	.5	.5	.6	.4	.5	.4	.5	1.3	.0
Fixed capital stock.....	5.6	6.1	5.5	6.7	5.2	4.6	5.2	5.8	5.4	
Output/worker.....	6.1	4.2	2.2	1.5	0.7	2.3	3.6	3.0	1.9	2.3
Capital/worker.....	5.0	5.6	5.0	6.1	4.8	4.1	4.8	5.3	4.1	
Gross investment.....	7.2	5.8	-1.4	-1.4	-4.4	-3.0	-4.8	6.5	2.7	5.0

Sources: Federální Statistický Úřad, Historická Statistická Ročenka ČSSR. (Prague: SNTL-ALFA, 1985.) Federální Statistický Úřad, Statistická Ročenka ČSSR 1987. (Prague: SNTL-ALFA, 1987.) PlanEcon Report, Vol. IV, No. 6 (Feb. 12, 1988).

These factors are clearly responsible for the inability of industry to accelerate growth during the 1986-90 FYP. Indeed, the authorities have complained that some of the growth achieved was due to plan overfulfillment by industries that should not have grown, either because of their excessive material intensiveness or because there was insufficient demand for their products. At the same time, those sectors that were to be favored, such as electronics, failed to meet their targets. Thus, the deflation of the early 1980's has provided industry with a cushion of unutilized or underutilized inputs that can be mobilized to increase the growth of production once the deflation pressures are eased. However, the period of deflation has done nothing to reallocate resources, and, as a result, the old industrial structure, with all its attendant problems began to reemerge when the economy accelerated in 1984 and 1985. Thus industrial growth has been slowed once again to permit more restructuring. This, like the case of the NMP targets, suggests that the FYP goals for the growth of industrial production cannot be met.

C. AGRICULTURE

Developments in agricultural production were less affected by the deflationary policies of the early 1980's than was the case in industry. Nevertheless, the determination to make Czechoslovakia self-sufficient in most temperate-zone agricultural products did receive an impetus from the import-substitution policy stance adopted in the face of Czechoslovakia's worsening terms of trade. A key to this policy was to increase crop production, especially that of grains and fodder, and thus to reduce dependence on imports. As Table 3 indicates, this policy, implemented by a rapid increase in agricultural capital formation, proved successful. Crop production grew more rapidly than did animal production. Moreover, modest growth in meat, egg and milk production was achieved with lower herd levels, indication of improved efficiency in the livestock sector.

TABLE 3.—GROWTH OF CZECHOSLOVAK AGRICULTURE

	1971-75	1976-80	1981-85	1981	1982	1983	1984	1985	1986	1987
Growth rate (percent/year):										
Gross agricultural output.....	2.3	2.0	1.8	-2.5	4.4	4.2	4.4	-1.6	0.6	0.9
Crop.....	1.6	1.9	2.7	-5.3	13.9	2.8	6.1	-4.1	-2.5	2.1
Animal.....	2.8	2.2	1.3	-5	-2.0	5.4	3.1	.4	2.9	.0
Employment.....	-2.7	-1.4	-2	.0	-0.8	-1.4	.9	.5	-5	

TABLE 3.—GROWTH OF CZECHOSLOVAK AGRICULTURE—Continued

	1971-75	1976-80	1981-85	1981	1982	1983	1984	1985	1986	1987
Fixed capital stock.....	5.9	6.5	5.8	6.1	5.3	5.6	5.8	6.4	5.6	
Output/worker.....	5.0	3.4	2.9	-2.5	5.2	5.6	3.5	-2.1	1.1	
Capital/worker.....	8.6	7.9	6.0	6.1	6.1	7.0	4.9	-5.9	6.1	
Gross investment.....	11.3	.8	6.3	5.0	4.6	12.6	1.6	7.8	3.0	

Sources: Federální Statistický Úrad, Historická Statistická Ročenka CSSR. (Prague: SNTL-ALFA, 1985.) Federální Statistický Úrad, Statistická Ročenka CSSR 1987. (Prague: SNTL-ALFA, 1987.) PlanEcon Report, Vol. IV, No. 6 (Feb. 12, 1988).

Since the acreage devoted to crops has remained relatively stable, increases in output as well as year to year fluctuations depend largely on the evolution of yields. In this regard, the years 1982 to 1984 were favored by good growing conditions with the 1984 grain harvest being a record one, and thus the slight decline in crop output in 1985 and the subsequent slow growth of crop production must be viewed in this context. Total grain production for the current FYP is at or ahead of plan targets. This, coupled with the greater efficiency in the utilization of feeds in the livestock sector represent a favorable development for the current FYP. Nevertheless, agriculture's ability to contribute to further growth in constrained, in part because it is vulnerable to weather induced reverses, which in fact have had unfavorable impacts on fruit and vegetable production, in part because of serious environmental problems and lastly because the sector appears to be doing as well as can be expected.

II. PRODUCTIVITY: THE EFFECTS OF SYSTEM AND POLICY

A. LABOR AND CAPITAL PRODUCTIVITY

The foregoing discussion of Czechoslovak economic performance suggests that the key to understanding the long-term decline in economic growth and the possibilities for a reversal of that trend lies in the performance of industry. In this regard Czechoslovak growth prospects are no different from those of the Soviet Union and the other socialist countries of Eastern Europe. In all of these countries the industrial labor force is stagnant if not declining, and the growth of capital is also slowing. To maintain rapid rates of growth the emphasis has been shifted from the growth of the factors of production to increases in their productivity, that is from extensive to intensive development. In both the West as well as in the socialist countries themselves the investigation of the growth slowdown has centered around the estimation of production functions that relate the growth of industrial output to the growth of labor and capital inputs and to technological progress.⁴

Out of this research, two competing explanations for the slowdown in growth have evolved. One is that industrial production can be characterized by a Cobb-Douglas (CD) production function with

⁴ For a survey of this literature see Josef C. Brada, "The Slowdown in Soviet and East European Growth." *Osteuropa Wirtschaft*, vol. 30, No. 2, (1985), pp. 116-128, and Gur Ofer, "Soviet Economic Growth: 1928-1985." *Journal of Economic Literature*, vol. 25 No. 4, (December 1987), pp. 1767-1833.

steady or declining technological progress.⁵ The alternative explanation is that industrial production can be characterized by a CES production function with a low elasticity of substitution between capital and labor and steady rates of technological progress.⁶

In the case of Czechoslovakia, the application of such production functions, estimated by traditional econometric methods, presents serious problems. As already mentioned, severe deflationary policies were implemented in the early 1980's. In a market economy such policies would result in layoffs of workers, yielding an appropriate measure of labor inputs. In the case of a socialist country such as Czechoslovakia such layoffs were not possible, and thus both labor and capital were underemployed.

To gauge the extent to which resources in Czechoslovak industry became underemployed, I estimated a frontier production function of the Cobb-Douglas form for Czechoslovak industry for the period 1960-85. The frontier production function assumes that points in input-output space lie on or below the production frontier. Points on the production frontier represent outputs achieved under the economy's best practice; those below the frontier reflect various levels of inefficiency in input use, relative to the economy's best allocations.⁷ Thus, in the frontier production function framework, changes in output can be disaggregated into changes in factor inputs, changes in technical efficiency or the distance of the economy from the production frontier, and to technical progress.

TABLE 4.—TECHNICAL EFFICIENCY IN CZECHOSLOVAK INDUSTRY, 1960-85

Year	Technical efficiency	Year	Technical efficiency	Year	Technical efficiency
1960	97.64	1969	97.76	1978	94.77
1961	99.74	1970	99.76	1979	91.86
1962	99.06	1971	99.52	1980	88.96
1963	92.53	1972	99.95	1981	84.38
1964	90.24	1973	100.00	1982	80.15
1965	91.74	1974	100.00	1983	77.88
1966	93.84	1975	99.69	1984	76.10
1967	96.83	1976	97.73	1985	74.13
1968	97.48	1977	96.35		

The estimated equation is:

$$Y = 0.996e^{0.0244K^{0.741}L^{0.259}}$$

where Y is an index of industrial production and K an index of the industrial capital stock, both in constant prices, and L an index of hours worked in Czechoslovak industry, and t represents time. Table 4 presents the resulting estimates of the technical efficiency

⁵ See, for example, Robert Whitesell, "The Influence of Central Planning on the Economic Slowdown in the Soviet Union and Eastern Europe: A Comparative Analysis," *Economia*, vol. 52, No. 206 (May, 1985), pp. 235-244, and United Nations Economic Commission for Europe, *Economic Survey of Europe in 1985-1986*. New York: United Nations, 1986.

⁶ See Jan Kláček and Alena Nésporová, *Produkční funkce a modelování ekonomického růstu v CSSR*. Prague: Akademia, 1983.

⁷ For a fuller explanation of the frontier production function and related estimation techniques, see Mieko Nishimizu and John M. Page, Jr., "Total Factor Productivity Growth, Technological Progress and Technical Efficiency Change: Dimensions of Productivity Change in Yugoslavia, 1965-78," *Economic Journal*, vol. 92, No. 368 (December 1982), pp. 420-936.

of Czechoslovak industry as measured by the ratio of actual to frontier production. The effects of the deflationary policy on technical efficiency are amply evident, with the 1979-85 levels of technical efficiency at unprecedented levels. If industrial inputs had been utilized with the same intensity they had been in the early 1970's, then industrial output would have been 20 to 25 percent higher. Although some of the decline in technical efficiency may be attributed to the system of economic management, and therefore amenable to reversal by the introduction of economic reforms, the bulk of the decline must reflect the effects of macroeconomic policy. What is troubling is that while the gap between actual and frontier production represents a form of "hidden reserves" it is not at all evident that these can be tapped. In large part the decline in efficiency represents the wastage of labor time through idleness, reduced effort and slack labor discipline. The performance of industry in the 1984-87 period suggests that workers' and managers' attitudes toward work have been permanently altered during the period of deflation and that reversing these attitudes will prove difficult. However, unless such a change can be brought about little progress can be made in reversing the longrun decline in Czechoslovak factor productivity. Perhaps even more serious is the fact that, unlike in a market economy where workers would become unemployed thus forming a pool of mobile labor and where scrapping of capital would be accelerated through firm failure and consolidation, in Czechoslovakia workers have remained at their old posts and capital has been preserved. Indeed, interbranch mobility of labor in Czechoslovak industry was lower in 1981-85 than in any other socialist country.

B. EFFICIENCY OF MATERIAL AND ENERGY CONSUMPTION

Both by the structure of final out and by the inefficiency or technological backwardness of its production techniques, the Czechoslovak economy is, by international standards, excessively material and energy intensive.⁸ While the deflationary policy of the early 1980's slowed the growth of demand for energy, both by slowing overall economic activity and by generating some favorable structural changes, such as an absolute decline in steel production, it did little to make any qualitative improvements in the efficiency of energy and resource utilization.

As Table 5 shows, there was some improvement in the energy to NMP ratio, although it is difficult to determine the distribution of these improvements among alternative sources, including the distribution of energy savings between households and productive sectors or the distribution between genuine energy savings and those created by shortages and rationing. The energy balance remained tight for the entire period, with primary energy production growing at 0.5 percent per year during 1981-85 and slightly faster thereafter. Some of these increases came from added electricity

⁸ See Jiri Sláma, "An International Comparison of Sulphur Dioxide Emissions." *Journal of Comparative Economics*, vol. 10, No. 3 (September 1986), pp. 277-292, and Stanislaw Gomulka and Jacek Rostowski, "An International Comparison of Material Intensity." *Journal of Comparative Economics*, vol. 12, No. 4 (December 1988).

generated by new nuclear power plants which now account for nearly 26 percent of electricity generated.

Coal production, which is Czechoslovakia's primary source of energy import substitutes, peaked in 1984. Given the grave environmental problems associated both with the mining and the burning of coal, the more so as the share of soft coals in total output has risen, as well as the economic costs involved, further energy conservation would appear to be the only viable course for Czechoslovak authorities. Unfortunately neither the existing system of management, nor the past achievements in this area suggest that the 1986-1990 goals for improved energy utilization can be met.

TABLE 5.—INDEXES OF THE EFFICIENCY OF ENERGY AND MATERIAL INPUT USE, 1980-86

	1980	1981	1982	1983	1984	1985	1986
Primary energy consumption/NMP ¹	100	99.2	98.0	97.1	95.1	94.5	93.6
Material inputs/NMP ^{1,2}	100	100.7	101.8	102.4	100.7	99.8	100.1

¹ NMP in constant prices.

² Material inputs valued at constant prices.

Sources: Federální Statistický Úřad, Statistická Ročenka ČSSR, 1984 and 1987. (Prague: SNTL-ALFA, 1984, 1987.)

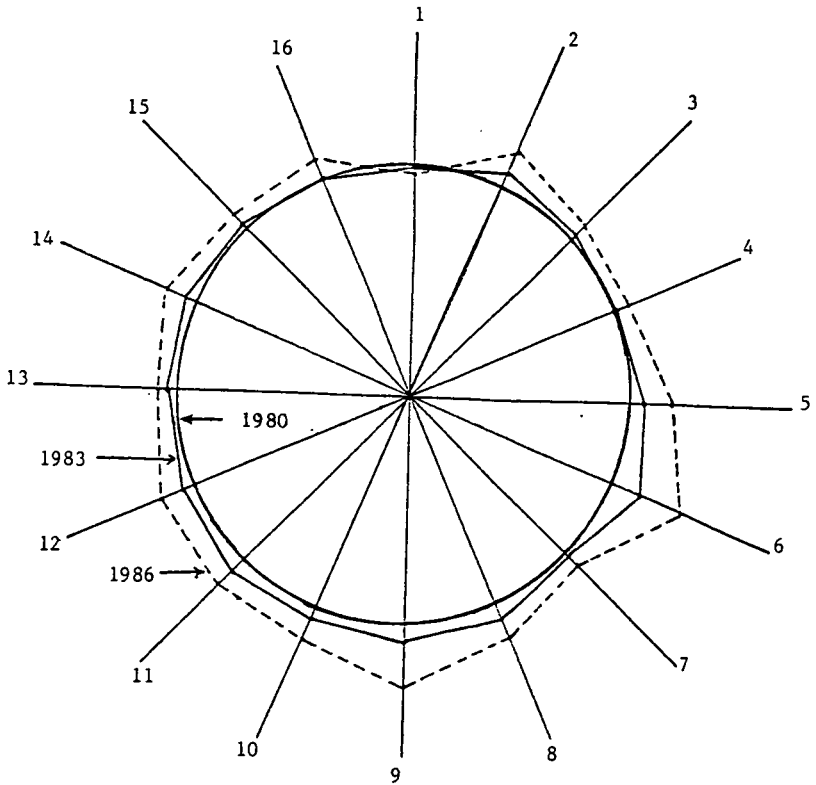
In contrast to the savings achieved in energy consumption, the material intensity of production remained constant, although there have been concerted efforts to reduce the consumption of specific inputs such as metals. The measurement of material intensity is, of course, less precise than that of energy intensity, but it appears quite evident that efforts to decrease material intensity by more than 1 percent per year are unlikely to meet with success in the current economic environment.

III. INVESTMENT AND RESTRUCTURING

Although the deflationary policy of the 1980's could have freed industrial workers to move to new dynamic sectors, these same policies tended to hold back restructuring by reducing investment levels, thus making it difficult to sustain the expansion of progressive sectors. As a result, there was little change in the structure of industrial output. As Figure 1 shows, with the exception of the fuels sector, all sectors of industry grew to some extent in the 1980's. Moreover, the pattern of growth reflects not any new conceptions of what Czechoslovakia's industrial structure should be, but rather the culmination of an industrial policy that has been in place for over a decade.

FIGURE 1

STRUCTURAL CHANGE IN CZECHOSLOVAK
INDUSTRIAL OUTPUT, 1980-1986



LEGEND:

- | | |
|---|---------------------------------|
| 1. Fuels | 9. Paper and cellulose |
| 2. Electric power generation | 10. Glass, ceramics and china |
| 3. Ferrous metallurgy | 11. Textiles |
| 4. Non-ferrous metallurgy | 12. Apparel |
| 5. Chemicals, rubber, asbestos | 13. Leather and shoes |
| 6. Machine building, electrical engineering, electronics, metal working | 14. Printing |
| 7. Building materials | 15. Food, beverages and tobacco |
| 8. Woodworking | 16. Other |

Czechoslovakia's industrial policy, formulated in the early 1970's, consists of a number of broad state programs for technological progress. Among the priority sectors of this policy have been nuclear technology, electronics and electrical engineering, machine building, computers and cybernetics, the better utilization of forest resources and self-sufficiency in animal feedstuffs.⁹ Some elements of this policy can be seen in Figure 1 in the relatively more rapid growth of engineering, electric power, chemicals, and paper and cellulose. At the same time, the shortcomings of the policy can also be seen in Figure 1; with the exception of fuels (where both investment and employment have, in fact, risen above average rates) no sector was subject to any appreciable downsizing.¹⁰

The focus of Czechoslovakia's industrial policy is the CMEA market and, within that, the market of the Soviet Union. Such a policy has had, and will have in the foreseeable future, both advantages and disadvantages. The advantage is that this emphasis enables Czechoslovakia to develop competitive positions in certain sectors at low risk because within CMEA it faces few or no competitors and thus its products need merely to be workable but not to meet world standards for quality or efficiency. In this regard the nuclear energy program, in which Czechoslovakia in effect became the major subcontractor for the production of Soviet designed nuclear reactors, is perhaps a unique success story. The Complex Program is viewed favorably by Czechoslovak authorities precisely because it offers further opportunities for Czechoslovakia to develop market niches within the CMEA. Similarly, because the Soviet Union is Czechoslovakia's largest customer, a movement toward raising Soviet productivity through retooling with newer more productive machinery creates opportunities for exports of Czechoslovak machinery and equipment.

Alongside these opportunities lie some serious problems as well. The first of these is whether Czechoslovak industry can make the structural changes, both intrasectoral and intersectoral, that are needed to take advantage of these opportunities on the CMEA market. Given the low levels of investment in this decade it is clear that it was in 1980 that the greatest increments in new investment resources were available. Second, it is questionable whether Czechoslovakia can develop technology-based industries by relying on domestic and Soviet research efforts with only minor reliance on technology imports from the West. Indeed, Czechoslovakia may find itself facing stiffer competition on the CMEA markets from countries willing to make greater use of western technology to develop new industries. Finally, the emphasis of Czechoslovakia industrial policy on the CMEA market does little to address to address the issue of Czechoslovakia's export competitiveness on the world market.

⁹ See Josef C. Brada, "Industrial Policy in Eastern Europe." In Josef C. Brada, Ed A. Hewett, and Thomas A. Wolf, *Economic Adjustment and Reform in Eastern Europe and the Soviet Union*. Durham and London: Duke University Press, 1989.

¹⁰ Part of the problem stems from the fact that resources allocated to priority sectors appear to be "add-ons" to plan allocations rather than the outcome of a zero-base allocation of investment resources.

IV. PRICES AND INCOMES

A. CHANGES IN THE LEVEL OF PRICES

Table 6 presents the price indices for major macroeconomic aggregates. Over the period under review industrial wholesale prices grew more rapidly more agricultural purchase (wholesale) prices. Neither the extent nor the pattern of these wholesale price increases made themselves felt in consumer markets. Thus the retail price index grew more slowly than either wholesale index.¹¹ Moreover, the retail prices of food, and particularly those of meat products, grew more rapidly than did the prices of industrial consumer goods and of services despite the relatively greater increase in the wholesale price of manufacturers. The rate of inflation faced by consumers, as measured by the cost of living indices, was 1.5 percent per year. This rate, however, reflects neither the effects of shortages, of changes in product quality or of the effects of relative price changes on consumer's ability to purchase the goods they seek.

TABLE 6.—PRICE INDICES FOR MAJOR MACROECONOMIC AGGREGATES

	1980	1981	1982	1983	1984	1985	1986
Implicit price deflators for: ¹							
Social product	100.0	101.8	107.0	106.5	113.4	113.9	114.0
NMP	100.0	97.4	101.9	102.0	105.0	104.8	104.7
Price indices: ¹							
Industrial wholesale prices	100.0	104.8	112.7	112.4	121.6	123.8	123.8
Purchase prices of agricultural goods	100.0	101.2	110.4	110.9	114.4	115.3	115.3
Retail price of goods and services	100.0	100.8	106.0	106.9	107.9	110.4	111.0
Cost-of-living index for:							
Workers and employees	100.0	100.9	105.6	106.8	107.8	109.3	109.7
Collective farmers	100.0	100.9	105.1	106.2	107.4	109.0	109.4

¹ Calculated on the basis of constant prices of Jan. 1, 1977.

Source: Federální Statistický Úřad, Statistická Ročenka CSSR, 1985 and 1987. (Prague: SNTL-ALFA, 1985, 1987.)

Also worth noting is the relationship between the implicit NMP deflator and the indices for industrial wholesale prices and for retail prices. Although real and nominal NMP are obtained from the national income framework, the major components for NMP used, for example, are consumption and investment which ought to reflect retail and industrial wholesale price trends. While the discrepancy observed between the implicit NMP deflator and the latter two price series is not inconceivable on logical grounds, it does raise the possibility that the real growth of Czechoslovak NMP is somewhat overstated.

B. WAGES, INCOMES AND CONSUMER WELFARE

As Table 7 indicates, real wages in the socialist sector grew slowly, less than 0.5 percent per year, in 1980-87. The declines and low growth in real wages, followed by an acceleration toward the end of the period generally reflect the pattern of real labor productivity growth. Wages in agriculture grew more rapidly than in

¹¹ This is only partly due to slower increases in the prices of services.

other sectors of the economy and the average income of cooperative farm members rose above the average wage in industry. Industrial wages grew somewhat more rapidly than did wages in construction, reflecting the slowdown in construction activity.

TABLE 7.—PERSONAL INCOMES AND EXPENDITURES

	1980	1981	1982	1983	1984	1985	1986	1987
Nominal growth of:								
Socialist sector wages	2.2	1.5	2.3	1.9	1.7	1.6	1.5	
Personal disposable income.....	4.0	2.5	4.5	3.0	2.6	3.3	3.2	2.8
Personal consumption	3.0	2.3	3.2	3.0	2.9	3.6	2.4	2.7
Personal saving.....	40.5	6.7	40.5	3.2	-2.5	-4.0	21.2	4.4
Real growth of:								
Socialist sector wages	-1.1	.6	-2.3	.7	.8	.3	1.1	2.2
Personal disposable income.....	.7	1.6	-.1	1.8	1.7	2.0	2.8	1.5
Personal consumption	-.3	1.4	-1.4	1.8	2.0	2.3	2.0	1.4
Retail trade turnover.....	-.8	1.5	-2.1	2.2	2.0	1.7	2.3	2.8

Sources: Federální Statistický Úrad, Statistická Ročenka ČSSR, 1987. (Prague: SNTL-ALFA, 1987.) Plan Econ Report (Mar. 10, 1988).

While real wage growth was maintained at the level of real productivity growth, nominal wages appear to have grown too rapidly in the early 1980's, giving rise to inflationary pressures that may have given rise to some repressed inflation. The large increase in personal saving in 1980, 1982, and 1986 despite modest increases in nominal income and even a decline in real income in 1982, suggest that there was unsatisfied consumer demand at least in those years.¹² Whatever tensions exist between demand and supply in the consumers goods market are unlikely to be alleviated by macroeconomic policy in the near future since the share of consumption in national income has again been declining since 1985. Increases in prices scheduled for 1989 are thus unlikely to do more than hold the line on the severity of repressed inflation.

The policy of deflation had disparate effects on consumption. Most severely affected was the housing sector. The decline in total investment coupled with a decline in housing's share in investment led to an absolute decline in the number of dwellings completed per year. Thus the total housing stock grew by only 1 percent per year, a rate clearly inadequate from the standpoint of new household formation as well as inconsistent with the requirements of regional mobility. The supply of consumer durables did not increase at a particularly rapid rate, but since inventories are at relatively high levels by regional standards, steady sales represent a growing ownership of such items. Clearly the brunt of the adjustment in consumption necessitated by the slowdown in industrial production and the fluctuations in agricultural production thus was borne by changes in the availability consumer nondurables and food products.

¹² It is worth noting that Czechoslovak economists have experimented with the Portes-Winter model of disequilibrium and conclude that aggregate excess demand does not exist.

V. FOREIGN TRADE

Czechoslovak foreign trade performance must be judged in the light of both domestic and foreign trade objectives as well as developments in the international economy. In view of the evident disequilibria in the investment sector at the beginning of the decade, some slowdown in economic growth was clearly required. The desire to reduce the country's hard-currency debt might have been achieved by a variety of policies, but, given the deflationary cast of policymaker's preferences on the basis of domestic needs, the decision to improve the hard currency trade balance by reducing domestic absorption through deflation is easy to understand. The principal external developments influencing the evolution of foreign trade took place within CMEA. The oil price increases of the second oil shock continued to make themselves felt in a deterioration of Czechoslovak terms of trade that tapered off and reversed itself only at the end of the period under review. As Table 8 indicates, the bulk of this deterioration occurred in trade with socialist countries and especially with the Soviet Union. Nonsocialist terms of trade changed very little over this period. At the same time, the Soviet Union cushioned these terms of trade effects by its willingness to run surpluses with its CMEA partners in the early 1980's. Finally, the growth slowdown was not limited to Czechoslovakia, but rather it extended in various degrees to all the socialist countries, as did a general tendency toward import substitution. Thus the growth of intra-CMEA trade slowed appreciably and in fact intra-CMEA trade grew more slowly than did the output of CMEA countries.

TABLE 8.—CZECHOSLOVAK FOREIGN TRADE AND FINANCE

	1980	1981	1982	1983	1984	1985	1986	1987
Terms of trade:								
Total.....	100.0	95.7	92.6	88.9	81.1	82.0	81.1	83.6
Nonsocialist.....	100.0	98.5	100.5	100.2	98.6	99.5	96.9	97.1
Export volume:								
Total.....	100.0	100.5	106.4	112.7	123.4	126.6	128.1	131.6
Nonsocialist.....	100.0	101.3	102.6	113.5	118.0	118.4	127.6	125.6
Import volume:								
Total.....	100.0	93.1	95.7	97.7	98.0	102.5	105.2	109.9
Nonsocialist.....	100.0	92.6	91.0	92.8	94.1	99.5	115.9	125.5
Trade balance:								
Socialist (million rubles).....	-253	-177	-227	-509	-599	-604	-680	-78
Nonsocialist (million dollars).....	7	316	482	776	795	637	297	-144
BIS-Area bank debt:								
Gross (million dollars).....	3,802	3,536	2,994	2,727	2,412	2,670	3,128	4,202
Net (million dollars).....	2,546	2,439	2,252	1,791	1,409	1,659	1,911	2,604

Sources: Federální Statistický Úrad, Statistická Ročenka CSSR, 1987. (Prague: SNTL-ALFA, 1987.) PlanEcon Report (Aug. 26, 1988).

The effect of these policies and external developments is reflected in the volume and direction of Czechoslovak trade. The growth of the volume of trade with socialist countries decelerated over the period under review, with a particularly sharp decrease in the growth of socialist imports in 1986 and 1987. As a result the deficit

in the socialist trade balance was largely eliminated in 1987. Non-socialist exports grew modestly over the period, but within this export growth there were differences between exports to developed market economies and exports to developing countries. Up to 1985, exports to developed market economies declined, while exports to developing countries increased, albeit erratically. This was in part due to the decline in surpluses of Czechoslovakia's traditional exports to the developed market economies (raw materials, semifabrics) and in part the result of a lack of competitiveness of Czechoslovakia's manufactured goods. Sales to developing countries, on the other hand, relied less on available surpluses of resource-intensive commodities and more on Czechoslovakia's willingness to sell machinery and arms on credit. Imports from developed market economies declined sharply over the 1981-85 period. In part this reflected the cutbacks in investment activity since a large share of western imports is taken up by machinery and equipment. Imports from the developing countries declined somewhat in the 1981-85 period, but with no discernible trend.

The consequences of these policies on Czechoslovakia's trade balances and external debt are evident from the data in Table 8. With the socialist countries, Czechoslovak trade was in deficit for the entire period, as was typical for the other East European countries. Nevertheless, Czechoslovakia appears to have been slower in bringing its CMEA trade into balance or surplus than were the other East European countries. With nonsocialist countries the surplus in trade increased and remained relatively high to 1985. Nevertheless, in view of our analysis of trade with developed and developing market economies above, it is evident that the reduction in hard currency debt is in part an achievement of dubious value. To be sure, surpluses in trade with developed countries represent assets that can be accepted at face value. However, sales on credit to developing countries have produced assets whose real value may be questionable.

In 1985, to a limited extent, and in 1986 and 1987, to a much sharper degree, Czechoslovak trade policy changed significantly, reflecting in part the changes in domestic macroeconomic policy. Exports to socialist countries grew moderately, but imports effectively stagnated. At the same time nonsocialist trade was reoriented from developing to developed market economies. Exports to the latter grew by 15.6 percent in 1986 and 12.3 percent in 1987, while for the same period exports to developing countries declined. At the same time inputs from developed market economies increased by 28.4 and 18.8 percent in 1986 and 1987, while imports from developing countries grew very slowly. There were two consequences to this maneuver. The first is that the hard currency balance of trade slipped into deficit for the first time in the period under review. Second, the composition of Czechoslovak imports from nonmarket economies changed drastically. The share of consumer goods in imports from nonsocialist economies decreased significantly in 1986 and 1987, and the share of machinery and equipment increased at a rapid pace.

VI. CONCLUSIONS

It is evident both from macroeconomic trends and from the developments in foreign trade that efforts are being made to end the policy of deflation and to restart the engine of growth. While deflation did eliminate disequilibria in the investment sector and reduce the hard currency debt, the fundamental and longrun problems of the economy have not been resolved. The domestic economy has been neither restructured nor made more efficient, and a larger part of the reduction in net hard-currency debt rests on the shaky foundation of developing country IOU's. While the economy may be made to grow somewhat faster in the short run, the evidence suggests that past problems will quickly reassert themselves to dampen the recovery.

ECONOMIC REFORMS IN CZECHOSLOVAKIA

By Friedrich Levčík*

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POLITICAL BACKGROUND

After prolonged hesitation and infighting between divergent forces within the leadership of the Czechoslovak Communist Party, finally in 1987 the decision was taken to follow the lead of Gorbachev's perestroika and to adopt also a program of the comprehensive reconstruction of the economic mechanism for Czechoslovakia. To understand the initially only lukewarm support of the Soviet "radical" reform measures, and the gingerly fashion of subsequently adopting and introducing by measured stages the Czech reform program, a few words have to be said about the specific political background. In Czechoslovakia this is the fourth attempt to substitute the Soviet model of centralized, administrative, and directive planning, which was introduced disregarding the divergent economic conditions after the Communist Party took over complete control over the economy and society in 1948. The first and the third attempt (1958-60 and 1981-85) failed in view of the internal inconsistencies of the reform measures, while the second try, better known in the West as the "Prague Spring" (1966-68), which resembled in some respects the current Soviet perestroika, was crushed by Soviet intervention in August 1968 after some conservative opponents of the reform within the leadership of the Czechoslovak Communist Party had appealed to the Soviets for help. The present Czechoslovak leadership is the heir of the disaster of 1968. Some of them directly asked the Soviet Union to crush the reform by military intervention, some turned away from the reform which they had initially supported and availed in "normalizing" the situation after the defeat of the reform. In the course of the "normalization" process they faithfully carried out the wishes and orders of their Soviet superiors and punished and persecuted the supporters of the "Prague Spring."

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It is understandable that this leadership looked with dismay upon Gorbachev's way of thinking which resembles in many ways the tenets of the "counterrevolutionaries" of the Prague Spring. But on the other hand the leadership is entirely dependent on the goodwill of Moscow and on the presence of the Soviet army for its own survival. Besides, the more pragmatic part of the leadership, represented mainly by Prime Minister L. Strougal, argued in view of the worsening situation of the economy since the end of 1985 in favor of a thorough reform program invoking the Soviet example.

In the end Gorbachev's plea for supporting his reform measures at the working Summit meeting of the CMEA Party leaders in autumn 1986 brought also the Czechoslovak Party leader Gustav Husak on the side of those who advocated the introduction of reform measures tailored after the Soviet example. Strougal obtained the task to prepare a reform concept which was accepted by the Communist Party Central Committee and the Federal Government.¹ Strougal and his team were charged with preparing for the end of 1987 a more detailed document on the comprehensive reconstruction of the economic mechanism to be introduced by stages. During the work on this document some of the professional economists known as protagonists of the Prague Spring were asked to participate in the discussions. The conservative wing in the leadership was alarmed. The propaganda tried to explain that the new reform measures had nothing in common with those introduced in the 1960's. The proponents of the Prague Spring were anew vilified as "counterrevolutionaries" and no rehabilitation for them was considered possible. The conservative core within the leadership was strengthened by the dismissal of G. Husak as Party leader and the installation of M. Jakes, one of those who invited the Soviet Army in 1968. Also L. Strougal was removed as Prime Minister and stripped of his party functions since the reform article was drafted.

We have, therefore, the peculiar situation that the most violent opponents of the reform in the 1960's are now charged with introducing a comprehensive reform of the economic mechanism. This situation is casting shadows on the sincerity of the reform intentions, the more so now that the bureaucratic machinery of the planning authorities is charged with implementing the reform measures.

THE REFORM CONCEPT

The reform concept itself, but even more so the specific reform measures are shaped by the inherent contradiction between the intended increased rights and responsibilities of the enterprises on the one hand, and the endeavors of the Communist Party to keep its "leading role" in macroeconomic and microeconomic management on the other. Also the planning and administrative bureaucracy is a powerful vested interest group striving to keep its influence and desks by inventing complex planning procedures and possibilities of day to day interference in the management of the economy.

¹ Rudé Právo, Jan. 9, 1987.

The concept envisages a newly defined relationship between the economic center, represented by the government and its functional and sectoral bodies, and the enterprises. The old relationship of subordination of the enterprise sphere under the directives of the planning machinery should be exchanged by a division of tasks and functions.

The enterprises and other economic organizations should be managed relatively independent of direct commands from above according to the principle of full accountability meeting from their proceeds all material and labor costs, tax and other payment obligations, and setting aside funds for depreciation, repairs, reconstruction of existing plant and for new investments. Commensurate to the increased responsibilities also the rights of the enterprises are to be extended. They are to be relatively free in setting their own enterprise plans, in allocating their resources, in deciding on the best organizational structures, in choosing their suppliers and customers, in entering cooperation and direct links with enterprises in other CMEA countries, and last but not least in deciding on the structure and range of goods according to the existing demand.

According to the logic of self-managing and self-financing enterprises acting in competition with other domestic and foreign firms, the central plan and management should concentrate on macroeconomic planning and decisionmaking guiding the enterprises and their behavior essentially by uniform rules and policies. By a coordinated set of price, wage, financial, credit and monetary policies, and with other specific instruments of indirect guidance, the enterprises should be guided and persuaded to follow their own interests within a frame which should correspond to the aims of the macroeconomic plan and programs. This would be a formidable task by itself and no easy success can be guaranteed. But at least it would be compatible with the principle of full accountability of the enterprises. However, the Czechoslovak central concept of planning and management of the economy is far more complex and demanding. In the most recent authoritative document on the reconstruction of the economic mechanism it is stated that the basic task of the central authorities is to safeguard the strategic targets and aims of economic and social development as worked out by the Communist Party and to direct by plan their fulfillment. The ruling role of the Party in determining the course of economic and social development of the country is expressly accentuated in an otherwise factual and technical official document.

The strategic targets and aims of the Party are to be implemented by the elaboration of long-term forecasts. Long-term strategic programs of economic development having a determining influence on innovative and structural change and on the participation of the Czechoslovak economy in the international division of labor are also to be determined and developed by the central authorities. The center is also responsible for achieving and maintaining equilibrium between the material resources and the financial means at the disposal of the economy and the population. Proper regional development is another task of the central authorities. Economic conditions, norms and rules according to which enterprises and the central managing bodies are to fulfil their tasks, are to be far more

demanding than hitherto. At the same time it is demanded to curtail operative and administrative management methods enabling the necessary concentration on conceptual and economic management activities. By and large, the enterprises should be guided in their behavior according to the logic of achieving positive enterprise results but foremost they should be urged—partly by different methods than until now—to fulfill the plan aims and targets of the central authorities.

THE 5-YEAR STATE PLAN AND THE ENTERPRISES

The central 5-year State plan is to be met by the enterprise and other economic organizations by a combination of uniform, long-term tax and payment rates, by virtually uniform normatives and to a lesser extent by direct tasks and state orders, and by mandatory limits of inputs.

As to the foreseen taxes and payments the concept distinguishes between so-called "criterial" (touchstone) taxes and income taxes. To the former belongs a tax on wages to be included into the wage costs of the enterprises and which will be set at 50 percent of the wage sum. The proceeds of these tax payments are meant to cover the expenses of society in relation to the work force and the population (in Marxist terminology for the "reproduction of the labor force"). Another payment of this type is a tax on working capital to be calculated from the present value of fixed capital stock and investments, the circulating capital and (as a possible variant) also from the value of the development fund of the enterprise. The tax rate is apparently not yet set, according to information received at the close of last year it could amount to 2 percent from the tax base mentioned. Taking into account the guidelines for the across-the-board wholesale price reform planned for next year, the tax could be set at 4.5 percent of the tax base. The tax will be paid out of gross profits (before profit tax), or according to a variant it will be considered as the bottom limit of the profit tax.

A real property tax will be levied on economic organizations and citizens using agricultural soil. It will be levied in absolute money units per 1 hectare differentiated according to the fertility of the soil. It will be paid out of the proceeds.

A typical income tax are payments levied on profit. All economic organizations are liable to pay this tax, some of them, especially in the service sector, may obtain tax reductions. Enterprises and other economic organizations belonging to approved member organizations of the National Front (foremost the Communist Party itself) are tax exempt. Also budgetary organizations and organizations covering their outlays from membership fees will not be liable to pay this tax. Joint ventures with foreign partners may be tax exempt or liable to reduced tax rates. The accounting profit will be lowered for tax purposes by interest payments, by the tax on working capital and by a mandatory minimum assignment to the enterprise development fund. (At the moment also other variants of possible deductions are under discussion.) There are also two variants considered of possible tax rates. According to the first, the tax rate would be a progressive one taking into account the de-

velopment of yields, according to the second variant, a linear tax rate is being considered.

The system of taxes and payments includes also payments of a regulatory nature if wage payments or investment outlays are deemed to be excessive in relation to the stipulated rules. Depreciation charges are to be kept in principle within the enterprise. However, in cases where the government has worked out a program of phasing out or damping a certain production, part of the depreciation charges may be taken away for central use. Also in exceptional cases where substantial government money was involved in setting up new capacities depreciation charges may be centralized for a certain period. There is also the intention to redistribute depreciation charges in the beginning between enterprises, making the starting conditions with respect to the capital stock vintage more equal. Lastly there will be taxes levied for the use of the environment and sanctions for the abuse of it. All taxes and payments are obligations of the producing and service organizations (enterprises). As to the wage taxes paid by the wage earners themselves one can assume that the present regulations will remain unchanged. In addition to taxes and payments enterprises and other economic organizations are liable to set aside certain sums for specific purposes. This mandatory endowment of various enterprise funds according to certain rules are known as normatives set by the central authorities—as far as possible—in a uniform way for a 5-year plan period.

One of the important normatives is the uniform minimum endowment of the enterprise development fund, paid out of profits as a percentage of the working capital. According to information received from Czechoslovak Government sources, a 3.5 percent charge is being considered. Together with the tax on working capital this amounts to the lower percentage limit of the expected yield on new investments to be financed from enterprise sources. A lower expected yield should persuade the enterprise depositing rather the available money in the bank where the interest received would be a better bargain. The enterprise development fund will be endowed further by a normative for noninvestment R&D outlays. The normative will be set according to branches in a uniform way as a percentage of gross value added achieved by the enterprise within 1 year. The charge will be included in the costs.

There will be another normative imposed according to branches expressing the relation between the increment of the wage sum and the increment of value added. (A wage increase beyond the limit set by the normative would be punished by a regulatory tax payment.) As an alternative, a uniform (for the entire economy or according to branches) annual percentage increase of standard wage rates may be stipulated. Again an increase above the normative may invoke the imposition of a regulatory charge.

Further normatives stipulate the minimum endowment of the enterprise fund for cultural and social needs (as percentage of the annual wage sum) and the minimum balance of the enterprise reserve fund. The minimum balance will be calculated as a percentage of the working capital. In both cases the normatives are to be prescribed as a uniform charge for the entire economy.

Organizations engaged in foreign trade activities and achieving a positive currency balance will have to hand over a part of their net foreign exchange takings to the central authorities. This part—expressed as a percentage of the net balance—will be imposed in the beginning in a differentiated fashion. In addition, a minimum payment of foreign currencies out of the positive net balance will have to be handed over to the central currency fund. Later on a uniform normative of payments of foreign currencies into the central foreign currency fund is envisaged.

This complex set of taxes, payments and normatives, together with the monopolistic influence of the state on price, wage, financial and monetary policies, as well as the many exemptions, relieves and reductions, or additional impositions, which according to the "Directions" are possible, give the central authorities ample room in keeping control over the enterprises. On the other hand, they make it easy for the enterprises to keep up with a bargaining process striving to soften the conditions under which they are asked to operate.

INDIVIDUAL TASKS, STATE ORDERS, AND INPUT LIMITS

The central planning authorities insisted, however, in addition to impose upon the enterprises individual tasks, state orders, and input limits for specific purposes. Such nominal tasks will be set for important investments and R&D activities determining structural change (like long-term energy programs, important ecological improvements, development of the infrastructure, etc.) State orders will be used in cases where a central authority is the purchaser for safeguarding priority in delivery, especially for defense and security and for the system of central state reserves. Where current production levels are below demand specific delivery obligations for exports, domestic market, intermediate use and investment purposes will be stipulated. In addition, there will be nominal tasks and state orders for exports to and imports from nonsocialist countries, as well as for the value of exports to socialist countries, both in foreign trade prices. (The wording of the regulation implies that all imports from socialist countries will be under the enterprises' discretion.) Among the nominal tasks belongs also the mandatory distribution of youths at school leaving age to various state apprentice centers.

Input limits will be imposed upon the purchase of fuels and energy, of raw materials and intermediary products, insofar as they are in short supply. Centralized sources for innovations earmarked for important nominal R&D tasks and for the activities of centrally controlled research institutions will be also allotted in the form of limits. There will be further limitations of foreign exchange funds for supplying the domestic market, and for the import needs of organizations with a negative foreign trade balance, or for those without any exports. Also the value of machine and equipment imports earmarked for important individually named investment objects and specific R&D activities will be limited by central decision. Lastly there will be limits of subsidies for nominal tasks and state orders, if the enterprise should suffer losses or be at a disadvantage by carrying out the orders.

Individual tasks, state orders and limits are to be spelled out in particular details, i.e., in physical units and in value terms including technical and economic efficiency parameters, prices, time limits and destination of deliveries, so as to form the basis for contractual obligations of the addressee. As to tasks and limits for goods and commodities in short supply the "Directions" promise to shorten the list of such items from the beginning of the next 5-year plan (1991) to a third or even a quarter of the present stage and to prevent any increase of tasks, state orders and limits thereafter. Together with the restoration of the internal and external equilibrium the number of these individualized tasks and limits will be further reduced.

The enterprises will also receive pertinent information on the desired development of efficiency criteria of the respective branches, as, e.g., the expected growth of gross and net profits, of the development of the relation of gross profits to the working capital, of the expected growth of the productivity of labor in value added terms, and of the development of export efficiency. There will be information on the expected development of prices, of interest rates for credits and deposits, of exchange rates and loan maturities. Information will be given on current adaptation measures to be applied by the central authorities in the case of deviations and divergences from planned development. Past experiences have shown that the central authorities have abused the information and informative indicators to impose upon the enterprises further restrictions in their management decisions. By and large, it seems to be clear that the 5-year State plan contains still a large measure of influence and that from this vantage point the proclaimed relative independence of the enterprises has to be judged.

THE POSITION OF ENTERPRISES

As has been stated before, the enterprises and other economic organizations are to operate with relative independence within the terms of the 5-year State plan and of general rules and regulations. The regime pertains to State producing enterprises, to State trade enterprises, to State producing and research associations, to State combines, to agricultural cooperatives, to production, consumer and housing cooperatives, as well as to insurance companies and other entrepreneurial undertakings. Banks, saving institutions, and enterprises under mixed ownership (with foreign partners) and Czechoslovak joint-stock companies will operate under generally applicable specific rules and regulations. According to the principle of full accountability the enterprises (and other economic organizations) will cover all costs of their activities out of their proceeds and they have to create additional resources for further development of the enterprise. In their activities they have to respect the 5-year State plan obligations and binding legal norms for economic relations, in particular they have to recognize prices set directly by the state and binding rules for price determination as formulated by the central price authorities. This provision shows that for the time being there will be little scope for the shaping of prices by the enterprises themselves. There are provisions for price setting by agreement between suppliers and customers but only if there exists

already effective competition between suppliers and an equilibrium between supply and demand. As long as general equilibrium conditions are not attained, and this seems to be the rule, the State will set or tightly control all prices.

The relative freedom relates, therefore, in the first place to cost reductions, to choosing—if practical—one's own suppliers and customers, to determining the inner organization of the enterprise, to allocating within the rules and normatives their resources, and to deciding on the structure and range of goods and services in accordance with the enterprise scope as set by the founder of the enterprise (as a rule a central state authority). The "Directions" are holding out the promise in framing the scope of action of enterprises in general terms only enabling thus also a broadening of the activities.

One of the most publicized features of the so-called self-managed enterprises is the election of the top manager by secret ballot of the work force or of elected delegates of the work force. The same body can also dismiss the director (top manager). However, this seemingly highly democratic procedure is circumscribed from above and below. The proposal for the election or dismissal of the director is to be presented by the founder (state authority) after a discussion with the work force council. The last word remains with the founder. The candidates are picked from applicants having high "political, professional, and moral qualifications for the function," as a rule from the outcome of a public competition organized by the founder. Here, especially, the "ruling role of the Party" is being asserted. Applicants not in the nomenclature list of the Party have hardly a chance to be considered at all. In the preamble of the draft bill on the State enterprises the Party organization within the enterprise is defined as "the core of the working collective" which "has the right of Party control with regard to the management and is safeguarding the 'cadre' policy of the Party."

INTRODUCTION OF THE REFORM BY STAGE

The scope of this paper does not allow a full discussion of many other facets of the comprehensive reconstruction of the economic mechanism. Problems tackled refer to a comprehensive (across-the-board) price reform of wholesale and agricultural purchase prices, to the introduction of unified commercial exchange rates, to a new orientation of the activities and of the organization of the central bodies responsible for economic management and control, and to a revamping of the organizational structure of production, research and trade enterprises. The proclaimed aim is the rationalization of the price structure bringing them also closer to world market price relatives and linking domestic prices in a more rational way with conditions existing abroad. The organizational measure intend drawing the consequences for the set up of the central authorities of changed management and control circumstances. Changes in the organization of the enterprise sphere should allow for the emergence of a differentiated pattern of huge, medium-sized and small enterprises ranging from combinates, concerns and trusts embodying all cycles from R&D, design and construction, manufacturing and trading to independent enterprises of varying sizes and activi-

ties. In particular the new enterprise structure should allow for more competition and for giving purchasers in general a better position vis-a-vis the suppliers.

All of the measures, those discussed in greater detail in the paper as well as those mentioned only cursorily, will be introduced or at least prepared between 1988 and 1990 so that from the beginning of the new 5-year plan 1991-95 all elements of the reform—albeit with some restrictions—are to be in operation.

The period up to 1990 is characterized as period of preparation. In this time elements of the reform will be introduced or tried out by stages, the organizational changes in the center and in the enterprise sphere will come into effect, all necessary legal changes will have to be completed and the new five-year plan will have to be constructed according to the new rules and conditions (including the new prices). Already from the beginning of this year the new mechanism will be applied in catering and in local production, repair, and service establishments. Also in retail trade the reform will be tried out in selected trade organizations in the current year and is to be extended to all trade firms from 1989. The new mechanism is to be applied from 1989 also in agriculture and food undertakings. Preparations for introducing the new mechanism in all other sectors and branches of the economy will proceed from now on until 1990.

In this period of preparation up to 1990, the comprehensive experiments undertaken in selected enterprises will be broadened so that already in the current year a fifth of the organizations will try out in a comprehensive way various elements of the reform, especially those where alternative solutions are feasible, as, e.g., in the control of wages or in using normatives of foreign exchange retention quotas. Also the self-management elements are to be tried out in practice. At the same time individual rules, applied in the experiments before the "Directions" had been adopted, have to be changed so as to come as close as possible to the intentions of the "Directions" and of the enterprise laws.

Selected elements of the new mechanism are to be introduced from now on throughout the economy. To this group of measures belong new principles of granting bank credits, widening the rights and responsibilities of enterprises in deciding on incentive wage elements (above the basic wage rates), in changing the forms of remunerating the management, of widening the scope of the enterprise remuneration fund so that its share in the total wage sum should rise to 10 percent by 1990, and lastly in changing rules for setting basic wage rates.

A major undertaking will be the across-the-board reform of wholesale and agricultural purchase prices. The basic feature of this reform is the continuation of the cost-plus principle. In the price calculations the prices of material inputs, as of fuels and energy, are to be set in relation to world market relations and developments. To the wage costs proper there will be added a 50 percent addition as indirect labor costs (e.g., for social and health insurance) which will be taxed away according to the new taxes and payments.

On the other hand, a calculated decrease of all costs till the end of 1989 is to be taken into account. The calculation of intermediate

products used in the manufacturing process will be priced accordingly, and in cases where the same products are manufactured in several plants, the new wholesale prices will be set taking into account the average costs of those which are the decisive suppliers and at the same time are using the most progressive technology available.

The price levels will contain a profit rate, in principle calculated at a uniform rate of 4.5 percent of the acquisition value of working capital. As a further guiding principle of the price reform, price relationships existing abroad should be taken into account and at the same time the existing overall price level should not be breached. All in all, it will not be easy to reach the divergent aims of the price reform.

A host of other measures will have to be taken in the time of preparation. The enterprise laws will have to be finalized and passed by the National Assembly. New taxation and payment laws have to be worked out in detail and adopted by the National Assembly. And lastly, the new 5-year plan will be constructed according to the new rules and regulations. It remains to be seen how this program will be implemented in the remaining 3 years.

The period 1991-95 will be considered as the first stage of the reconstructed economic mechanism. All elements are to be applied throughout the economy. However, in view of the fact that in the beginning in some spheres of the economy elements of disequilibria will still exist, and that some of the value criteria envisaged may not furnish sufficiently equal conditions for all economic subjects, a certain scope of nominally addressed tasks and limits will have to be kept for some time. For the same reason individualized or differentiated foreign exchange normatives and regulations in foreign trade will be kept until foreign and domestic price relations and levels will be brought nearer to each other. Also the redistribution of depreciation charges between enterprises will be continued for some time. It is hoped that in the second half of the next decade these crutches can be dispensed with and the more perspective concept of a socialist economy controlled largely with the help of indirect value instruments and keeping individual tasks to a few select priorities of national interest can be attained.

CONCLUDING REMARKS

The entire approach to the reform is characterized by utmost caution so as to keep constant control over the development of the reform. This is not necessarily a bad thing. The example of other countries has shown that the hasty introduction of new measures without taking into account all consequences and without having created in advance all the necessary preconditions, often leads to a worsening of the situation increasing the pressure of groups essentially in opposition to any reform, for returning to the old administrative and directive forms of planning and management. The documents published so far give the impression of carefully considered measures interlinked with each other in scope and time.

On the other hand the entire reform is marred by prejudices and taboos of the political decisionmakers. The market and market forces are still "dirty" words in the mind of the present Party lead-

ership. The specialists working out the reform measure know that in all fields where direct prescriptions will be done away with, the market will step in disregarding the wishes of their superiors. But they had to make some fatal concessions to the prejudices of their leaders.

An important one is the belief that direct tasks and limits have to be kept so long as imbalances and disequilibriums exist in the economy, and that they can be dispensed with only after the restoration of an equilibrium. The present situation of deep disequilibriums in the Czechoslovak economy is, however, just the result of the administrative and directive way of central planning kept for 20 years. It is therefore not very likely that with the same medicine which has harmed the patient so evidently, now a therapeutic effect can be achieved. Equally important is the prejudice that economic equilibrium is a state which can be attained and then kept indefinitely. In reality equilibrium can only be conceived as a tendency toward which an economy can be moving with the help of market clearing prices. The unwillingness to rescind central control or direct determination of prices, at least by stages, will be a major obstacle in making progress also in other fields. The reliance on across-the-board price reforms—which have been attempted several times before—and on the subsequent planning and central management of price developments sounds completely naive and nonoperational in the present time of uncertainty and the possibility of unexpected changes in price relatives of commodities, goods, and currencies. Very likely, considering the discussion going on in the Czechoslovak professional press, the experts know the weakness of the proposed measures but very likely the political leadership has vetoed any other more rational solution.

The biggest obstacle to a meaningful reform is in any case the present Party leadership itself. It has more or less been forced, by the worsening economic situation and by the prodding of the Soviet Union, to agree to a reform program. But most of the Party leaders do not understand the essence of the reform, and they are only interested in keeping personal control over the events. They are frightened of everybody who could challenge their exclusive power and are depriving the economy of expert knowledge which otherwise would be available. The population is alienated and will not participate in initiatives and harder work connected with the reform endeavors. Still, the reform measures bring some movement into the picture and show the contours of a possible development. If and when a new political set up will be created, the present frame of the intended economic mechanism could furnish the beginning of a process of economic recovery.

SOURCES

Principles of the reconstruction of the economic mechanism in the CSSR adopted by the Executive Board of the Central Committee of the CP of Czechoslovakia and by the Czechoslovak Government, in: *Rudé Právo*, January 9, 1987.

Resolution of the Central Committee of the CP of Czechoslovakia on the comprehensive reconstruction of the economic mechanism in the CSSR and of its implementation, in: *Rudé Právo*, December 22, 1987.

Directions for the implementation of the comprehensive reconstruction of the economic mechanism (Approved by Government Decree, No. 29/1988), Appendix to *Hošpodárské noviny*, No. 8, February 26, 1988.

Draft Bill on the State Enterprise, Appendix to Rudé Právo, July 18, 1987.

Draft Bill on Agricultural Cooperatives, Appendix to Rudé Právo, September 3, 1987.

Draft Bill on Production, Consumer and Housing Cooperatives, Appendix to Rudé Právo, September 11, 1988.

THE GDR ECONOMY AND THE QUESTION OF REFORM

By Arthur A. Stahnke*

When General Secretary Honecker delivered the report of the Central Committee to the 11th Congress of the Socialist Unity Party (SED) of the German Democratic Republic (GDR) in April 1986, he spoke glowingly of the achievements of the East German economy over the previous 5 years. Among other things, he said that: "The GDR has at its disposal a well functioning socialist planned economy. It is characterized as performance capable, dynamic, and flexible."¹ This theme has been repeated consistently by GDR leaders since then, with variations to be sure.²

There may be instances when statements by the General Secretary should not be taken at face value. In this case, however, there can be little doubt that he indicated in all seriousness his and his government's firm commitment to the retention of an economic system that nicely matches the "Traditional Centrally Planned Economy" (TCPE) model Professor Marer has described elsewhere in this volume.³ It is, Honecker and his cohorts have urged, a socialist system, which history has shown to be superior to other (i.e., "capitalist") models, and it is striking that precisely the qualities they identify as crucial to socialism (e.g., the primacy of the plan, administratively determined prices, and central involvement and control of resource allocation) are those that would be threatened by systemic reform.⁴

Given the apparently unqualified commitment of the current East German leadership to its version of the TCPE, it should not be surprising that the GDR presently is not considering systemic economic reform, despite efforts at restructuring in the Soviet Union and elsewhere within the bloc. In fact, the confidence of the Honecker leadership that the GDR is presently employing the correct economic model is so great that when Politburo member Kurt Hager was asked by a Western journalist whether the East Germans might also implement their own version of perestroika, he responded almost flippantly: "Do you feel obligated to redecorate your dwelling just because your neighbor has redecorated his?"⁵

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¹ See: *Bericht des Zentralkomitees der Sozialistischen Einheitspartei Deutschlands an den XI. Parteitag der SED* (East Berlin: Dietz Verlag, 1986), p.44.

² See for example the report on the most recent meeting of the *Kombinate* General Directors in March 1988, in which another Honecker statement was repeated: "We have no reason to minimize the performance of the workers, and no reason to strike the word success from our vocabulary." In: *Neues Deutschland*, Mar. 11, 1988.

³ See Marer, this volume, pp. 1-15.

⁴ See a recent speech by Politburo member Kurt Hager before the seminar of the Pedagogical Council (*Schulrauteseminar*) in *Neues Deutschland*, Oct. 29-30, 1988, in which, *inter alia*, he said: "An attempt to replace the plan with a market mechanism would be utopian, and dangerous at that, and it would result in serious losses in the reality of life."

⁵ See his interview in the West German publication *Die Stern*, and reprinted in *Neues Deutschland*, Apr. 10, 1987.

The GDR political elite has not been similarly so committed to the economic status quo when less fundamental, within-system modifications of the economy have been suggested. As recently as the late 1970's, a major overhaul of the system was undertaken, and it included restructuring the nonagricultural sectors into *Kombinate*, decentralizing the foreign trade system, reorganizing the system of research and development (R&D), phasing in a comprehensive upward revision of prices, and introducing broad changes in the system of plan obligations and steering mechanisms.⁶ Since 1984, by which time these changes were largely in effect, only minor adjustments have been made, thus reflecting GDR policymakers' satisfaction if not complacency with their efforts. But it should be stressed that the satisfaction here noted could rapidly sour if performance should deteriorate; it is probably even fair to say that the need for continuing within-system modification is accepted in East Berlin as normal.

Thus, while at least potential crisis and economic reform to meet it may be very much the concerns of other East European (and Soviet) elites, the GDR has proceeded with apparent confidence that its economic system has proven itself as sufficient, and that the current course is correct. Our task here is to consider whether that assessment is appropriate, or alternatively, whether the GDR might face the need for economic reform in the future.

As is suggested from the above discussion, systemic reform (i.e., departure from the TCPE) is most unlikely to be considered seriously in the near future by GDR leaders. First, the past record of economic performance has been found to be good or at least acceptable, even if the GDR has admittedly not closed the gap between itself and the most advanced industrialized countries of the world.⁷ For most of the past four decades, growth rates have been adjudged impressive, even into the 1980's, when, with the exception of 1982, they have averaged about 4 percent annually.⁸ Moreover, since 1980, growth has been accomplished while substantially improving the ratio of factor inputs to value produced.⁹ As a result, there are data available that has been taken to support the belief that the East German economic system has proven itself capable of achieving the regime's goals.

Second, the GDR once tried systemic reform, and the results were rejected as unacceptable. In 1963, the so-called "*New Economic System*" (NES) was introduced, which was to bring into being a very considerable decentralization of decisionmaking authority, dy-

⁶ For an analysis of these modifications, see: Manfred Melzer and Arthus A. Stahnke, "The GDR Economy in the 1980's: Caught Between the Need for Efficiency and the Lack of Alternatives," *East European Economies: Slow Growth in the 1980's* (a compendium of papers, JEC of the U.S. Congress) Vol. III, 1986, pp. 131-168.

⁷ The last time a public comparison of GDR productivity against Western counterparts was made in East Germany was in late 1982, at the Fifth Session of the Central Committee. At that time, General Secretary Honecker reported that the GDR had achieved a level of labor productivity roughly equal to that of Great Britain and Italy. "That," he continued, "is not satisfactory, for our productivity is about 30 percent lower than that of France or the Federal Republic of Germany." What he didn't say was that in April 1969, at a similar meeting of the Central Committee, he had agreed with an Ulbricht assessment of the GDR's relative position on labor productivity at 20 percent below FRG levels. For the 1982 speech, see *Neues Deutschland*, Dec. 27-28, and for the 1969 citation, *Neues Deutschland*, April 29.

⁸ For data on annual rates of growth, measured in National Income, see: Irwin Collier, this volume.

⁹ *Ibid.*

namic prices, and the installation of profit and other "economic" levers as the basic inducements for "correct" decisions.¹⁰ In actual practice, NES was never fully implemented. Perhaps the political leadership was never able to shed skepticism as to the benefits NES might have brought. But the acknowledged fundamental problem was that the authority delegated down to producing units was used to make decisions inconsistent with general political and economic objectives, and by 1967, NES was significantly modified. Three years later, it was effectively terminated, and it has since been taken as an example not to be replicated.

Third, GDR planners have been and remain convinced that they have had success with within-system modification. This, in turn, has led easily to the conviction that the TCPE is capable of self-correction when wisely or properly overseen. The "self-corrections" of a decade ago, they would argue, were the responses to some very serious dilemmas, including the exhaustion of resources that might otherwise have permitted continued "extensive" growth, deteriorating terms of trade, a serious foreign debt, and negative productivity trends; the results of the modifications, allegedly, were at least salutary and in some cases impressive.¹¹ Hence, there is thought to be little reason to doubt that future problems can be met with similar modifications as needed.

A fourth and final obstacle to the consideration and implementation of systemic reform by the GDR political leadership derives from its own ideological and interest-based set of preferences, drawn from long experience as political activists and more lately, as a ruling party. Although there has been a modest turnover in East German leadership positions over the nearly 20 years since the "Honecker core" came to power in 1971, stability has been the rule. During the period, the SED Politburo membership has consistently asserted its confidence in the TCPE that has been in place since the founding of the GDR, and its satisfaction with the economic policies the GDR has pursued. Obviously, it has also taken credit for the economic achievements recorded during its tenure. For Honecker or Mittag (Politburo member responsible for the Economy) to now call for systemic change would contradict their previously publicly held positions, and could be taken as a tacit admission of past failures and/or a criticism of their own records.

At a more general level, GDR leaders have consistently shown a political style that places a very high premium on central direction and control, that is suspicious of spontaneous forces, and that resists risk taking. This may be understandable, given their own experiences with imprisonment and exile during the Nazi era, the isolation their regime faced in the first decade and more after its establishment, and the grudging acceptance they have been given by their own people. But the point here is that such a political style implies preferences as to various policy alternatives, including one in favor of centralized direction and strict control of the economy. That predisposition is obviously not consistent with a sys-

¹⁰ For a thorough examination of the NES experiment, see: Gerd Leptin and Manfred Melzer, *Economic Reform in East German Industry* (Oxford: Oxford University Press, 1978).

¹¹ For an example of an authoritative assessment of the benefits of these modifications see: Guenter Mittag, *Oekonomische Strategie der Partei—klares Konzept fuer weiteres Wachstum* (East Berlin: Dietz Verlag, 1983).

temic economic reform that might include decentralization of decisionmaking authority and/or the introduction of market forces.

These impediments to systemic economic reform in the GDR are indeed formidable, especially when one also adds to them the difficulties involved in implementing such a change without allowing a period of chaos during the changeover. Nevertheless, it is at least possible that reform could come, if the considerations examined above were to lose their appeal, and/or other factors propitious for reform were to come into play.

One change that is certain in the near future is the transfer of authority to a new generation of leaders. The current Politburo, headed by the 76-year-old Honecker, has seven members over the age of 70 (average age 76); the average age of the entire group is 66,¹² while the youngest member is now 51. Though Honecker and his older colleagues continue to exhibit a vigor unusual for their ages, they obviously will soon depart from the scene, perhaps as early as late 1989.

It is not at all clear who the new General Secretary will be or what policies he will pursue. The Secretariat of 11 members includes only Politburo members, and is also comparatively old at an average age of 64; none is the obvious heir apparent. The same can also be said of the candidate members of the Politburo who average 61 years of age. District level First Secretaries also are mostly in their sixties (average age: 62),¹³ though three of the four who also are Politburo members are either 58 or 59 years of age. The youngest member of the Politburo, Egon Krenz, was seen for a time in the mid-1980's as Honecker's heir apparent. More recently, however, he is reportedly out of the running.

Given this uncertainty, it is impossible to say how the next generation will view the question of reform generally, and more specifically, economic reform. It can be assumed, however, that the new leader will not need to feel so responsible for the past record, and for that reason he might be more "reform friendly." It is also true that the new leader will have had significantly different socializing experiences than those of the older generation, for he will have been a successful, upwardly mobile, and comparatively well educated individual in an increasingly secure and stable political order. As such he could be more pragmatic and perhaps more sympathetic to the Gorbachev agenda than his predecessors have been. He might also be more reactive to developments elsewhere in the bloc and more responsive to Soviet encouragement of reform strategies. In sum, the postsuccession period could be propitious for economic reform, especially if other considerations were to suggest its appropriateness.

Another possible impetus to economic reform in the GDR might be responses to the same question from elsewhere in the bloc, particularly those in the Soviet Union. As is well known, economic

¹² Subsequent to the time of this writing, Politburo member, Werner Felfe (age 60) died. Until he is replaced, the average age of the body has been marginally raised. The data presented here were calculated from the information published by the *Gesamtddeutsches Institut, Bundesanstalt fuer gesamtddeutsche Aufgaben* in Bonn: *STAATS—UND PARTEIAPPARAT DER DDR* (Stand: 15 Juni, 1988.)

¹³ Since this was written, the First Secretary for Frankfurt (Oder), Hans-Joachim Hertwig, died.

reform is a central element of Gorbachev's program for the fundamental transformation of Soviet political and economic life. One consequence of Gorbachev's efforts has been that GDR leaders have been forced to react to them, in part by answering questions as to the applicability of Perestroika to their own economy. This has doubtless been an embarrassment, for no matter how one tries to put the best face on the matter, it is rather clear that basic differences on the value of the traditional Soviet type economy exist within the bloc.

Nevertheless, reacting to the Soviet experiment is not the same as seriously reconsidering the economic reform question, and as the Hager quote cited above shows, the GDR political leadership has rather summarily denied the need to follow the Soviet example.¹⁴ So long as the Soviet economy continues to stagnate while that of the GDR sustains reasonable growth rates, this posture is likely to hold. On the other hand, if GDR economic performance should lag while Perestroika begins to bring results, the possibility of systemic reform in East Germany would obviously grow.

Whatever the results of the coming transfer of power in the GDR and of the Soviet experiment, the key determinant of economic reform in the GDR will be the performance of its own economy. The rest of this contribution will therefore focus on several factors that will importantly influence future GDR economic achievements.

Before that is undertaken, however, a brief, mostly qualitative balance sheet on past GDR economic performance, drawn without reliance on official proclamations and interpretations, will be presented. On the plus side, as noted earlier, the system has generated generally consistent growth, with few exceptions on the order of 4 percent or more annually in recent years (using National Income as the key indicator). Moreover, periods of negative results or trends have typically been addressed with at least enough success to restore performance to acceptable levels. Further, the social services and benefits provided by the regime, and they have been popular, have been steadily expanded over time; job security, of course, has also been a reality. Finally, and more recently, very substantial improvements have been registered in the ratio of material inputs to unit value of output.

Taken together, there are not negligible achievements. The GDR citizenry has been afforded the security of a comfortable if modest existence. In nonconsumer sectors, the GDR has maintained its position as a medium sized industrial country, capable of producing computers as well as cameras, and participating in such internationally cutting edge R&D areas as biotechnology and robotics.

Nevertheless, there is somewhat less here than meets the eye. The official growth rates are clearly somewhat inflated and not to be taken as comparable to GNP growth rates from the West. In part, this is a function of the use of different methods of computation, and the reader is referred to the calculations of East German

¹⁴In the Hager speech quoted in footnote 4, he also commented extensively on this question, and the gist of his argument is contained in the following: "The requirements for the development of socialism in each individual country must show regard for its own concrete historical conditions. . . . For that reason, neither the general validity of economic laws nor the manifold national variations (in socialist countries) can be ignored."

GNP growth made elsewhere in this volume for our best estimate as to the magnitude of this factor.¹⁵ In addition, GDR prices are generally not reflective of market factors, and in recent years, prices for "new products" have been highly inflated, thus increasing the paper value of total goods produced.

Second, when compared to the industrial West, the GDR economy continues to be immensely wasteful in its utilization of resources. Comparisons recently made of the GDR with West Germany illustrate the point. As of 1985, 15 percent more of its total population was gainfully employed, and its average work week was 3.5 hours longer.¹⁶ Per capita energy consumption in the GDR was 25 percent higher;¹⁷ investment levels were also comparatively high, and were much more heavily concentrated on industry.¹⁸ Finally, in another major West German study, GDR labor productivity was estimated overall at just over 50 percent of the West German level, a ratio that has not changed much over the years.¹⁹ These comparisons suggest the wisdom of the GDR effort to reduce factor input to value output ratios—and the basis for the recent successes with that effort. But over time, such reductions will become more difficult of achievement as the law of diminishing returns takes hold, unless other efforts at intensification should succeed.

Third, though one should be cautious in drawing conclusions from the limited evidence, GDR economic performance has deteriorated somewhat since early 1987. The official report for 1987 claims a growth rate of 4 percent in National Income, but the data included in that report would suggest that a figure of 3.6 percent is closer to the mark.²⁰ This is the lowest since 1982, and well below the planned level of 4.5 percent. The production of industrial goods in the industrial sector was also well below plan (Plan: 4.5 percent; achieved: 3.7 percent), and foreign trade was notably below expectation (Plan 6 percent; achieved: -3.2 percent). Finally, the production of lignite coal, a crucial product for the GDR economy, has stagnated over the past three years, probably a function of the increasingly inferior quality of the remaining reserves.

The seriousness of these developments was underscored in early 1988, when Secretary Honecker evaluated the performance of the previous year critically.²¹ The record was "not satisfactory," for delays in production had become almost normal for some ministries. Moreover, such delays had been common enough to create serious disruptions that could be alleviated only with overplan imports from nonsocialist countries. Nevertheless, one ought not forget that in the past, such problems have been more or less successfully redressed.

¹⁵ See: Thad Alton and associates, this volume, pp. 80-82.

¹⁶ See: Bundesministerium fuer innerdeutsche Beziehungen, *Zahlenspiegel Bundesrepublik Deutschland/Deutsche Demokratische Republik: Ein Vergleich* (Bonn: 1988), pp. 52, 81.

¹⁷ *Ibid.*, p. 65.

¹⁸ *Ibid.*, p. 56.

¹⁹ See: Bundesministerium fuer innerdeutsche Beziehungen, *Materialien zum Bericht zur Lage der Nation im geteilten Deutschland* (Bonn, 1987), p. 345.

²⁰ For the official report, see: *Neues Deutschland*, Jan. 23-24, 1988. For commentaries and analyses of the year's performance, see: Doris Cornelsen, "Die Lage der DDR-Wirtschaft zur Jahreswende 1987/1988," *DIW Wochenbericht*, 5/88, Feb. 4, 1988, pp. 59-67; and Wolfgang Stinglwagner, "Mit gedampftem Optimismus ins Jahr 1988. ZK und Volkskammer beschliessen den neuen Volkswirtschaftsplan," *Deutschland Archiv*, vol. 21, No. 1, (January 1988), pp. 5-10.

²¹ See extended excerpts of his speech in: *Neues Deutschland*, Feb. 13-14, 1988.

Overall, it is difficult not to conclude that the GDR economy in recent years has registered real but limited successes. Crises have been avoided, but breathing space has also been out of reach.

Looking to the future, the GDR faces three possible alternatives: (a) Stagnation and inadequate performance, bringing with it pressures for systemic reform; (b) continued growth and economic achievement at roughly the levels recorded in the past; and, (c) dramatic, positive results bringing the GDR closer to leading edge positions on productivity, standard of living indicators, and high technology advancement.

In fact, the third alternative can be dismissed as most unlikely. Even the GDR political elite and its professional economists do not seem to expect it, and would be most pleased if growth at 4-plus percent annually could be achieved while "keeping pace" with the rest of the world in technological advancement. The serious and real question then, is whether or not GDR economic growth will match the average levels of the past, and with "intensive" means.

One major reason the discussion must be set within such modest limits is the fact that the TCPE has amply demonstrated its limitations, even when run by Prussians. It is not necessary here to belabor the point once more, but it is to be noted that the GDR leadership has paid in economic terms for its emphasis on security, stability, centralization, risk avoidance, insulation from the world economy, distorted prices, and weak incentives, and in predictable fashion. Admittedly, political and social advantages may also have been gained, whether in the form of social security (e.g., absence of unemployment and the provision of the basic necessities of life for all at subsidized prices) or political/governmental effectiveness (e.g., the capacity to rule effectively even without general and unreserved popular support for the system). But in any case, the economic price has been real, and it will continue to be paid if (as seems most likely) the economic system remains intact.

Evidence to support this point is ample. The focus here, however, will be on three elements of the GDR "intensification" strategy for the years ahead: (a) Efforts to increase the effectiveness of labor utilization; (b) investment policy; and (c) attempts to stimulate product renewal. In each case, it will be noted, systematic parameters have conditioned, even shaped, the substance of GDR policy; this is turn, has limited and will limit the level of success likely to obtain.

As just noted, one major facet of these efforts has been that of achieving the more effective use of labor. Already in 1978, the much heralded "Schwedt Initiative" was introduced.²² This mandated that as new projects were undertaken or new departments were created, the labor needed for them was to be found in other existing operations of the *Kombinate* and reassigned. Presumably, those so transferred would leave wasteful and/or unneeded slots. Since 1981, *Kombinate* have been assigned obligatory numbers of work places they are to thus "save," and 370,000 such transfers were reportedly accomplished during the plan period 1981-85.²³

²² See report in *Neues Deutschland*, July 21, 1978.

²³ See: *Milestones in the Development of an Advanced Socialist Society in the GDR (East Berlin: Central Committee of the SED and the Central Statistical Office of the GDR, 1986)*, p. 46.

A second effort to increase effectiveness in labor utilization was the introduction in 1984 (1985 for construction) of a levy on all *Kombinate*, equal to 70 percent of labor costs.²⁴ In addition to raising labor costs very substantially, this program (called "Contribution to the Social Fund"), had a built-in inducement to produce new products, for goods so designated were to be priced up sufficiently to cover the added cost.

These several attempts to improve labor utilization in the GDR are not particularly impressive or innovative, at least to the Western observer who has given some attention to the rapid changes over the past decade in the composition of labor forces in market economies. It is almost shocking that at least until a decade or so ago, the incentives to use labor optimally were so weak in the GDR as to impel the leadership to introduce the Schwedt initiative.

In any case, the utility of the initiative can only be described as variable and limited. In cases where new technologies or changes in a firm's production profile have reduced the need for labor in a particular department or factory, shifting (the now superfluous) workers to new tasks would seem salutary, though one might wonder why a special norm is required to bring about this obviously "rational" decision. In other cases, however, where transfers are mandated but no working places have in fact been freed up, little net benefit is likely and even disruption could result. Finally, the crucial question centers on the use to which the transferred labor is to be put, for transfer for its own sake brings no certain utility. The point seems inescapable: When *Kombinate* General Directors (or their subordinates) are required to transfer labor to fulfill their plan obligations, they will feel compelled to respond. In the best of circumstances they will be able to make the transfers in a way that improves *Kombinate* labor utilization; in other, less advantageous instances, the obligation will likely still be fulfilled, but without real benefit.

As to the impact of the levy on labor costs, the likelihood is that it has been marginally effective in making management in GDR industry and construction more sensitive to labor costs. Nevertheless, since the system still functions primarily through the rationing out of factor inputs, the importance of this "financial lever" is probably not great.

GDR economists with whom the author has spoken assert that these "labor saving" efforts have been effective in that they have substantially altered the labor market: workers can no longer so easily jump from one job to another (since producing units are restricted in their opportunities to hire and have little incentive to do so given the levy on labor costs), and as a result workers discipline is said to have improved. Given the job security still afforded in the GDR, however, slothful workers still have little to worry about even if they cannot move from job to job as previously. All in all, the GDR seems therefore to have been unable to find the means to bring about efficiencies in labor usage comparable to those found in the West.

²⁴ For a discussion of this levy, see Melzer and Stahnke (Note 6), pp. 162-163.

As noted earlier, the GDR has consistently committed very substantial percentages of its national income to investment, and its diversion of resources to R&D work (about 4 percent of national income) is also comparatively high. Yet historically, this has not resulted in closing the distance by which it has trailed the West in productivity levels, and the dilemma therefore remains that of finding more effective means of investment utilization, a point on which GDR economists are quick to agree.

One measure intended to increase effectiveness in investment utilization was the reorganization of the nonagricultural sectors of the economy into *Kombinate* or giant trusts;²⁵ as large, complex units with substantial internal autonomy, they have been expected to utilize the economies of scale and to have the capability to conduct R&D work effectively. To enhance this capability further, research capacity has been shifted away from independent scientific institutes and universities. At the present time, more than one-half of all basic research and most applied research is either carried out in *Kombinate* or in institutes under contract with the *Kombinate*. Most recently—the policy was to take effect in January 1988—the principle of “self-generation” of the means of further internal investment was installed, the intent of which was to tie allocation of resources more closely to past performance successes.²⁶

Actual investment strategy has basically been carried out on two tracks. On the one, key areas have been identified for particular attention, including microelectronic and computer technology, computer aided design and manufacture (CAD/CAM) systems, flexible automated production systems, biotechnology, nuclear energy and laser technology.²⁷ These “key technologies” are seen to be of such general importance for the entire economy that they merit central attention and direction, and this has been translated into much publicized national targets for the production of computers and the like, and frequent public attention to the achievements of the key *Kombinate* (like *Robotron*) that produce them. Investment allocations are not disaggregated sufficiently for us to have an exact picture of who gets what amounts for these purposes, but it is clear that “key technologies” have priority in investment allocations for major projects.

The second track of GDR investment policy focuses on process “rationalizations” or modernization of existing fixed assets. Slightly over 50 percent of total investment (i.e., not just total investment in industry) is to be for such “rationalizations” in the current 5-year period, and of all such expenditures, approximately 20 to 25 percent is to be accounted for by those internally designed and executed.²⁸

²⁵ For an authoritative discussion of the expected utilities from the organization of *Kombinate*, see: Mittag (note 11); for an analysis of *Kombinate*, see: Arthur A. Stahnke, “Kombinate as the Key Structural Element in the GDR Intensification Process,” *Studies in Comparative Communism*, vol. XX, No. 1 (Spring, 1987), pp. 27–38.

²⁶ For a recent discussion of the policy of self-generation of investment funds, see: Helmut Koziolek and Lothar Bayer, “Leistungsfähige sozialistische Planwirtschaft—Grundlage unserer dynamischen Gesellschaftsentwicklung,” *Einheit*, Vol. 42, No. 7 (July 1988), especially pp. 607–608.

²⁷ See the discussion of key technologies in *Milestones* (Note 23), pp. 32–36.

²⁸ *Ibid.*, pp. 44–45.

It would be difficult to fault the general soundness of this strategy, for the benefits to be gained through advances in the identified key technologies are clear, and the applications of those technologies to specific production processes is the obvious final step in linking R&D to end results. Yet, we may well expect no better than limited results from GDR investment efforts.

First, the evidence available suggests that though the key technologies for particular attention have been properly identified, GDR achievements here have been and remain some distance behind leading edge developments in the West. This is no doubt true in part because the GDR economy simply does not have the resources to compete successfully on a wide front with giant Western firms like IBM or Sony, nor does it have the opportunity to cooperate and compete with the multinationals that dominate cutting edge technologies in the West; rather, the GDR is essentially on its own, with an economy one-quarter or so as large as that of West Germany, and with only rather arm's-length ties (in this regard) to its CMEA partners. In addition to this already daunting situation, the GDR has also shown a rather vigorous penchant for risk avoidance, and has entered into serious R&D efforts only when developments elsewhere have shown real prospects for success, as well as the general directions to be taken to achieve them. Several GDR scholars and researchers have literally insisted to the author that there has been a pattern of denying resources to high risk, promising research that subsequently has been successfully carried out in the West.

A second element of the problem is the means used to determine success with the investment strategy. In an interesting modernization of the now discredited emphasis on "gigantomania" or "*tonnenideologie*" as it is called in German, the GDR now places great stress on numbers, on the numbers of robots, computers or CAD/CAM stations manufactured or installed. The actual utilities that might result from these achievements is de facto a separate question, and this has admittedly resulted in a loose definition of the properties of robots, underutilization of computer capacity, and poorly conceived CAD/CAM installations. Of course, real efficiencies may be or may have been achieved in some or even in most "rationalizations." Yet, the fact that all producing units are required to rationalize and to be able to report that they have, encourages a "rationalization at any price" mentality: better to have even quite worthless "improvement" to report than none at all.

The rationalization aspects of GDR investment strategy introduce a third, really quite pernicious and complex problem. As noted above, the objective is to modernize existing plant and to streamline functioning production processes. This, at best, is a conservative strategy, the success of which is necessarily limited by the performance capabilities of the plant and equipment to be upgraded; obsolete machinery even when optimally integrated into production systems remains obsolete.²⁹

²⁹ One East German economist put the point nicely: "It is hardly possible to construct a nuclear power plant by means of reconstructing a power plant driven by coal energy." Cited in: Manfred Melzer and Arthur A. Stahnke, "Product and Process Renewal in GDR Economic Strategy: Goals, Problems and Prospects," Ian Jeffries and Manfred (eds.), *The East German Economy* (London: Croom Helm, 1987) pp. 131-132.

The problem for the GDR here is that much of its plant and equipment is indeed obsolete and/or of inferior quality. While we do not have very precise measures that could provide support for this assertion, both simple on-the-spot observation and reasonable inferences drawn from GDR regulations on the retirement of aging plant give us substantial reason to assume that more than mere rationalization is urgently needed, even if that is an appropriate partial solution for the inefficiency problem.³⁰

Finally, the investment strategy as described will be only as good as the complementary efforts of the GDR leadership to improve product quality and/or to develop new and better finished goods. As Guenter Mittag observed, "It makes little sense to utilize the time [and the resources] saved through rationalizations to produce already outmoded products in greater quantities, products for which there is little or no demand."³¹ As a result, the economic strategy places a substantial emphasis upon "product (and process) renewal" (*Hoehere Veredelung*).³² One aspect of that effort, as was noted above, provides for pricing new products advantageously (i.e., at a level high enough to cover the levy on labor costs), but a number of other steps have also been taken.

The key element in the regime's efforts to improve product quality has been the setting of norms for product (and process) renewal: 30 percent of all value produced is to be either from new processes or in new goods. Additionally, targets have been set for the introduction of new products (15,000-16,000 for the period 1986-90), and finally, 60 percent of all new products are to be on a par with world standards.³³

At first glance, this is an impressive set of objectives, for it would seem that a near 100 percent turnover of products could be expected every 3 years. Yet, that has not happened, nor, apparently, was it intended. Already in 1985 a "renewal rate" of 27.5 percent was reported, and since then, the targets have been met without noticeable difficulty, even as product changeover, as seen by consumers, goes on at a seemingly leisurely pace. This would suggest that a certain elasticity, has been built into the system, which doubtless includes at least the following elements.

First, there is the sometimes ambiguous question of determining the existence of "newness." In certain cases, of course, the evidence may be clear: a color television is certainly not the same as a black-and-white set; a pocket calculator is not the same as an abacus. At the other extreme, it would seem clear that a blue computer is not different from a white one, and a newly labeled bottle of *Nordhaeuser* is not different from one with the old trademark. Between these extremes, in the real world of products, more difficult determinations must be made, determinations, for example, whether a bar of soap in a new package and with a new perfume is new, or whether narrow neckties are any different from wider ones.

³⁰ For a discussion of the problems attending attempts to determine the age structure of GDR plant, see *Materialien* (note 19), pp. 293-294.

³¹ See Mittag's speech in *Oekonomische Strategie der Partei* (note 11), p. 82.

³² For an analysis of *Hoehere Veredelung*, see: Melzer and Stahnke (note 29), pp. 119-140.

³³ Figures are taken from *Milestones* (note 23), p. 24.

A second, related question makes the point more clearly: How does one determine the boundaries of "newness?" For example, when a new bumper is put on an auto, is the auto to be defined as new, or is it an old car with a new part? What about a new bumper and a new motor? When a new process is installed to continue the production of an unaltered rivet, is the ship into which the rivet has been hammered to be considered "new" or should just the 10 pfennig rivet itself be included when tallying up the mandated 30 percent? The GDR has set guidelines to deal with this question, but they hardly can be comprehensive enough to eliminate the use of all discretion by the appropriate administrators.

And then there is a third question, that of the price to be assigned the new product or the modernized process.³⁴ Obviously the higher the new price, the more quickly one passes the 30 percent threshold mandated in the plan. And just as obviously, with generally distorted prices and no reliable measure of user utility, the "correct" price to be assigned is most likely to be a guess.

We do not have much of the information required to make an authoritative and comprehensive evaluation of the efforts to promote product and process renewal. Yet, it is fair to note that the mechanisms in place could be so used as to achieve plan fulfillment even without substantial economic benefit, and that in any case, broad administrative discretion will necessarily come into play as specific decisions are made. In such circumstances, the leverage of the planners in this respect is probably not sufficient to force an acceleration of product renewal.

The encouragement of product (and process) renewal in the ways described above has had another consequence; given the need and the resulting advantages to be gained by producers from developing "newness," old but still fully satisfactory items have sometimes been withdrawn from production or at least have been produced in insufficient amounts. Though one might well overstate the extent to which actual shortages in the "good but old products" have occurred, the fact that official policy rewards newness as an end in itself is significant, for recently Secretary Honecker himself was constrained to note in a report to the Central Committee that products ought not be changed just for the sake of change.³⁵ He didn't bother to offer any advice as to how producers might retain the good old things and still meet their quotas for renewal.

From this discussion of the GDR's intensification efforts, it can be concluded that the leadership there has undertaken a serious, fairly comprehensive program to promote greater efficiencies, productivity increases and even a rapid transformation of the economy through technological progress. Its goals and/or objectives are clear and on target.

On the other hand, the means by which these ends are to be achieved seem less than adequate, in that they fail to tie with much exactness the achievement of formal compliance with central directive to real economic benefit. This is, of course, an old story

³⁴ For a discussion of pricing policy in the GDR, see: Manfred Melzer, "The Pricing System of the GDR: Principles and Problems." In: Jeffries and Melzer (eds.), *The East German Economy* (London: Croom Helm, 1987), pp. 141-148.

³⁵ Reported in *Neues Deutschland*, Dec. 12, 1987.

for TCPE's, but it is significant that the GDR has thus far not solved the riddle—and it will suffer the consequences.

In addition to systemic-based limits or implications on future GDR economic performance, several other factors may also impact upon it, and in the ways indicated:

First, the economic performance of the rest of the Soviet bloc will likely have a substantial and negative effect. Short-term problems caused by stagnation in the bloc might result in delays or cancellation of deliveries to the GDR, with more or less serious consequences. The greater difficulty, however, and one that has been present for some time, stems from the perceived undependability of CMEA partners. This has forced and will continue to force the GDR to be as self-sufficient as possible. Data on the number of different products the GDR produces and on the sizes of its production runs is not available. Nevertheless, GDR economists are nearly universal in their agreement that their economy does not and cannot specialize sufficiently, official claims about CMEA cooperative and specialization efforts to the contrary notwithstanding. When asked to identify important cases of GDR dependency on products produced elsewhere in Eastern Europe, they typically point to the buses and streetcars, and then ask the questioner whether he would rely more heavily on such partners as Poland or Romania if he were responsible to make such decisions. But because the GDR is unwilling to take such chances, its limited resources will continue to be spread more thinly than would be preferable in an ideal world. On the other hand, this posture of limited interaction with CMEA partners (despite the relative weight of those partners in GDR foreign trade statistics) also means that short of an actual crisis in the U.S.S.R., the GDR will retain a measure of protection from the economic problems other CMEA countries might experience.

Second, the continuation of amicable and improving East-West relations could have a limited but beneficial consequence for the GDR. In particular, such a general trend would likely facilitate the continued expansion of inter-German ties, and on terms that would continue to benefit the East Germans economically. Such benefits would likely include increased trade levels under favorable conditions, greater access to Western credits, and higher hard currency earnings for services to West Berlin and its visitors and the like. Though this relationship is not and will not be decisive for the future of the GDR economy, it is nevertheless a significant if not measurable plus.

Third, developments on the world market will also have an impact, and probably a negative one. Though a thorough analysis of this topic will not be made here, it is worth noting that competition for markets internationally has been increasing, that the time cycle of products (from R&D to production, etc.) has shortened, and that new participants from the Third World have successfully entered the competition for increasing sales abroad. None of these developments works in the GDR's favor, and indeed quite the reverse is the case. As a result, the obstacles to expanding the GDR's exports in finished goods to the nonsocialist world will be greater than ever in the years immediately ahead.

Given these considerations, what can one predict about the future of GDR economic performance? The answer is simply not clear. On the negative side, there is, most importantly, a little evidence to show that the East German leaders have found solutions to the perplexing limitations of their chosen economic system, even if they have quite properly identified their goals. The evidence shows, further, that the returns on their previous, most recent within-system modifications may be diminishing (and even in the years 1981-86, they didn't fully match plan targets). Finally, the stagnation, even crises, presently so apparent within the CMEA will be at least a drag on the GDR, though of uncertain severity.

On the other hand, it is difficult to ignore 40 years of inertia, in this case inertia in the sense of continued stable performance with measured growth. The passive but disciplined labor force is better educated than ever before, and it has a growing stake in the system that has provided housing, jobs, autos, and more recently expanded travel opportunities.

Moreover, even if computers, robots and other elements of the "scientific and technological revolution" have been developed comparatively late, and then used in inefficient ways, they still provide major opportunities for economic advancement. In fact, if the GDR has shown itself capable of anything, it is that it can keep pace with the West—but with a time lag of 10 to 15 years.

Forced to halt with equivocation, I would predict that the GDR economy will continue to match or nearly match the norms officially established for minimally acceptable growth, admitting at the same time that hunch plays a disturbingly important part in the calculation. That is, I would expect that at the end of 1990, the targets of the previous 5 years will have been more or less met. Such an achievement will permit observers a variety of options as they develop interpretations of the results. The GDR leadership and its apologists will be able to proclaim that great successes have been achieved, while regime critics will dispute the validity and reliability of the data, and point to the continued backwardness of the economy. (Curiously, both will have a point.)

In any case, this is not the stuff of which crisis and severe pressure for reform are made. In this view, if systemic economic reform is to occur in the GDR in the next several years, it will most likely be the result of relatively unforced decisions by a new generation of leaders. Such a development seems possible if unlikely, and for two reasons. First, East European leaders have sometimes taken surprising courses once in power (consider Kadar, Dubcek, and Gorbachev). Second, while the GDR economy is relatively sound as compared to the others in the Soviet bloc, it also is relatively backward as compared to the West. Some day, a GDR leadership might find that backwardness unacceptable, however implausible that eventuality seems at this writing.

COST CUTTING AND MACROECONOMIC ADJUSTMENT: THE GDR IN THE 1980'S

By Irwin L. Collier, Jr*

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INTRODUCTION

The history of the GDR economic *system* in the 1980's is a continuation of what some West German analysts have described as "reform in small steps"¹ or what East German political economists have less modestly proclaimed as the further perfection of the economic system.² Some of these steps were intended to promote a much greater frugality in the use of primary factors of production (land, labor, and capital) as well as intermediate goods. Following the declaration at the end of the last decade that the Kombinate were to form the organizational backbone of the GDR economy, there still remained many mutual adjustments needed in fitting the Kombinate organizational form to the planning, balancing and financial institutions of the economy.³

The history of GDR economic *policy* in the 1980's is the macroeconomic response to the challenges confronting continued economic growth that came from unfavorable developments in its relations

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¹ Cornelsen, Melzer, and Scherzinger (1984). Also Melzer (1987).

² The official GDR line on economic restructuring is that perestroika has been going on in the GDR continuously since the beginning of the 1970's. For example a recent article by two directors of central committee institutes, Reinhold and Koziolk (1988, p. 719): "Even as the SED struggled to initiate the transition to an intensive expanded [economic] reproduction, it was clear that a new system of management and planning was needed for the economy. Beginning in the 1970's such a system was being continuously molded, a system to meet the requirements of intensive expanded reproduction and the scientific-technical revolution. . . . This was quite clearly a process of reform of far reaching consequence" [author's translation].

³ For a discussion of the Kombinate, see Stahnke (1987).

with both socialist and nonsocialist trading partners. At the beginning of the decade the East German economic leadership faced what it perceived as a long-term decline in the country's terms of trade. This situation was aggravated by an unanticipated liquidity crunch of historic proportions in early 1982 following unanticipated drops in deliveries of Soviet oil and Polish coal. Hard choices were forced on the GDR economic leadership. In the end, foreign creditors were satisfied, indeed impressed by East German performance, but the adjustments meant reductions in both present and future consumption levels. The middle of the decade were happier years for East German economic planners with a string of four very good harvests in 1984-87.⁴ An improvement in the terms of trade with the GDR's nonsocialist trading partners began in 1985 and the first significant improvement in the aggregate terms of trade with its socialist trading partners in a very long time was registered in 1987.⁵

A quantitative assessment of the aggregate impact of the numerous small changes in the East German system on the performance of the economy is rendered difficult by the fact that the policy reaction to the events of the 1980's has dominated the movements in macro-indicators of economic performance. This chapter presents examples from the incomplete statistical record of the East German economy in the 1980's to illustrate the impact of increased GDR efforts to cut production costs as well as the scale of the macroeconomic adjustments during the period. The ultimate question of interest is whether tinkering with performance indicators, improving the determination of energy and material normatives, tightening discipline and other such measures to get the East German economy closer to its present production possibilities frontier will matter much in the technological race of nations. A conclusive answer to that question will probably not be apparent before the end of the century.

OFFICIAL GDR STATISTICS AND WESTERN RECALCULATIONS

Any quantitative analysis of the GDR economy is forced to confront two significant limitations of the available data. The first limitation is the sparseness of the official published data. The second limitation is one the GDR shares with the other centrally planned economies—significant distortions in the prices used for aggregation. These distortions reflect the interplay of nonmarket price determination and a constraint-rich environment within which economic activity takes place in a centrally planned economy.

Three examples illustrate the limitations of the official GDR economic data. The published national accounts of the GDR could comfortably fit on two pages once redundancy in the published statistics is eliminated. Another example is that after 1976 the struc-

⁴ However, the grain harvest of 1988 was so bad that net material product growth for the year could be almost as disappointing as it was for 1987 (range 3.6-3.7 percent). A possible setback for the future of GDR agriculture was the untimely death of the highly respected Politburo member responsible for agriculture policy, Werner Felfe (age 60), who suffered a heart attack on Sept. 7, 1988.

⁵ With the exception of a very minor improvement in 1979, there has been a continual decline in the East German terms of trade with its socialist trading partners since 1970. *PlanEcon Report*, Vol. III, Nos. 47-48 and Vol. IV, Nos. 37-38.

ture of East German investment by industrial branch has not been systematically reported.⁶ A final example is the entire area of foreign trade statistics. Foreign trade by country is only reported as the sum of exports and imports rather than as separate items. Balance of payments statistics and valuta mark conversion coefficients between domestic and foreign trade prices are not included among the GDR's published official statistics.

The second limitation of GDR economic data results from the use of official prices for aggregation. Should prices for aggregation fail to reflect objective tradeoffs in production or subjective tradeoffs of consumers, the economic interpretation of the resulting expenditure aggregates will be problematic.⁷ Shifting the product assortment from cheap "basic" goods to expensive "luxury" goods is one of the methods used to hide inflation from price indexes though certainly not from the population. Hence the interpretation of movements in expenditure totals is virtually always problematic.

These valuation difficulties are compounded by the sparseness of officially published data. Independent checks of consistency are limited to the officially released data,⁸ foreign trade data published by the GDR's trading partners, and the systematic collection of East German consumer prices compiled by the German Institute for Economic Research (DIW) in West Berlin.

Is it ever possible to extract an economic "signal" from the official statistical "noise" without a complete reworking of the data? It is useful at this point to examine two independent Western attempts at generating economic aggregates for the GDR in order to assess the usability of "raw" GDR official statistics.

One way to address this question is to compare annual growth rates calculated from the official Net Material Product (NMP) statistics with the growth rates calculated from indexes of value added by the "material sector" of the economy calculated by Thad Alton and his associates. Inspection of Figure 1 shows that the NMP movements are quite similar to those from the Alton series except for a shift in the level. On average the annual growth rate of the Alton index for the material sectors is about 2 percent lower than the officially reported growth rate of NMP. One can conclude from this comparison that the official data are sufficiently consistent to be useful for identifying breaks in trend and fluctuations in activity. The Alton recalculations indicate the official growth rates have an upward bias. However, recent research suggests that the direct construction of quantity indexes from quantity series (as opposed to the deflation of expenditure series by means of price indexes) will systematically *understate* the quality improvements which can be expected to occur in centrally planned economies, even if at slower rates than in market economies. In his recomputations of West German and U.S. growth rates over the 1971-80 period, Boretsky (1987) found that the methodology used by the CIA for computations of real growth for the Soviet Union (and by extension used by Alton and his associates for Eastern Europe)

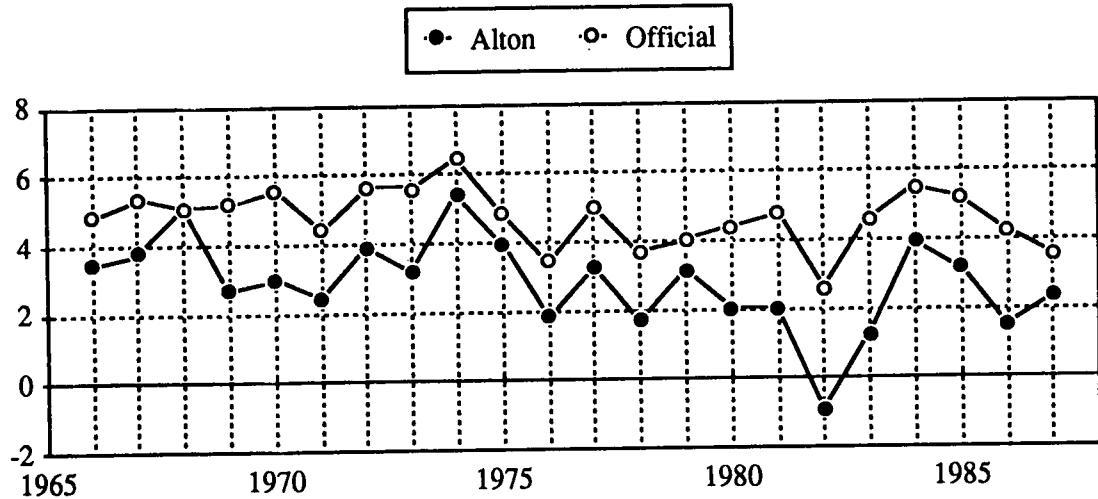
⁶ In the meantime only irregular breakdowns of industrial investment have been published in the annual report of the U.N.'s Economic Commission for Europe and incomplete breakdowns have been published in the CMEA Statistical Yearbook.

⁷ Bergson (1961) and Collier (1988, 1989).

⁸ This includes data that are released, e.g., to the U.N., but not directly published by the GDR.

leads to an understatement of growth in West Germany of about 1 percent per year (2.0 percent versus 3.0 percent in fact) and a half percent underestimate for the U.S. (3.3 percent versus 3.8 percent). It would appear that short of full East German participation in future phases of the International Comparison Project, there will remain considerable uncertainty in the Western estimates of the rate of East German growth.

Figure 1—Official NMP vs. Alton growth rates*
 German Democratic Republic



*Alton series calculated from indexes of value-added in material sectors.

Source: SJDDR 1987, p. 13; Alton (1981), p. 383; Alton (1988), p. 11.

According to the official East German consumer price index, the level of consumer prices has remained virtually unchanged between 1970 and 1986, having fallen only one-half of a percent during the entire period.⁹ This rather remarkable *statistical* price stability is quite independent of the actual course of prices in the GDR and a manipulation that will continue to cast a deep shadow of doubt on the reliability of all other official published statistics. Fortunately the German Institute for Economic Research (DIW) in West Berlin has long collected consumer price data for the GDR, allowing an objective evaluation of consumer price trends.¹⁰ Using the DIW price data, Keren (1987) was able to calculate an average annual inflation rate of 2.7 percent between 1973 and 1983. While this is quite a low rate by international standards, it is still significant enough to necessitate deflating nominal expenditure series for a proper understanding of real trends.

To end this section on a positive note, an interesting recent development in GDR national accounting can be reported. Historically the GDR has lagged behind both Hungary and Poland in the use of a national accounting framework that incorporates the so-called nonproductive spheres of the economy as is done in Western GNP accounts. East German statistical practice apparently changed and the GDR Central Statistical Administration has added a nonproductive services account together with an account for total economic performance (which integrates material product and nonmaterial services accounts) to its national accounting system. From figures given in a recent GDR publication, it is possible to calculate an estimate of East German gross domestic product for 1985 in current prices of 322 billion marks (NMP for that year was 242 billion marks).¹¹ While the new accounts are reportedly included in the confidential volume of national accounts tables, there is no indication that these accounts will be added to the heavily abridged (material) accounts published in the Statistical Yearbook any time soon.

COST CUTTING IN THE EAST GERMAN ECONOMIC STRATEGY

Stalin's fundamental contribution to socialist economics was the construction of an economic system well suited to the direct mobilization of the factors of production for rapid, extensive industrial growth. The GDR's own contribution to socialist economics has been to renovate the old structure of a classic centrally planned economy through an intensive mobilization of all productive inputs. It would appear that the frugality of the German people is an important cultural trait that has survived the transition between modes of production, much to the success of material balancing in the GDR.

Even before the longrun significance of the worldwide explosion in material and energy prices was apparent, an increased emphasis on economizing material inputs (*Materialökonomie*) was a part of

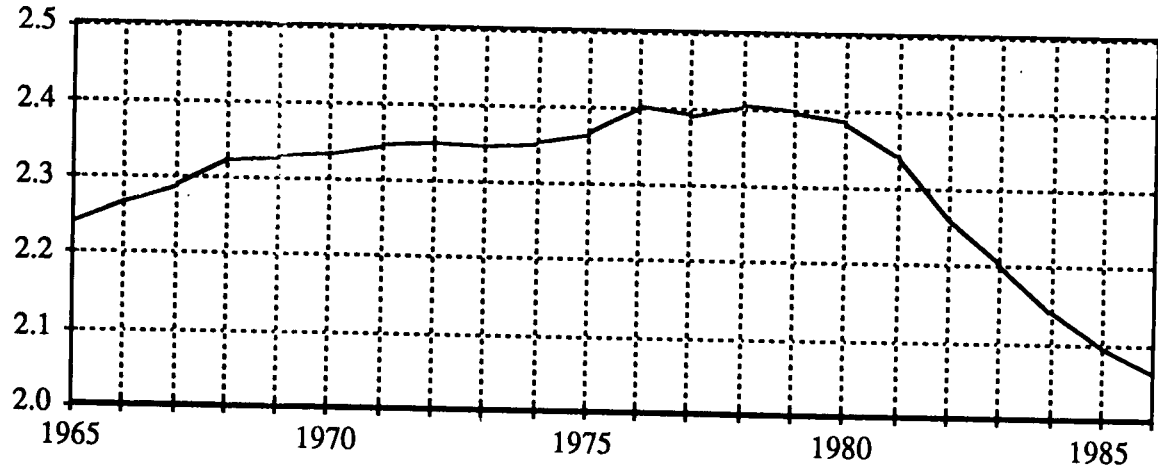
⁹ *Statistisches Jahrbuch der Deutschen Demokratischen Republik* (abbreviated below SJDDR), 1987, p. 272.

¹⁰ See BMB 1987 for a sample of consumption purchasing power parities with respect to DM prices.

¹¹ See the Appendix to the chapter which employs figures reported in Hein (1987).

the construction of the 5-year plan, 1976-80. In Figure 2 one observes a distinct break in the gradual upward trend of the ratio of gross intermediate product to net material product at the end of the last decade. The drop in that ratio through the first 6 years of the 1980's is quite striking. This macroeconomic turn of events is reflected in the underlying microeconomic data as well.

Figure 2—Material inputs per unit net material product
German Democratic Republic

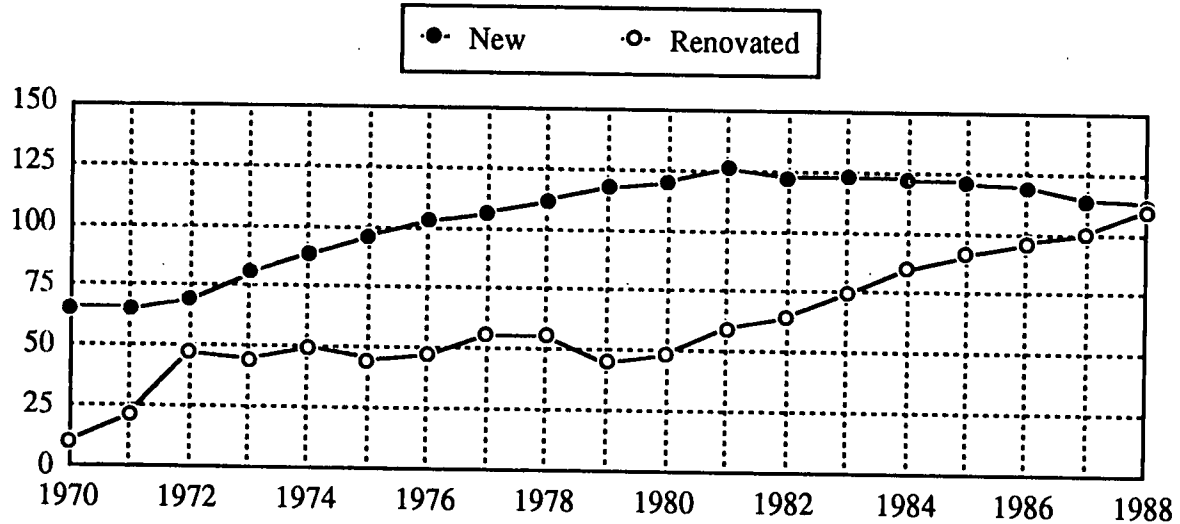


Source: Calculated from data in SJDDR 1987, p. 13.

HOUSING AND CONSTRUCTION

The structure of the East German housing program, begun in 1973, was clearly altered in the drive to save material inputs. This is seen in the marked break in the trends of new housing construction (relatively material intensive) and housing renovation (relatively labor intensive) which occurred at the beginning of the decade. During the first 7 years of the housing program, the number of housing unit renovations was held constant at approximately 50,000 units annually while the number of new housing units built rose by over 50 percent to a peak rate of 126,000 new units in 1981. Beginning in 1981 the number of renovations began to increase significantly each year so that renovations now are about equal to the number of new housing units. Inspection of Figure 3 reveals that the renovation component will soon dominate housing investment in the GDR.

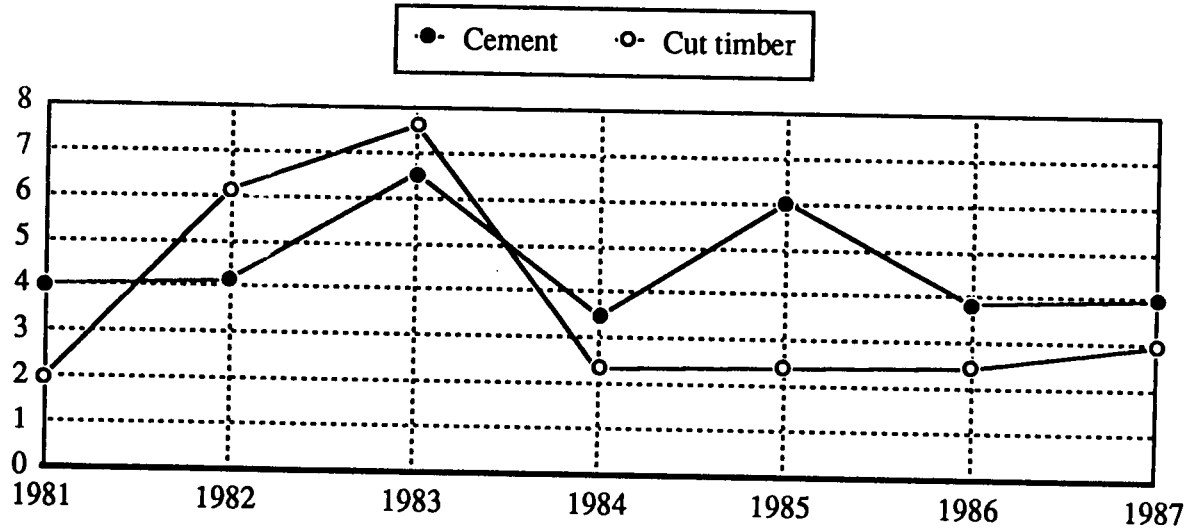
Figure 3—GDR housing construction
(Thousands of new and renovated units)



Source: Calculated from data in SJDDR 1987, p. 168; estimates from plan fulfillment reports.

Indexes of unit cement and unit cut timber consumption for GDR construction falling under the responsibility of the Ministry for Construction are published in the East German Statistical Yearbook only for this decade. In Figure 4 the annual percent reductions of these indexes are plotted. The marked reduction in unit consumption of cut timber occurring in 1982 and 1983 reflects supply bottlenecks from the drastic reduction of imports and forcing of exports. Average rates of decline in unit cement requirements appear to have been higher for 1983-85 and have dropped back down to the 4 percent annual reduction observed at the beginning of the decade.

Figure 4—Material savings in construction
(Annual percent reduction in unit requirements)



Source: Calculated from data in SJDDR 1987, p. 164; estimates from plan fulfillment reports.

ENERGY

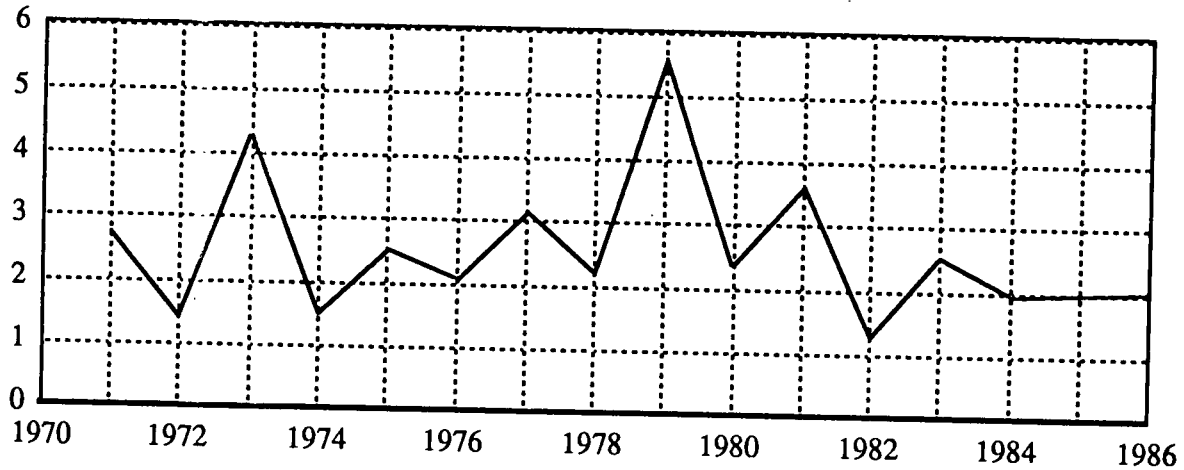
Certainly by the second explosion in world energy prices in 1979, the economic leadership of the SED believed that the change in the relative price of energy for the GDR would continue for the long term. Furthermore the change in the method of price setting for Soviet oil was beginning to make itself felt. With a more than doubling of the price of oil on Western markets between 1978 and 1980, the GDR could forecast the deterioration in its terms of trade with the Soviet Union using the formula for price setting in CMEA. These events shifted priorities toward substantial energy conservation reflected in the 1979 energy resolution of the Council of Ministers followed by a revision of the Energy Law in October 1980.¹² The 5-year plan, 1976-80, aimed for reduction in unit requirements of important raw materials of 3 percent annually. That rate of reduction was increased to 6 percent for the 5-year plan for 1981-85. Nonetheless, throughout this period the GDR has kept energy prices for households constant—even the gas station price for gasoline was not changed. The GDR is the only CMEA country not to have used price increases for household energy purchases to promote energy conservation.

Energy consumption has been given to enterprises as a state plan indicator since 1979 and beginning in September 1980 energy consumption in centrally planned enterprises has been monitored on a monthly basis. One can see the immediate impact of these measures in GDR industry by examining Figure 5 where the annual rate of reduction of kilowatt hours per 1,000 marks of gross industrial output (at constant prices) is plotted. Average reductions were very high for the period 1979-1981, but it is evident that those reductions reflect one-time reductions in waste. The average annual reductions for the years 1982-86 were in fact less than the average rates for 1971-78, before the tightening in energy normatives took place. The DIW in West Berlin estimates that unit energy consumption still remains about one-fifth higher in GDR than in FRG.¹³

¹² This law was just recently revised again June 1, 1988. GB1. I, Nr. 10 of June 15, 1988, pp. 89-105. The energy inspections created following the declaration of the 1980 Energy law have been consolidated into a State Energy Inspection analogous to the state material balance inspection (January 1981) and the state construction authority (Bauaufsicht) (July 1981).

¹³ Deutsches Institut für Wirtschaftsforschung, *Wochenbericht*, No. 5, 1986, p 62.

Figure 5—Electrical energy savings in industry
Reduction in kilowatt hours per unit gross output
(percent)



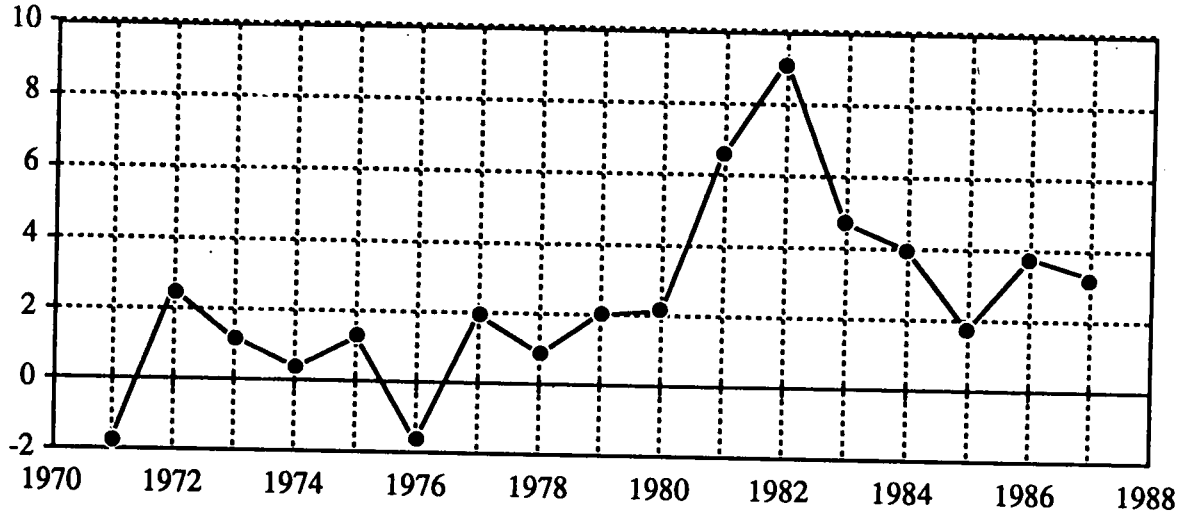
Source: Calculated from data in SJDDR 1987, p. 155.

TRANSPORTATION

Many administrative measures have been introduced to force the reduction of freight trucking performed by enterprises for themselves (from about 50 percent of total freight tonnage in 1980 to 42 percent in 1986) and to shift freight transportation generally from the roads to rail and canals. These shifts have been motivated by a desire to cut the use of imported energy for domestic transportation. Figure 6 shows the annual percent reduction of freight transportation ¹⁴ services (in metric ton kilometers) per unit of net material product. While the sharp reduction in 1982 primarily reflects the sharp drop in NMP growth, it is still clear from the figure that reductions in unit transportation requirements in the 1980's have been dropping at more than twice the rate in the previous decade. In order to substitute domestic energy sources (electrical power from lignite burning plants) for foreign (diesel fuel from imported oil), the electrical railway net has been expanded over 60 percent between 1980 and 1986.

¹⁴ Includes railroad, public and enterprise trucking, canals, civil aviation, and pipelines but excludes sea freight.

Figure 6—Freight transportation per unit NMP
(Annual percent reduction)



Source: Calculated from data on freight ton-kilometers (excluding sea-freight)
per unit NMP in SJDDR 1987, pp. 13, 44, 214; 1987 plan fulfillment report.

INVESTMENT PRODUCTIVITY AND CAPITAL UTILIZATION

Toward the end of the last decade official complaints were made that billions of marks worth of investment had been occurring outside of the framework of the plan.¹⁵ These complaints led to the 1979 joint Politburo and Council of Ministers resolution for increasing the effectiveness of investment that was followed by a stream of administrative measures to strengthen central control over investment. Working in an offsetting manner, i.e., toward a greater decentralization of investment, was an expansion in the scope for each Kombinate to use its own resources for the reconstruction and modernization of its own plant and equipment.

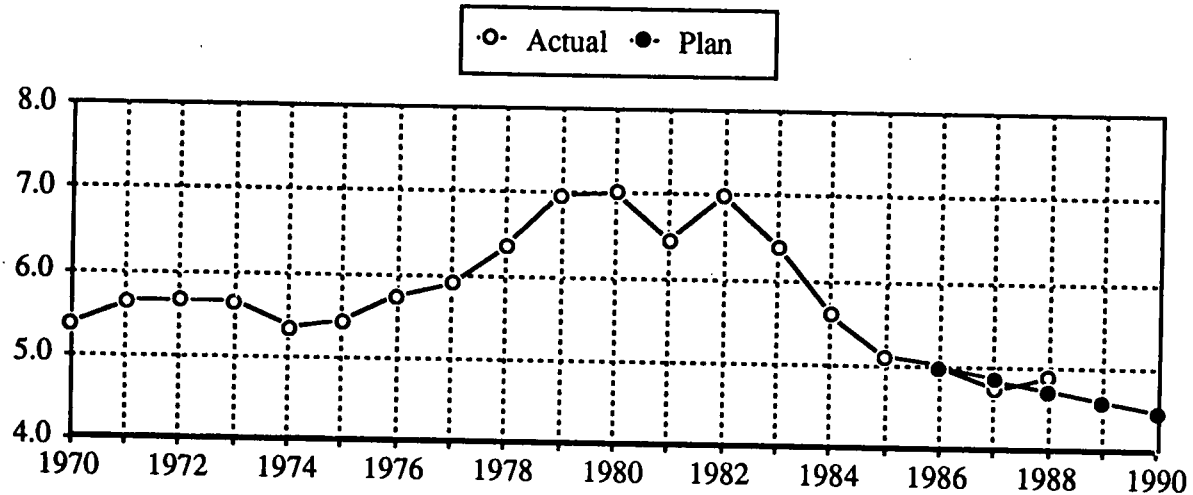
The shift toward a far greater emphasis on modernization investment (as opposed to expansion in production capacity) that began in the early 1980's came with the dramatic reduction in investment which played an important role in the GDR's macroeconomic adjustment. Given the enormous political significance of the housing construction program, there was no give in the housing construction program other than the shift toward renovation previously mentioned. Investment had to be sacrificed to make external adjustment. The bulk of new capacity for 1981-86 was limited to domestic raw materials (including lignite) and electronics.

Using figures from the current 5-year plan, one can estimate that planned investment in the productive sphere of the economy will total about 271 billion marks in 1985 prices. The planned increase in the level of net material product is 25 percent (60.5 billion marks). This gives a 5-year incremental capital output ratio of just under 4.5.¹⁶ In Figure 7 moving 5-year incremental capital output ratios are plotted for 1970 through 1988. Calculated implicit 5-year plan ratios are also plotted for 1986-90. The upward drift in the incremental capital output ratio was basically stopped by 1978. Reductions in the ratio coincide with the collapse in investment at the beginning of the decade. There appears to be another trend break beginning 1988, following the resumption of an active investment program. Hence the newest data indicate that the effectiveness of new investment will *not* follow the optimistic 5-year plan path that extrapolated from the atypical experience of the first half of the decade.

¹⁵ The complaint was made by Politburo member Günter Mittag at Eighth Plenum of the Central Committee of the SED. *Neues Deutschland*, May 27-28, 1978.

¹⁶ According to the 5-year plan investment for the entire economy will amount to 341 billion M. I have assumed that 79.5 percent of that investment will be in the productive sphere of the economy, 271 billion M. NMP is to increase 60.5 billion M. The sum of planned (productive) investment for the 5-year period is divided by the 5-year difference in NMP to obtain the 5-year incremental capital output ratio.

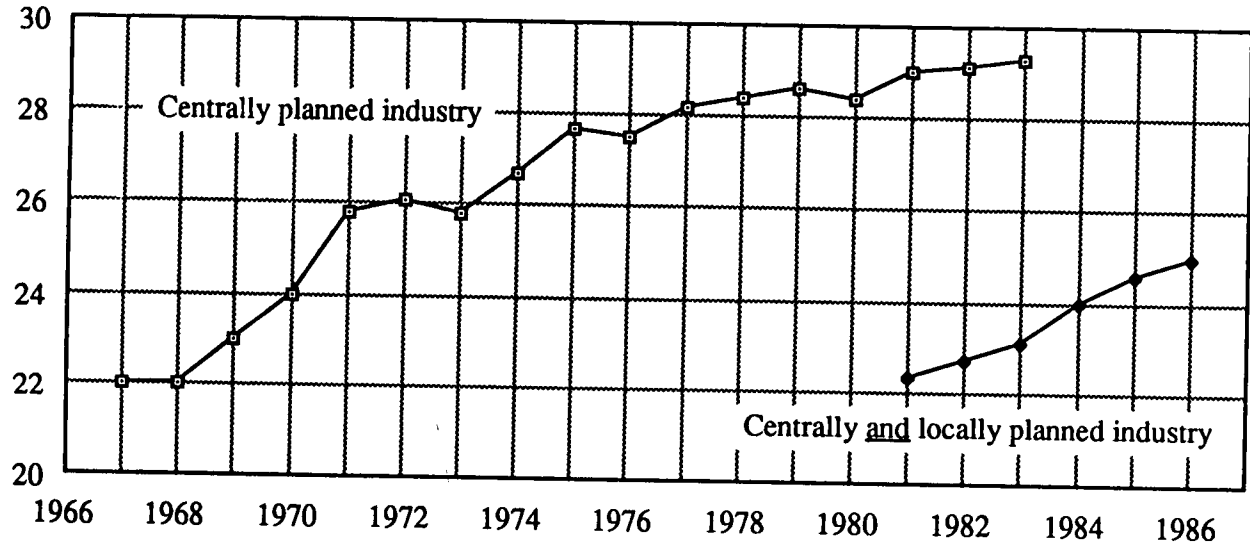
Figure 7—Incremental capital output ratios
(Five year moving average)



Source: Calculations from NMP and gross investment in the material sphere statistics in SJDDR 1987, pp. 13, 15; plan fulfillment reports 1987 and first half-year 1988; plan series estimated using data from five year plan 1986-1990.

Increased public pressure to promote participation in shift work reflects the difficulty of obtaining further increases in the proportion of production workers employed in rotating shifts. Figure 8 shows that this proportion has been growing fairly continuously since the mid-1960's. Currently production workers participating in three shift rotation account for about one-fourth of the production workers in both centrally and locally planned industrial enterprises (almost one-third in centrally planned industry). Further increases in the daily utilization of the fixed capital stock will be harder to achieve.

Figure 8—Production workers in GDR industry
in three shift rotation
(Percent of all production workers in socialist industry)



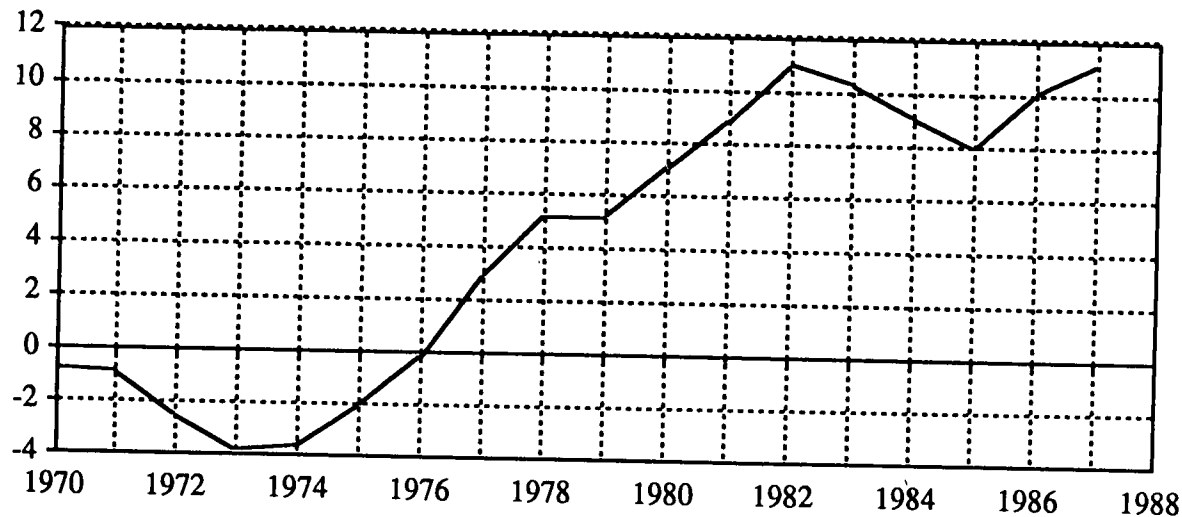
Source: SJDDR, latest years in 1987, p. 152.

MACROECONOMIC ADJUSTMENTS IN THE 1980's

The gradual impact of the fall in the GDR's terms of trade with its socialist trading partners and in particular with its most important trading partner, the Soviet Union, led to the accumulation of deficits in its trade with the Soviet Union seen in Figure 9.¹⁷ The long-term nature of trade contracts within 5-year planning cycles meant that East German export surpluses would be required in the first half of the 1980's. The expected fall in the GDR's terms of trade at the beginning of the 1980's was accompanied by a surprise cut in Soviet oil deliveries of 1.3 million metric tons in 1982 (a drop of 7 percent) together with an unanticipated shortfall in Polish deliveries of coal to the GDR (1982 deliveries were one-third below 1980 deliveries). As if matters were not difficult enough, the GDR was confronted with a major liquidity crisis at the beginning of 1982 as Western credit to Eastern Europe became extremely scarce. In response to the collective impact of these developments, the GDR proceeded to force its exports on Western markets, to cut imports, and to reduce both investment and current consumption at home. "Liquidity over profitability" became the unofficial governing principle of East German economic relations with its nonsocialist trading partners.

¹⁷ By 1980 the cumulative deficits of the GDR were equal to approximate 4 months of GDR exports to the Soviet Union, roughly the same relation as it was in 1987. This is slightly less than the relationship between the cumulative Soviet deficit in 1974 and the size of Soviet exports to the GDR.

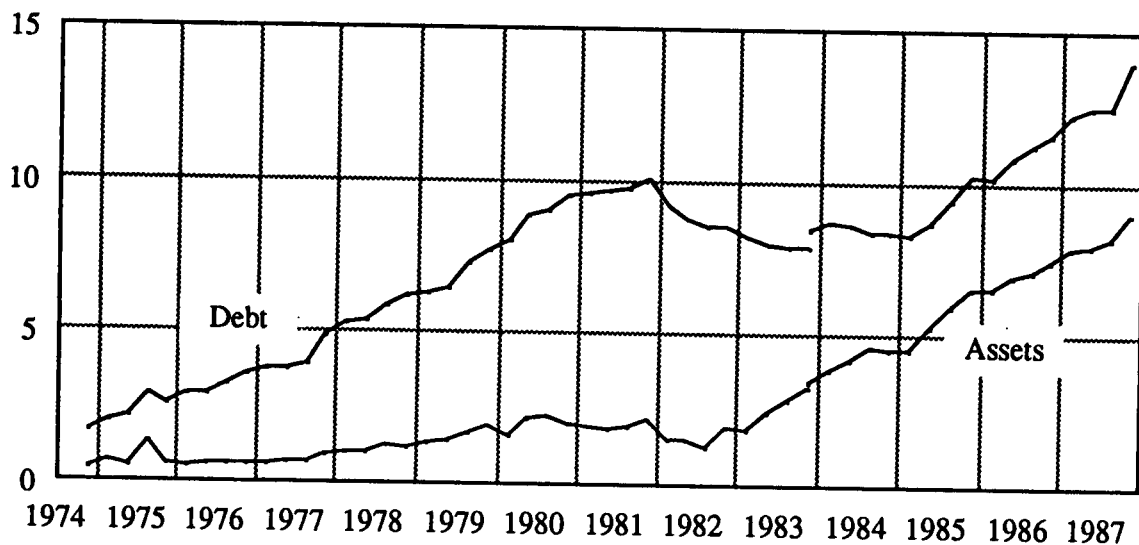
Figure 9—Cumulative GDR trade deficits
with the Soviet Union (billion VM)



Source: For the trade surpluses/deficits prior to 1974, data were taken from earlier volumes of SJDDR; 1974-1986 from *PlanEcon Report* Nov. 26, 1987 and 1987 from *PlanEcon Report*, Sept. 30, 1988.

The magnitude of the East German response to the circumstances it faced in 1982 is best seen in the changes in the levels of its liabilities to and assets in BIS-area banks (Figure 10). We can observe an uninterrupted reduction in net debt that started at the beginning of 1982 and continued through the second quarter of 1985. By that time this measure of the GDR's debt to the West had been reduced almost 60 percent, going from slightly less than \$8 billion to \$3.4 billion. While the increase in net debt since that time has been modest, the GDR has been continuing to pile up assets since 1983 to create the cushion of liquidity it sorely missed in 1982.

Figure 10—GDR debt to and assets in BIS-area banks
(Billions of Current \$)



Source: *PlanEcon Report*, June 17, 1988.

NET MATERIAL PRODUCT FOR DOMESTIC USES

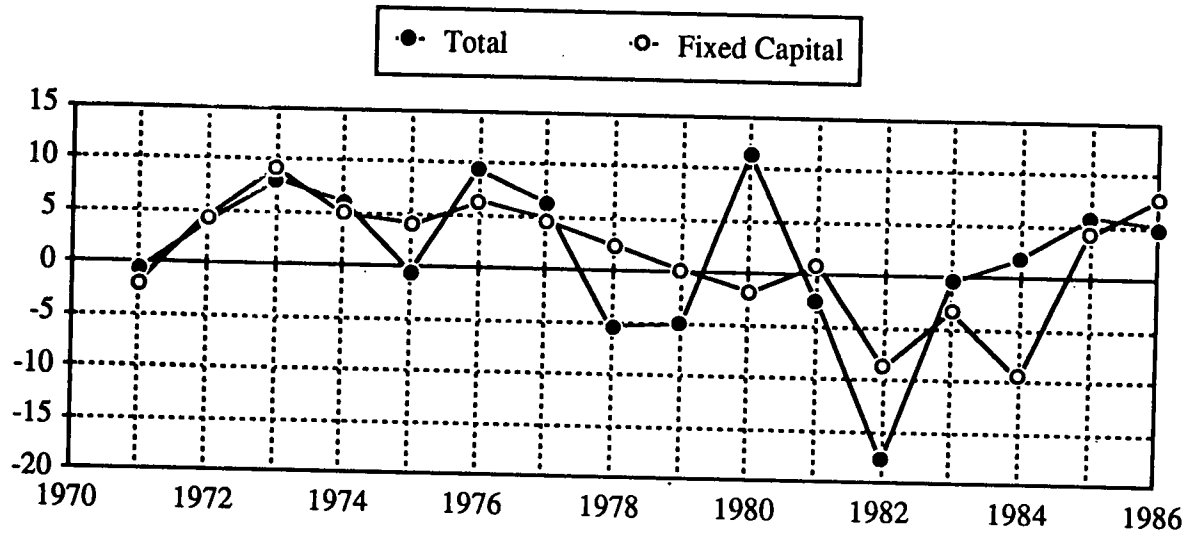
Besides the notable increase in its net exports, the GDR reduced *both* the accumulation and consumption components of domestically used NMP in adjusting to the external shocks at the beginning of the 1980's. In Figure 11 the annual growth rates for total accumulation¹⁸ and the component of fixed capital accumulation have been plotted for the period 1971 to 1986. A gradual reduction can be observed in the growth rate of fixed capital accumulation during the 1970's. There has been near zero or negative growth of fixed capital for 1979-84 with a dramatic drop in investment occurring in 1982. Between 1981 and 1983 the magnitude of the drop in fixed capital accumulation was equal to almost three-fourths of the drop in NMP used domestically. The relatively greater fluctuations of the growth rate of aggregate accumulation compared to fixed capital is due to the huge fluctuations of the relatively small component of inventory investment seen in Figure 12 which has been plotted in the levels of the index.¹⁹ The drop in inventory investment from 1981 to 1983 was equal to 55 percent of the drop of NMP used domestically.²⁰

¹⁸ Defined as net fixed investment in the productive sphere of the economy plus gross fixed investment in the nonproductive sphere plus increases in inventories and state reserves.

¹⁹ This index was calculated from the data published in the SJDDR for aggregate accumulation and fixed capital accumulation.

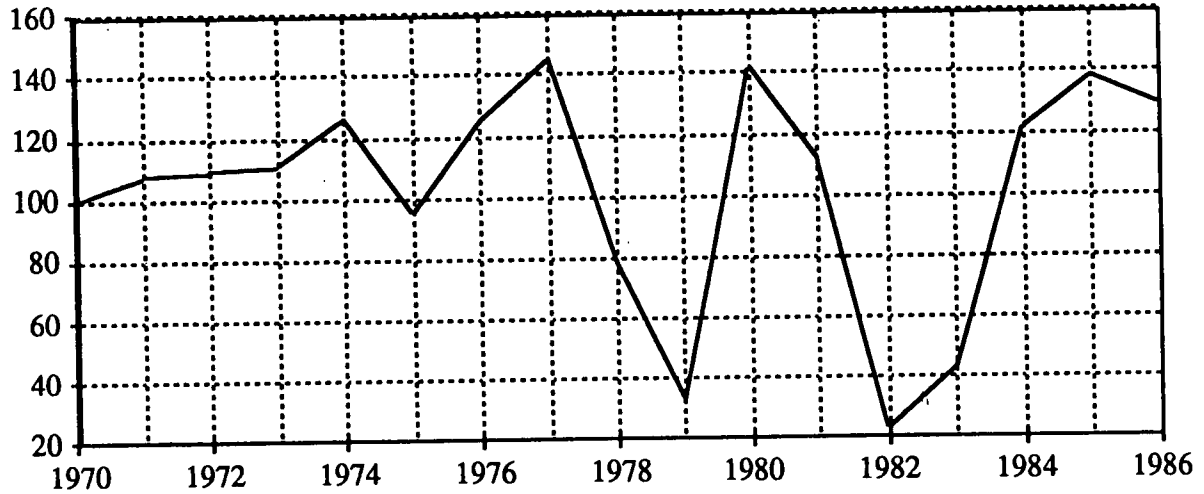
²⁰ The sum of the reductions in the two components of accumulation exceeds the drop of NMP used domestically because individual consumption in the official NMP accounts is reported to have increased by a magnitude roughly 40 percent the absolute value of the change in net material product used domestically. This "official increase" was only about half the increase measured for 1979-81. Strong evidence which points to an actual reduction in real consumption during this period is given below.

Figure 11—Annual growth of accumulation
(percent)



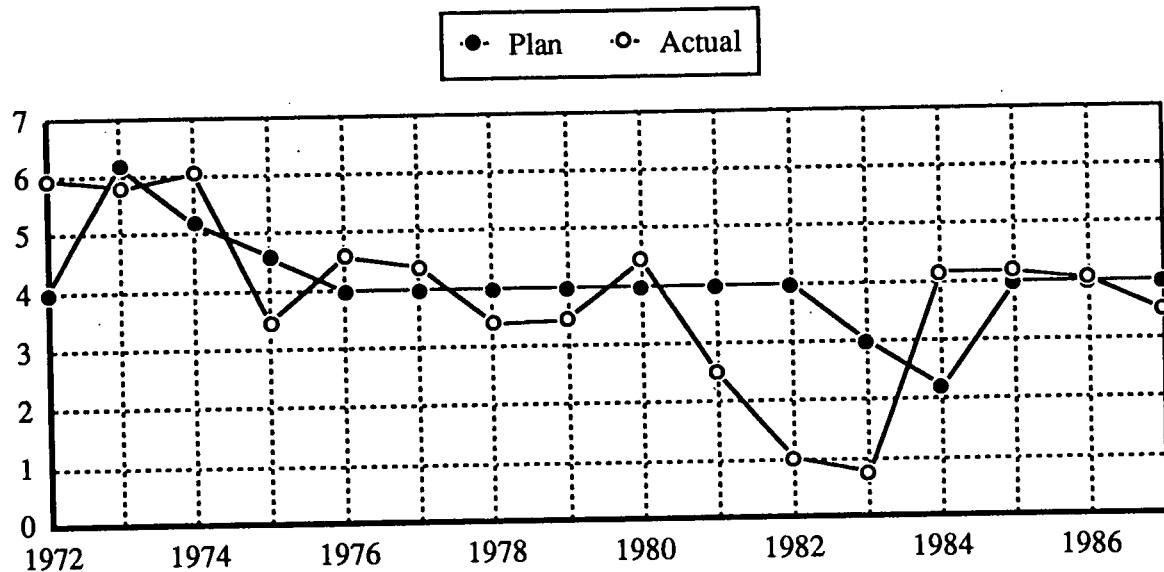
Source: Author's calculations from SJDDR.

Figure 12—Inventory investment
(1970 = 100)



The contribution to the macroeconomic adjustment made by GDR consumers in the early 1980's is illustrated using official data in Figure 13 which plots actual and planned retail sales. There we can see the large shortfall in retail sales in the years 1981-83. The official data are misleading since they indicate that consumption growth merely slowed down during the period in question. In contrast an analysis of published data on household budgets combined with the detailed purchasing power parities for the East German mark estimated by the West Berlin DIW reveals otherwise. The purchasing power parities for the GDR mark show that a significant drop in real consumption was part of the macroeconomic adjustment of the 1980's.

Figure 13—Retail growth rates in the GDR
(annual percent increases)



Michael Keren (1987) has used the published purchasing-power parities of the DIW to construct a consumer price index for the GDR. According to Keren's calculations, between 1973 and 1983 there was an annual average inflation of consumer prices of 2.7-2.8 percent which is quite modest in a global sense but which means the difference between slow growth and a decline in living standards during the reference period. Also using the DIW purchasing power parities but employing a different methodology, Collier (1987) has calculated DM-metric measures of real consumption for East German families of four for selected years between 1977 and 1985. As seen in Table 1 the real consumption expenditure of four person wage and salary households in the GDR is estimated to have fallen 6 percent from 1977 to 1983.

TABLE 1.—*Real monthly consumption expenditure, 4-person wage and salary households (at 1985 West German prices)*

1977.....	DM
1981.....	1819
1983.....	1798
1985.....	1714
.....	1744

Source: Collier (1987).

In the East German NMP accounts public consumption expenditures on material product are divided into two components. Social consumption for cultural and social purposes includes housing, public transportation, gas and water supply, and the material component of other city services, education, art and culture, health and social services, as well as the material component of sports and recreation. The other component is for the "satisfaction of public needs" which includes the material consumption of the banking and financial system, science and technology, governmental and social (includes political parties and trade unions) organizations and presumably current material defense expenditures. The growth rates of both components have dropped considerably from the early Honecker years with the social consumption for public needs stagnating or falling for the 6 years 1979-84. It was only by 1987 that the level of expenditure for public needs attained the level for 1977! The "private" component of social consumption has been spared relative to the "public" component during the difficult times of the early 1980's.

INTER-GERMAN DEVELOPMENTS

The mutual fear of the consequences of a further worsening of U.S.-Soviet relations in the early 1980's was an objective condition that favored a better working relationship between the Germans. The situation was ripe for understandings that would serve to promote East German economic interests in its relations with the industrialized West and West German political interests in increasing contacts between the two German populations as well as maintaining the long-term viability of West Berlin. By the middle of the decade relations between the Germans achieved a postwar high with every expectation of a continuation in the rate of improvement.

Representing a sovereign nation, the GDR leadership as a matter of principal has refused to allow the regulation of its internal affairs to be the subject of public negotiation. However the GDR leadership is quite pragmatic on this score and appears to be satisfied when the link between Western economic benefits and liberalization in inter-German travel remains implicit however obvious.²¹ A brilliant success of West German inter-German policy can be seen in the two billion DM bank loans of 1983 and 1984 that were guaranteed by the West German government.²² These loans were followed by GDR approval of an 11-point program for easing travel restrictions. One of the most important changes was the reduction of minimum exchange of DM for East German marks required of pensioned travelers from West Germany from a daily rate of 25 DM down to 15 DM. The number of permanent exit visas granted by East Germany increased enormously and the number of visits by East Germans below the official retirement ages (60 for women and 65 for men) literally soared.²³ The West German response has not been niggardly. On September 14, 1988, the FRG agreed to increase its lump sum payments for transit (FRG to and from West Berlin) as well as the road tax for West Germans driving automobiles during visits in the GDR. Together these payments will amount to 915 million DM each year during 1990-99.²⁴

ASSESSMENT

The economic leadership of the GDR has demonstrated discipline in a world economy where the supply of adversity seldom generates the needed demand for economic policies of austerity. The successes of the East German economic strategy in the 1980's have been to reestablish GDR creditworthiness in the eyes of Western bankers and to squeeze additional resources out of the system through a ruthless pursuit of waste and an unrelenting search for "hidden reserves." These successes are subject to a few qualifications however.

The reputation of the GDR among international bankers was certainly strengthened by the GDR's demonstrated ability to throttle imports, force exports and make deep cuts in investment and consumption so swiftly and decisively. Nonetheless, the general panic of the Western banking community in the face of the Eastern European debt crisis early in the decade had become a hysterical overreaction when it failed to distinguish the GDR from the genu-

²¹ Helmut Schmidt's failure to get a reduction in the minimum exchange for an increase in the Swing credit is an example of one failed West German attempt at making matters more explicit.

²² In mid-1983 a group of 24 West German financial institutions put together a loan of 1 billion DM for the GDR to be financed over the Euromarket. The terms of the loan were 1 percent over the London Interbank Offered Rate (LIBOR) with 100 Million DM of the principal to be repaid at 6-month intervals. The West German government's guarantee of the loan was obtained by the GDR renouncing the contractual right of special payments from the Federal budget (the transit lump sum) in the event of a default. The 1984 credit of over 950 million DM was subject to similar terms as the first loan except this time the West German budget received a payment of one-fourth percent of the 1 percent markup over the LIBOR rate for guaranteeing the loan. See BMB (1987), p. 634.

²³ In 1987 12 percent of the East German working age population is estimated to have received a visa for a short-term visit to West Germany compared to 0.6 percent in 1985. In absolute terms, this is an increase from 66,000 to 1.2 million visits. BMB (1988) and BMB *Informationen*, 1/1988, Beilage, p. 6.

²⁴ *Neues Deutschland*, Sept. 15, 1988.

inely troubled economies of Eastern Europe. The revived interest among Western bankers in lending to the GDR is at least as much a manifestation of Western bankers returning to their senses as a consequence of GDR economic policy. By guaranteeing the pair of billion DM loans to the GDR in 1983 and 1984, the West German government proved to the world that the pawnshop of intergerman relations could supply significant liquidity to the GDR in times of crisis. Finally, the GDR's dramatic reduction of its net debt to the West during the first half of the decade can be fairly characterized as a financial echo of the *Störfreimachung* (insulation) policy of the Ulbricht years.

The intensive use of resources has taken many shapes in the GDR economic strategy. Producer goods Kombinate are required by plan to save bits and scraps of material and to dedicate some of the labor saved through increases in productivity to expand the supply of consumer goods. Owners of weekend cottages are organized and mobilized to cultivate their *Schrebergärten* (World War II style victory gardens) to increase the production of fruit, vegetables, and poultry.²⁵ Citizens may now apply for part-time taxi licenses and use their family cars to supply private taxi services after work. The scientific personnel of universities and institutes of the academy of sciences are increasingly being harnessed by contract to the R&D programs of the Kombinate. These are only a few examples of the intensive mobilization of productive inputs characterizing the GDR economic strategy.

Material and energy conservation efforts have been given top priority. Strict energy and material normatives are given to enterprises coupled with binding limits on allowable energy and material consumption. To enforce quality standards, quality regulations and quality inspectors have been multiplied. To enforce frugality in construction, building inspectors carefully monitor material consumption in construction enterprises. However effective the additional constraints and state inspectors might be for the task of waste reduction, one should not forget that inefficiency represents a much broader category than does waste. The fundamental question that must be continually posed in any economic system is whether the existing allocation of resources among organizations and economic activities is such that a greater social value could be obtained by transferring resources from one organization or activity to another. The mobility of resources across organizations remains very *low* in the GDR economy. While increasing the authority of the General Director within a Kombinate should work to increase the mobility of resources within the Kombinate, the increased autarky of each Kombinate will hamper the mobility of resources within the economy as a whole.

The economic leadership of the GDR has announced its intent to become a serious competitor in the international race to develop science and technology. The course of that race will determine the economic strategy of the GDR to the end of this century and beyond. East German olympic teams have demonstrated what disci-

²⁵ For a most interesting discussion of the role of small (private) producers in GDR agriculture, see Ahrends, Groschoff, Heinrich, Wirsig (1987). For a recent comparison of the two Germans in matters of vegetables, see Kurjo (1988).

plined training and planning can accomplish. With all due respect to the organizational skill of East German managers and to the discipline of the East German labor force, the medal counts in international economic competition will not be significantly influenced by the proportion of freight carried on barges, the degree of self-sufficiency in raw materials and energy, the proportion of the industrial labor force working third shifts, and not even by the integrity of a country's quality inspectors.

While West European governments pursue the full-fledged integration of their economies, involving as it does the surrendering of sovereignty in such matters as standards and the regulation of capital and labor markets, the attempt of the GDR to restrict its participation in the international economy to its chosen terms appears an anachronism.²⁶ Yet there is reason for optimism. The rise of Mikhail Gorbachev and his struggle to implement glasnost and perestroika in the Soviet Union have created an opening for serious public discussion of economic policy and a fundamental restructuring of the GDR economic policy and a fundamental restructuring of the GDR economic system.²⁷ While the present Politburo of the Socialist Unity Party of Germany (SED) appears to have little use for such openings, glasnost and perestroika can be expected in an actuarial sense to survive most members of the SED's Politburo and thus serve as the ultimate untapped reserve for future improvements in the East German economy.

REFERENCES

- Ahrends, Klaus, Groschoff, Kurt, Heinrich, Richard and Wirsig Hermann (1987), "Die individuelle landwirtschaftliche Kleinproduktion in der DDR," *Wirtschaftswissenschaft* 35, Heft 4, 536-556.
- Alton, Thad P. (1981). "Production and Resource Allocation in Eastern Europe: Performance, Problems, and Prospects," in U.S. Congress, Joint Economic Committee, *East European Economic Assessment: Part 2—Regional Assessments*, Washington, DC, U.S. Government Printing Office.
- Alton, Thad P. et al. (1988), *Economic Growth in Eastern Europe 1970 and 1975-1987*, OP-100. New York: L. W. International Financial Research, Inc.
- Bergson, Abram (1961). *The Real National Income of Soviet Russia Since 1928*. Cambridge, Mass.: Harvard University Press.
- Boretsky, Michael (1987). "The Tenability of the CIA Estimates of Soviet Economic Growth" *Journal of Comparative Economics* 11 (December, No. 4), 517-542.
- Bundesministerium für innerdeutsche Beziehungen (BMB) (1987). *Materialien zum Bericht zur Lage der Nation im geteilten Deutschland 1987*. Bonn, FRG: Bonner Universitäts-Buchdruckerei.
- Bundesministerium für innerdeutsche Beziehungen (BMB) (1988). *Zahlenspiegel Bundesrepublik Deutschland/Deutsche Demokratische Republik: Ein Vergleich*, Bonn, FRG.
- Collier, Irwin L., Jr. (1987). "Effective Purchasing Power: Measurements of Shortage for the German Democratic Republic, Poland, Hungary and Romania," Final Report for contract No. 801-12. Washington, DC: National Council for Soviet and East European Research.
- (1988). "The Simple Analytics (and a Few Pitfalls) of Purchasing Power Parity and Real Consumption Indexes," *Comparative Economic Studies* Vol. 30, No. 4, Winter 1988, 1-16.

²⁶ For instance the GDR's economic information policy defies all potential trading partners to guess where there are new untapped gains from trade.

²⁷ The relationship between Soviet reforms and the GDR was the subject of the 25th anniversary conference of the 25th anniversary of the West Berlin Forschungsstelle (1988).

- (1989). "The Measurement and Interpretation of Real Consumption and Purchasing Power Parity for a Quantity Constrained Economy: The Case of East and West Germany," *Economica*, 56, 109-120.
- Cornelsen, Doris, Melzer, Manfred and Scherzinger, Angela, (1984). "DDR-Wirtschaftssystem: Reform in kleinen Schritten" *Vierteljahrshefte zur Wirtschaftsforschung* Heft 2.
- Forschungsinstitut für gesamtdutsche wirtschaftliche und soziale Fragen (1988). *Glasnost und Perestrojka auch in der DDR?* Berlin (West): Berlin Verlag Arno Spitz.
- Garland, John (ed.) (1987) "The GDR's Quest for Growth and Modernization Through 'Intensification.'" *Studies in Comparative Communism*, 20,1 Spring.
- Hein, R. (1987) "Zu einigen aktuellen Fragen der volkswirtschaftlichen Gesamtrechnung in der Staatlichen Zentralverwaltung für Statistik der DDR" (Concerning a few current questions regarding the national economic accounts of the State Central Administration of the GDR) in Udo Ludwig (ed.) *Karl-Marx-Symposium 1987: Volkswirtschaftliche Gesamtrechnung in der DDR*" Akademie der Wissenschaften der DDR, Zentralinstitut für Wirtschaftswissenschaften, Studien Forschungsberichte Kolloquien, Heft 3, 171-181.
- Keren, Michael (1987). Consumer Prices in the GDR Since 1950: The Construction of Price Indices From Purchasing Power Parities. *Soviet Studies*. 39, 247-268.
- Koziolok, Helmut and Reinhold, Otto (1988). "Gesellschaftspolitik und politische Ökonomie," *Einheit*, No. 8, 715-722.
- Kurjo, Andreas (1988). "Die Gemüsewirtschaft in der DDR im Überblick—mit vergleichenden Betrachtungen zur Gemüsewirtschaft in der Bundesrepublik Deutschland" *FS-Analysen*, No. 1.
- Melzer, Manfred (1987). "The New Planning and Steering Mechanisms in the GDR—Between Pressure for Efficiency and Success in 'Intensification' Policy," in Garland (ed.), 9-26.
- Stahnke, Arthur A. (1987) "Kombinate as the Key Structural Element in the GDR Intensification Process," in Garland (ed.), 27-37.
- Statistisches Jahrbuch der Deutschen Demokratischen Republik (SjDDR)*. [East Berlin, GDR: Staatsverlag.]

APPENDIX

Beginning in 1986 two new accounts were added to the official East German national accounting system: an account for nonproductive services and a total economic product account (volkswirtschaftliche Gesamtleistung) which links the new nonproductive services account with the traditional material product accounts. These accounts are described and a few numbers from the accounts for the year 1985 were reported in the paper presented by R. Hein (1987) of the State Central Administration for Statistics at the 1987 Karl-Marx-Symposium held by the Central Institute of Economics of the Academy of Sciences of the GDR. These numbers can be combined with numbers taken from the published material product accounts to obtain an estimate of East German gross domestic product at current prices for 1985.

In Table A-1 the sources side of the total product account for the year 1985 has been filled in where possible combining statistics from the material product accounts reported in the statistical yearbook and the numbers given in Hein. Net total product in this account appears identical to the western concept of net domestic product. Gross domestic product in current prices for 1985 may be obtained by adding the total for depreciation, rentals and long-term lease payments to net total product. The resulting estimate of East German GDP for 1985 is 322 billion marks. How does this compare with comparable calculations for other economies using the material product system? Similar calculations can be found in the World Bank study on the national products of the U.S.S.R. and Eastern Europe, Marer (1985). Net material product in the GDR in 1985 was equal to 75 percent of its gross domestic product according to the figures in Hein. Examination of Table A-2 shows that this percentage is low compared to those estimated for the other economies as well as compared to the figure estimated by the present author for the World Bank study. Until the nonproductive service accounts of the GDR are published in greater detail, it will be impossible to account for this difference.

TABLE A-1.—TOTAL ECONOMIC PRODUCT ACCOUNT: GDR 1985

[Sources of product, billions of marks]

	Total	Productive sphere	Nonproductive sphere
I. Gross total product.....	¹ 836	(j) 748.6	(j) 88.4
A. Intermediate consumption.....	¹ 554	(g) 507.6	(h) 47.4
1. Depreciation, rents and long-term lease payments.....	¹ 40	(a) 28	(b) 12
2. Material and productive services.....	¹ 513	(c) 478.8	(d) 34.3
3. Nonproductive services.....	¹ 2	(e) .9	(f) 1.1
B. Net total product.....	¹ 282	¹ 241	¹ 41
II. Statistical discrepancy.....	NA	NA	NA
III. Imports.....	NA	NA	NA
IV. Sources of total product.....	NA	NA	NA

¹ Numbers are official GDR estimates reported by Hein (1987), p. 179. Presumably because of rounding the numbers for categories of productive consumption do not add to reported sum.

Note:

(a) SJ86, p. 101 for 1985 this was 27.74 billion marks at 1980 prices. SJ87, p. 100 for 1986 the corresponding figure was 29.24 billion marks for 1986 at 1985 prices. Fixed capital assets in the material sector increased 4.2% between 1985 and 1986 when valued at 1986 prices. Scaling down 29.24 billion marks by 4.2% gives 28 billion marks which is very close to the valuation in 1980 prices.

(b) Subtracting (a) from the 40 billion marks reported in Hein.

(c) SJ87, p. 100 gives 506.75 billion marks for productive consumption in the material product account in 1985 prices. Productive consumption in the productive sphere of the economy is equal to the sum of i) depreciation, rentals, and long-term lease payments and ii) consumption of material and productive services. The value of material and productive services consumed in the productive sector is calculated as the difference between 506.75 and the estimate for depreciation etc. (a).

(d) Subtracting (c) from the 513 billion marks reported in Hein.

(e) Produced national income (net material product) in 1985 in current prices was equal to 241.9 billion marks (SJ87, p. 100). The difference between produced national income (241.9) and net total product of the productive sphere (241) is equal to the value of the nonproductive services consumed in the productive sphere. (Hein 1987, p. 177)

(f) Subtracting (e) from the 2 billion marks reported in Hein.

(g) Sum of items (a), (c), (e).

(h) Sum of items (b), (d), (f).

(i) Sum of item (g) and 241 billion marks reported in Hein.

(j) Sum of item (h) and 41 billion marks reported in Hein.

TABLE A-2.—Ratio of NMP to GNP at current established prices, 1980

	Percent
Hungary.....	81
Romania.....	83
U.S.S.R.....	78
Czechoslovakia.....	85
Poland.....	78
GDR.....	86
Bulgaria.....	76

Source: Marer (1985), Table 2-1, pp. 18-19. Accepting the official GDR data for use on intermediate service consumption in the productive sphere in Hein (1987), the GDR ratio in the table should be lowered to 84.2.

ROMANIA: THE SEARCH FOR ECONOMIC SOVEREIGNTY

By Ronald H. Linden*

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SUMMARY

For the leaders of the Romanian Communist Party (RCP) the primary political-systemic and socioeconomic objectives have been those of orthodox Marxist, even Stalinist, development. The regimes of both Gheorghe Gheorghiu-Dej (1952-65) and Nicolae Ceausescu (1965-present) have pushed for rapid broad industrial development and relegated other sectors of the economy, such as agriculture, and indeed the population itself, to the role of resources for this development. The regimes in Romania have not always been able to pursue this goal as rapidly as desired because of internal or external circumstances, and the drive to achieve this goal has often led to policies or actions quite out of step with the other East European states and the Soviet Union. Still, it is the relentless pursuit of this drive and the struggle to protect the prerogatives of the RCP leadership which have characterized and continue to mark Romanian policy.

BACKGROUND

POLICIES

From its earliest days in power the Romanian Workers Party (as it was known between 1948 and 1965), enunciated policies favoring rapid industrial development. The economic plans—and actions—of the postwar period stressed heavy industrial development backed by national mobilization of resources for investment.¹ This was in

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¹ See, for example, *Planul General Economic al Republicii Populare Romane pe Anul 1949* (Bucharest: Editura Partidului Muncitoresc Roman, 1948). See also the discussion in John M. Montias, *Economic Development in Communist Rumania* (Cambridge: MIT Press, 1967), pp. 1-86.

line with the ideology of the party's orthodox leadership and the plans of the U.S.S.R. for the East European region, newly brought under Communist rule.

But rapid industrial growth had to be put off somewhat in the midfifties due to the slowdowns initiated throughout the region by the Soviet "new course" (1953-55) and because of the fear of possible repercussions of the Polish, and especially the Hungarian, upheavals.² Thus, during the midfifties industrial and overall growth as well as the pace of investment slowed, even if plans remained ambitious.³

During this period the Romanian goal of rapid industrial development—if not the ability to carry it out—did conflict with official Soviet ideology calling for specialization of the East European economies. But in 1959 Moscow's shift to supporting the "simultaneous transition" of all socialist states to communism seemed to bring these two states' policies back into congruence. However, in the early sixties, Nikita Khrushchev attempted to strengthen CMEA to counter an increasingly vigorous European Common Market and a Chinese challenge to Soviet leadership of the world Communist movement.⁴ From the Romanian point of view, accepting such specialization meant accepting a role within CMEA—that of supplier of primary products—similar to that which the country had occupied before World War II when it was seen as the "gas station and breadbasket of Europe." Bucharest demurred and in its "Statement on the Stand of the Rumanian Workers' Party Concerning the Problems of the International Communist and Working Class Movement," stated its unequivocal opposition to "supranational planning bodies." "The sovereignty of the socialist state requires that it effectively and fully avail itself of the means for the practical implementation of these functions [planning], holding in its hands all the levels of managing economic and social life."⁵

Thus pursuit of the socioeconomic objective (SEO) of rapid economic growth led to the pursuit, first discretely and then more openly, of a critical political-systemic objective (PSO): foreign policy independence. This was necessary to secure two additional PSO's, preserving the leading role of the Communist Party and achieving national security. In the Romanian case, unlike that of Poland, for example, the threat to both of these goals was not domestic political or social opposition but the policies of their external "ally," the Soviet Union. In striving for foreign policy independence, the Romanians relegated to a secondary position the PSO of unity of the international Communist movement by essentially redefining it in their own terms.⁶

² On the reaction to the 1956 events in Romania among the country's Hungarian population, see Ghita Ionescu, *Communism in Rumania* (London: Oxford University Press, 1964), pp. 267-273.

³ Montias, pp. 38-53.

⁴ Declaration by CMEA on "The Basic Principles of the International Division of Labor," reprinted in Michael Kaser, *Comecon* (London: Oxford University Press, 1967), pp. 249-255.

⁵ The text of this Statement can be found in William E. Griffith, *Sino-Soviet Relations, 1964-65* (Cambridge: MIT Press, 1967), pp. 269-296; quote is found on p. 283.

⁶ Kenneth Jowitt, "The Romanian Communist Party and the World Socialist System: A Re-definition of Unity," *World Politics* xxiii, 1 (October 1970): 38-60. The discussion of "fundamental objectives" of the leadership of the European socialist states is found in Paul Marer's chapter in this volume.

Both Gheorghiu-Dej and later Ceausescu were able to impose their visions of the country's present and future because of the political system they led. Unlike the situation which had developed in Poland in the fifties or Hungary in the sixties, the Romanian leaders effectively removed potential challengers from the top. Gheorghiu-Dej used the unsettled times in Moscow following Stalin's death and Khrushchev's attack on the antiparty group in 1957 to weaken and remove his own opponents.⁷ Similarly, Nicolae Ceausescu moved remarkably quickly from a relatively weak position as a member of collective leadership in 1965 to *primus inter pares* by the time of the next party congress in 1969, to unchallenged leader and object of an orchestrated personality cult by the time of the next two congresses (1974 and 1979).⁸ At each point at which a conflict might have occurred between the goals of the leadership of the Soviet Union and those of the Romanian leadership, Moscow faced a united, faction-free party. This left little opportunity for manipulation of intraparty struggles of the kind seen in crises involving the Hungarian, Czechoslovak, or Polish parties.

Economically, Romania was able to capitalize on its extensive natural resource base, which included resources usable both for domestic development and international exchange. The country's ample supplies of coal, manganese, and bauxite, as well as oil, natural gas, and agricultural products set it apart from most of its allies. Romania did not need to depend on the U.S.S.R. as a source of energy, for example, and imported no Soviet oil until 1979.

The international economic component was crucial to Romania's strategy. If it was to develop "multilaterally," to use the term offered by Ceausescu, the country needed to find other sources for the manufactured goods—especially industrial technology—which it would not be getting from members of the CMEA. Chinese political support, offered especially during the early years of Romanian assertion of autonomy, was welcome but could provide little of the wherewithal for rapid development. The country turned to the West in search of the means for achieving its central SEO. Between 1960 and 1967 trade with Western countries nearly quadrupled, bringing these countries' share of Romania's trade to just under 40 percent.⁹ During this same period, the Western share of imported machines and equipment jumped from one-quarter to nearly three-fifths.¹⁰ By 1974, Romania's trade with developed capitalist countries had surpassed its trade with the CMEA states.

The RCP supported its search for economic sovereignty with bold assertions of foreign policy independence in word and deed. After

⁷ Stephen Fischer-Galati, *The New Rumania: From People's Democracy to Socialist Republic* (Cambridge: MIT Press, 1967).

⁸ Mary Ellen Fischer, "Idol or Leader? The Origins and Future of the Ceausescu Cult," in *Romania in the 1980's*, Daniel Nelson, ed. (Boulder, CO: Westview Press, 1981), pp. 117-41, and Mary Ellen Fischer, *Nicolae Ceausescu and the Romanian Political Leadership: Nationalization and Personalization of Power*, Edwin M. Moseley Faculty Research Lecture, Skidmore College, 1982.

⁹ *Anuarul Statistic al Republicii Socialiste Romania, 1970* (Bucharest: Directia Centrala de Statistica, 1971), pp. 563-567. Early trade data can be found in Paul Marer, *Soviet and East European Foreign Trade, 1946-69, Statistical Compendium and Guide* (Bloomington: Indiana University Press, 1972).

¹⁰ John M. Montias, "Romania's Foreign Trade: An Overview," in Joint Economic Committee, *Eastern European Economies Post-Helsinki*, 95th Cong., 1st sess. (Washington, DC: U.S. Government Printing Office, 1977), pp. 884 and 885.

the 1967, Six Day War in the Middle East, Romania did not break relations with Israel as all of the East European allies, plus Yugoslavia, did. Bucharest moved to establish full diplomatic relations with the Federal Republic of Germany that same year, without insisting on the latter's recognition of East Germany, and the RCP maintained party-to-party relations and continued to exchange high-level visits with China. Most provocatively, Ceausescu criticized the actions of the Warsaw Pact pressuring Czechoslovakia to end the reforms of the "Prague spring" of 1968 and condemned the invasion of that country in August of that year.¹¹

During the 1970's Romania's political and economic differences with the Soviet Union and its other East European allies were less dramatic but remained in evidence. In 1972 Ceausescu offered a re-definition of Romania from being a socialist country to a "socialist developing" country. This, in his view, meant that the country had as much in common with the developing countries of the Third World as it did with its CMEA allies. The early and mid-seventies was a period of forceful assertion by the nonaligned and less-developed countries of demands for a restructuring of the global economy to benefit the formerly disadvantaged "south" at the expense of the rich "north." This was spelled out most clearly in calls for the creation of a New International Economic Order.¹² Unlike its allies, Romania wholeheartedly embraced this call and added to its broad pattern of international actions both bilateral contacts with developing countries and institutional ties with the Nonaligned Conference (as an official "guest") and the Group of 77.

Politically, the Romanian aim in these actions was to establish for itself an alternative international constituency, that of the numerous less-developed countries of the Third World, and in this way try to protect and strengthen its assertion of national prerogatives. Economically, wooing the Third World also proved useful for securing for Romania a supply of raw materials, especially fuel, and as a market for Romanian exports, especially manufactured goods, which were less salable in the West. Less-developed countries, which took just over 8 percent of Romanian exports in 1970, took 18 percent in 1978; from providing 6 percent of Romanian imports, their share grew to 17 percent.¹³

ECONOMIC PERFORMANCE

During the first 15 years of the rule of Nicolae Ceausescu, Romanian economic growth was rapid. As measured by gross national product, Romanian growth rates were the highest in the region, averaging nearly 5 percent for the period. Industrial production was particularly high, averaging 11.2 percent and 9.4 percent for the 1965-70 and 1970-75 periods, respectively.¹⁴ Though in the

¹¹ Ronald H. Linden, *Bear and Foxes: The International Relations of the East European States* (Boulder, CO: East European Quarterly, 1979), pp. 53-167.

¹² Guy F. Erb and Valeriana Kallab, eds., *Beyond Dependency: The Developing World Speaks Out* (Washington, DC: Overseas Development Council, 1975).

¹³ Linda S. Droker and John A. Martens, "Romania: Performance and Prospects for Trade With the U.S. and the West," in Joint Economic Committee, *East-West Trade: The Prospects to 1985*, 97th Cong., 2d sess. (Washington, DC: U.S. Government Printing Office, 1982), p. 263.

¹⁴ Data in Thad P. Alton, "East European GNP's: Origins of Product, Final Uses, Rates of Growth, and International Comparison," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*, Vol. 1, "Economic Performance and Policy," 99th Cong., 1st sess. (Washington, DC: U.S. Government Printing Office, 1985), pp. 118-119.

first 5 years of Ceausescu's rule, agriculture did poorly, it is worth noting that during the 1970's agricultural production did expand, despite receiving a consistently low share of investment (usually around one-seventh of the total).

The country was able to secure these high rates of growth partly as a result of extremely high rates of investment, especially in industry. From 1971 to 1979, Romania averaged more than 11 percent in annual growth of investment.¹⁵ Of this, about half went into industry. In addition, starting from a lower level of industrial development, the country was able to draw on its agricultural labor force to a greater extent than its more developed neighbors. As late as 1970 nearly 50 percent of the Romanian labor force was still working in agriculture (the average for the other East European states was 20 percent).¹⁶ Being able to draw on such a labor supply, plus having access to a stock of natural resources, allowed the country for a time to avoid having to find the funds to pay for both Western machines and equipment and the fuel to run them. Debt was incurred to cover imports of technology and equipment but borrowing was kept under tight control and, in hard currency exports. In 1976 Romania's gross debt (\$2.9 billion) and debt-to-export ratio (18 percent) were the lowest in East Europe except for Czechoslovakia.¹⁷

Politically, rapid economic development was also aided by the fact that, unlike Poland and Czechoslovakia, Romania was not troubled by internal labor or other social unrest. It did not have to worry about trying to satisfy a population sullen and alienated after Soviet intervention, as in Czechoslovakia, nor had it seen the repeated upheavals which had toppled Communist leaders in Poland in 1956 and 1970. Marginal improvements in living standards, combined with the implicit anti-Soviet appeal of an independent foreign policy plus, of course, steady repression against those few who tried to organize opposition, kept the leading role of the party, or at least of its leader, intact.

The increase in OPEC oil prices in mid-decade and the resulting inflation and recession in the western economies did not produce a significant adjustment in Romanian pursuit of its SEO of heavy industrial development. Investment stayed high—and continued to focus on the energy-intensive steel, chemicals, and oil-refining sectors. In the latter case, processing capacity grew from 18 to 33 million tons annually between 1973 and 1980, precisely at the time when huge price increases were forcing reconsideration of energy policies in major oil dependent countries. Romanian purchases of OPEC oil to run these refineries—even at less than full capacity—began to outpace the country's ability to pay for it. Trade with less-

¹⁵ Marvin R. Jackson, "Romania's Economy at the End of the 1970's: Turning the Corner on Intensive Development," in Joint Economic Committee, *East European Economic Assessment*, Part 1, "Country Studies, 1980," 97th Cong., 1st sess. (Washington, DC: U.S. Government Printing Office, 1981), p. 247.

¹⁶ Paul Marer, "Economic Performance and Prospects in Eastern Europe: Analytical Summary and Interpretation of Findings," in Joint Economic Committee, *East European Economic Assessment*, Part 2, "Regional Assessments," 97th Cong., 1st sess. (Washington, DC: U.S. Government Printing Office, 1981), p. 40.

¹⁷ Joan Parpart Zoeter, "Eastern Europe: The Growing Hard Currency Debt," in Joint Economic Committee, *East European Economies Post-Helsinki*, 95th Congress, 1st session (Washington, DC: U.S. Government Printing Office, 1977), p. 1357; Marvin R. Jackson, "Industrialization, Trade, and Mobilization in Romania's Drive for Economic Independence," in *Idem.*, p. 912.

developed countries moved into deficit in 1978 and was piled onto chronic deficits with developed capitalist countries made larger because of recession-induced slowdown in their purchase of Romanian exports. By 1980 the Romanian hard currency trade deficit exceeded \$1.5 billion.¹⁸

By the end of the decade, the consequences of several domestic imbalances had also come home to roost. The country's slowing population growth, both in terms of overall numbers and numbers available from the agricultural pool, meant that further gains through the use of sheer people power were impossible. Chronic underinvestment in agriculture left that sector not only unable to continue growing at high rates but unable to produce enough to meet growing export demands. Overall growth slowed sharply and was virtually nonexistent in 1980 and 1981.¹⁹ Agricultural output was also flat from 1978 to 1980 and declined in 1981.²⁰ Finally, the external environment which had been encouraging to Romanian economic expansion in the late sixties and early seventies turned decidedly discouraging as the debt grew and the collapse of the Polish economy demonstrated the hazards of unbalanced overinvestment and an alienated population.

ADJUSTMENT

Romanian adjustment to the external and domestic economic difficulties of the early eighties was belated but severe. Ceausescu's approach was akin to that on economic development: i.e., that Romania should rapidly and if possible totally clear its accounts with external creditors and trade partners and under no circumstances surrender key economic policy prerogatives to outside influence. Industrial development would continue; as before, the Romanian worker and consumer were to bear the burden.

The 1981-85 5-year plan cut back growth rates overall and in industry, but agriculture was slated to enjoy substantial growth. A separate agricultural plan was adopted and great emphasis was placed on increasing agricultural trade and exports overall. Energy production—especially coal—was targeted for rapid expansion but living standards and levels of investment in supporting sectors were to be sharply restricted.²¹ On the external plane, Ceausescu matched Western disinclination to lend to Romania with condemnation of "new forms of exploitation" and announced the intention to pay off one-half the debt by 1985 and all of it by 1989. Export promotion and import substitution were to be even more vigorously enforced.

¹⁸ Marvin R. Jackson, "Romania's Debt Crisis: Its Causes and Consequences," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*, vol. 3, "Country Studies on Eastern Europe and Yugoslavia," 99th Cong., 2d sess. (Washington, DC: U.S. Government Printing Office, 1986), p. 540.

¹⁹ Alton, p. 111.

²⁰ Gregor Lazarek, "Comparative Growth of Agricultural Output, Inputs, and Productivity in Eastern Europe, 1965-1982," in Joint Economic Committee, *Eastern European Economies: Slow Growth in the 1980's*, vol. 1, "Economic Performance and Policy," 99th Cong., 1st sess. (Washington, DC: U.S. Government Printing Office, 1985), p. 399.

²¹ Adjustment can be seen in the plan as adopted, in *Romania Libera*, July 2, 1981, pp. 1-4, as compared to the figures of the directives of the Twelfth Party Congress, in *Congresul al XII-lea Partidului Comunist Roman* (Bucharest: Editura Politica, 1981), pp. 690-691.

In practice these policies were implemented with a severity unequalled in the region (indeed in the world). Domestic investment declined by 7.1 percent in 1981 and another 3.1 percent in 1982, while the declines in industry were 6.6 percent and 3.2 percent, respectively. Even after returning to positive growth rates, total investment averaged only 2.9 percent growth through 1986.²² Economic growth slowed accordingly, to an average of under 3 percent for 1980-83 and industrial growth rates fell to below one-half of what they had been at the end of the 1970's. Agriculture did not respond uniformly to increased shares of investment (over 15 percent by 1981 and 1982 and climbing to over 18 percent by 1985). In other respects as well the Romanian economy was not able to achieve the ambitious goals of this 5-year plan. Coal production grew by 7 percent rather than 200 percent by 1985 and oil production actually fell, to below 11 million metric tons (mmt) in the same period.²³

The beleaguered Romanian consumer was made to bear the major share of the pains of adjustment. Supplies of all goods for domestic consumption were sharply cut back, using both administrative measures—such as restrictions and cuts in use of power and rationing of agricultural commodities²⁴—and price increases.²⁵ The Romanians' living standards, already the lowest in East Europe, fell still further. Between 1980-83, real personal disposable income, for example, fell more than 16 percent.²⁶

The domestic market was squeezed to allow the regime to divert all resources toward exports in order to correct trade imbalances and to repay the debt. For 1981-85, exports to hard currency areas exceeded 1980 levels in all years but 1, while imports were cut by roughly one-third. Oil imports, which had reached nearly 16 mmt in 1980 were cut back to below 11 mmt in 1982 and only recovered half the loss in the next 2 years. By 1982 the convertible currency trade and current accounts were in surplus and remained so.

TABLE I.—FOREIGN TRADE AND EXTERNAL FINANCIAL INDICATORS

(Dollars in millions)

Year	Convertible-currency trade volume index (1980=100)			Trade balances		Convertible currency current account	Convertible currency debt	
	Exports	Imports	Terms of trade	Convertible	Noncon- vertible		Gross	Net
1977.....	n.a.	n.a.	n.a.	-\$83	-\$60	-\$273	\$3,582	\$3,073
1978.....	n.a.	n.a.	n.a.	-592	-24	-779	5,074	3,825
1979.....	n.a.	n.a.	n.a.	-1,155	-66	-1,668	7,133	5,354

²² *PlanEcon Report*, Mar. 4, 1988, p. 12.²³ *Ibid.*, p. 9.²⁴ Sept. 9, 1979; *Romania Libera*, Jan. 29, 1982, pp. 1 and 2; Reuters, Apr. 24 and Nov. 12, 1981, Feb. 18, 1982; AP, July 14, 1982; *Financial Times*, Nov. 17, 1981.²⁵ Reuters/AP/CMD, May 14, 1979; Reuters, Feb. 18, 1982; *Romania Libera*, Feb. 15, 1982, pp. 1-3; *Radio Free Europe Research*, Mar. 18, 1982; Tanjung Domestic Service, Mar. 30, 1982 [FBIS, Apr. 3, 1982, p. H1]; *Scinteia*, June 30, 1982, p. 2.²⁶ Thad P. Alton, Krzysztof Badach, Elizabeth Bess, Joseph T. Bombelles, Gregor Lazarcik, "Money Income of the Population and Standard of Living in Eastern Europe 1970-1987," in Thad Alton et al., *Research Project on National Income in East Central Europe* (New York: L. W. International Financial Research, Inc., 1988), p. 12; cf. Elizabeth M. Clayton, "Consumption, Living Standards, and Consumer Welfare in Eastern Europe," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980s*, vol. 1, "Economic Performance and Policy," 99th Cong., 2d sess. (Washington, DC: US Government Printing Office, 1985), pp. 249-62.

TABLE I.—FOREIGN TRADE AND EXTERNAL FINANCIAL INDICATORS—Continued

[Dollars in millions]

Year	Convertible-currency trade volume index (1980=100)			Trade balances		Convertible currency current account	Convertible currency debt	
	Exports	Imports	Terms of trade	Convertible	Nonconver- tible		Gross	Net
1980.....	100.0	100.0	100.0	-1,534	-92	-2,399	9,557	7,981
1981.....	110.0	84.0	97.1	204	-63	-818	10,160	8,387
1982.....	97.9	60.5	100.2	1,525	289	655	9,766	7,606
1983.....	104.8	63.5	102.4	1,688	181	922	8,880	6,119
1984.....	121.5	67.3	100.3	2,186	126	1,536	7,198	3,775
1985.....	111.8	70.0	100.3	1,445	290	915	6,634	3,760
1986.....	¹ 114.6	¹ 69.7	¹ 110.6	1,917	36	1,408	6,395	3,411
1987.....	¹ 131.1	¹ 72.1	¹ 107.7	2,800	¹ 450	2,400	6,150	2,500
1988.....	¹ 154.8	¹ 78.7	¹ 113.4	² 4,000	¹ 650	¹ 3,800	¹ 2,100	¹ -850

¹ Estimates.² Official Romanian statistics, *Scinteia*, Feb. 3, 1989.

Source: PlanEcon Report, Mar. 4, 1988, p. 5, and May 19, 1989, p. 6.

Other East European states had been obliged to adjust their domestic investment and consumption patterns, to shift to import substitution and export promotion policies and to apply various types of austerity programs, but none had set out to adjust to economic difficulties so rapidly and with so little regard for the plight of their own population.²⁷ In Romania, driving the state and the population to satisfy external creditors was possible because of the same political dynamic which had facilitated the country's original commitment to rapid industrialization: the political domination of the party and of the state itself by the leader. Lacking even the fundamental dynamics of powerful countervailing elites, much less public interest groups, there were few moderating influences or political checks to Ceausescu's method of achieving his objectives. Only during the height of the Solidarity period in Poland was there any indication of easing of the austerity measures on the Romanian population, through compensation to lower income groups, or attempts to utilize incentives as well as penalties to improve production.²⁸ Evidence of opposition to Ceausescu's policies, while not completely absent, is scant.²⁹

During the period of adjustment, Ceausescu was often generous with his criticism of those responsible for the economy, except for himself. His role was that of object of a state-directed campaign of adulation, praising him, as well as his wife Elena, for having brought Romania to this "era of light." As he had earlier, Ceausescu continued the policy of "rotation of cadres" appointing and changing regional and national officials in the party and government with sometimes dizzying speed. For example, in 1986 alone the ministers of defense, foreign trade, finance, electricity, industrial construction, transportation and telecommunications, plus the foreign minister (for the second time in 2 years), were replaced.

²⁷ Ellen Comisso and Laura D'Andrea Tyson, eds., *Power, Purpose, and Collective Choice: Economic Strategy in Socialist States* (Ithaca and London: Cornell University Press, 1986).

²⁸ *Scinteia*, Nov. 1, 1980, Dec. 19, 1980; *Romania Libera*, Feb. 15, 1982, pp. 1-3.

²⁹ In 1983 rumors circulated of an attempted military coup. The formal enactment of the plan for making counties self-sufficient (discussed below) took place 2 years after it was formally proposed.

Such rotation had always served to weaken potential opponents and their power bases. In the early eighties, as the economy slowed and difficulties mounted, removal was accompanied by blame for the failure of economic performance and was a substitute for reform.

An important factor driving the pursuit of rapid repayment of debt was Ceausescu's focus on the PSO of preserving national—which in practice meant his personal—independence. Economic sovereignty was tied up inextricably with national sovereignty and Ceausescu sought to protect himself against possible encroachments on his policy prerogatives from Western bankers, governments, or international organizations, as he had against encroachments from the East. From such a perspective followed the virtual halt in hard currency borrowing; the refusal even to take up IMF credits when they were accompanied by policy conditions, such as those applied in Yugoslavia; and the precipitation in 1982 of angry exchanges with the United States and the threatened loss of MFN because of the imposition of an emigration tax and ultimately the renunciation of MFN by Romania in 1988.

In other respects Romania continued to pursue a foreign policy which often was distinctly different from that of the U.S.S.R., despite a shifting of trade toward the East and the beginning of extensive oil purchases from the U.S.S.R. Thus, Bucharest did not applaud the Soviet invasion of Afghanistan, continued to pursue good relations and high-level visits with China, criticized both the U.S.S.R. and the U.S.A. on their nuclear arms policies, and did not adhere to its allies' ban on the U.S.-hosted Olympic games in Los Angeles in 1984.

RECENT POLICIES

Recent Romanian policies have shown a familiar and if anything even more exaggerated emphasis on both economic sovereignty vis-a-vis external actors and squeezing of the domestic economy. Growth rates, which had maintained moderately high levels during 1984-86, slid in the last two years (to 4.8 and 3.2 percent, respectively). Industrial growth showed a similar pattern and agricultural performance was quite erratic. (See Table II.) Gross agricultural output grew at record rates in 1984 and 1986 but was virtually level in 1985 and 1987. The sizable gains in investments which agriculture had enjoyed during 1983-85 have been reversed, as investment in agriculture has declined by more than 7 percent in the last 3 years. Industry has its claim on roughly one-half of all investment, and current economic plans call for even greater levels of resources for the industrial sector.³⁰ Measures of living standards continue to show minimal gains. (See Table III.) It is clear that the emphasis on industrial development at the expense of agriculture and the emphasis on producer goods over "consumption" goods remains a key socioeconomic objective.

³⁰ *PlanEcon Report*, May 19, 1989, pp. 15-16 (for a discussion of Romanian statistics see p. 7) and *Romania Libera*, Feb. 4, 1988, p. 1.

TABLE II.—AGGREGATE OUTPUT INDICATORS

[Annual growth in percent]

Year	NMP produced	Industrial output/sales			Gross agricultural output			Gross investment
		Total	Producer goods	Consumer goods	Total	Crops	Animal products	
1977.....	8.6	12.6	13.6	9.3	-0.8	-5.0	5.4	11.6
1978.....	7.4	9.0	10.2	6.1	2.5	.3	5.6	16.0
1979.....	6.2	8.1	8.8	6.3	5.6	6.2	4.7	4.1
1980.....	2.9	6.5	6.8	5.1	-4.3	-6.0	-2.1	3.0
1981.....	2.2	2.6	2.5	2.8	-9	.6	-2.8	-7.1
1982.....	2.7	1.1	1.3	.2	7.5	12.8	.3	-3.1
1983.....	3.7	4.7	4.8	4.3	-1.6	-5.1	3.7	2.4
1984.....	7.7	6.7	6.8	6.5	13.3	20.3	4.4	6.1
1985.....	5.9	4.9	3.6	8.7	.1	-1.5	2.5	1.6
1986.....	7.3	7.7	8.3	5.9	12.8	19.9	2.8	1.2
1987.....	4.8	4.5	2.7	9.6	2.3	-1.0	6.2	.9
1988.....	¹ 3.2	¹ 3.6	² 3.5	¹ 3.8	¹ 2.9	² 4.2	² 1.0	- ¹ 1.3

¹ Official Romanian statistics; Scinteia, Feb. 3, 1989.² Estimates.

Source: PlanEcon Report, Mar. 4, 1988, p. 5, and May 19, 1989, p. 6.

TABLE III.—CONSUMPTION AND LIVING STANDARD INDICATORS

Year	NMP domestic used	Retail trade turnover				Retail price index	Average monthly wages	
		Total	Food products	Public dining	Nonfood		Nominal	Real
1977.....	5.5	6.8	4.0	5.9	8.8	0.6	6.2	5.6
1978.....	8.8	11.6	9.4	9.6	13.8	1.6	10.6	8.9
1979.....	5.6	5.7	7.0	8.8	4.4	2.0	4.8	2.8
1980.....	.3	6.1	6.2	6.0	6.1	2.1	6.2	4.0
1981.....	-6.6	4.3	.9	6.2	5.9	2.0	4.6	2.5
1982.....	-1.5	-3.9	-9.5	-9.8	1.6	17.0	7.9	-7.8
1983.....	2.2	-2.0	3.3	-7	-6.7	5.5	3.0	-2.4
1984.....	2.8	4.0	4.6	5.7	2.9	.9	6.6	5.7
1985.....	4.3	2.2	.6	3.8	2.8	-4	1.9	2.4
1986.....	4.3	2.4	-1	4.9	3.2	-1	1.0	1.1
1987.....	1.2	2.6	1.9	5.5	2.8	.5	.6	.1
1988.....	¹ -2	² 5	¹ 0	¹ 5.0	¹ -1.0	¹ 5	² 3.3	¹ 2.8

¹ Estimates.² Official Romanian statistics; Scinteia, Feb. 3, 1989.

Source: PlanEcon Report, Mar. 4, 1988, p. 5, and May 19, 1989, p. 60.

In external economic relations some results of this policy are evident. Exports of machinery and equipment grew by more than 57 percent in 1986, earning more than one-fifth of the country's hard currency. The convertible currency trade surplus has continued to climb reaching an officially estimated \$2.8 billion in 1987 and \$4.06 billion in 1988. Convertible currency gross debt, cut by 40 percent (to an estimated \$6.6 million). by 1985, fell to below \$1 billion by the beginning of 1989. Some of this success is attributable to the benefits Romania accrues when the price of crude oil stays low or drops, as it did in 1986. In this situation the cost of Romanian imports of crude oil drops, for example, by nearly 44 percent in 1986, and more oil can be imported. Oil imports grew by 40 percent during 1984-87. The price of refined oil products, however, which until 1987 were the leading hard currency earner, declined more slowly. Such gains, of course, are essentially dependent on the vi-

cissitudes of the world oil market and with Romanian oil production declining steadily (by 20 percent since 1982), will become even more so. Moreover, as excessively ambitious plans remain part of the regime's objective³¹ the country has returned to importing increasing amounts of other energy including electricity, natural gas, and hard coal.³²

Gains from agricultural trade, on which the Ceausescu regime has staked so much, vary according to the success of the harvest. In 1986, a record year, earnings from export of food to convertible currency countries almost doubled. But in 1987 and 1988, agricultural production officially estimated to have grown by less than 3 percent, export earnings grew more modestly.

The shift of trade to the East, begun during the early 1980's as a way of reducing hard-currency imbalances, peaked in 1986. By that year trade with socialist countries, which had accounted for roughly one-third of Romanian trade in 1980, accounted for three-fifths and two-thirds of its imports. By 1988 these levels had declined to 51 and 59 percent, respectively. Trade with the Soviet Union has grown particularly vigorously, though it leveled off in 1987 due evidently to Romanian inability to meet its commitments to the U.S.S.R. In dealing with the nonsocialist countries, Romania has recently been able to significantly increase its exports of machinery and equipment and food in good harvest years. And the lower cost of oil and purchase of Soviet supplies has allowed a healthy trade surplus to grow.

The squeezing of the domestic economy for every possible exportable good has left the country in a grim situation. Use of power by consumers has been consistently cut back to the point that energy consumption levels by households in 1985 was one-fifth what it had been in 1979.³³ In October 1985 the entire electrical energy sector was militarized by presidential decree.³⁴ Cities remain unlit at night and hours of centrally provided heat kept to a minimum. Romanian workers still work the longest hours in the region, a 46-hour week, and in March 1986 the policy of tying wages strictly to plan fulfillment became law, along with promises of both bonuses for overplan performance and penalties for nonperformance.³⁵ The current 5-year plan envisages only a 6.8 percent total increase in real income by the time of its completion in 1990.³⁶

Most drastically, the regime announced plans in 1986 to raze hundreds of small villages with the ostensible purpose of clearing more land for agricultural use. Displaced persons were to be moved into nearby towns and cities in order to make production more efficient and responsive to national needs.³⁷ Combined with the policy of "reconstructing" the centers of most major cities in order to build palaces and monuments to the Ceausescu era, the regime's

³¹ Bucharest Domestic Service, May 29, 1986 [Summary of World Broadcasts, June 2, 1986, p. 8274/C/3]; *Scinteia*, Dec. 25, 1987, pp. 1 and 2; *Romania Liberia*, Dec. 2, 1988, pp. 1 and 2.

³² *PlanEcon Report*, Mar. 4, 1988, p. 9.

³³ *Radio Free Europe Research*, June 26, 1985.

³⁴ *Scinteia*, Oct. 18, 1985, p. 5.

³⁵ *Scinteia*, Sept. 5, 1985, pp. 1, 5; Feb. 6, 1986, pp. 1 and 5.

³⁶ *Agerpress*, June 26, 1986 [SWB, July 9, 1986, p. EE/8360/C/6].

³⁷ *Agerpress*, May 10, 1986 [SWB, May 29, 1986, p. EE/W/1392/A/16].

policies, if carried to completion, will change the face of the country permanently.

The use of such draconian measures has provoked displeasure among some of Romania's erstwhile partners. The Hungarian Government has been unusually outspoken in its denunciation of the treatment of Romania's estimated 1.7 million Hungarians and of the policy of razing of villages many of which are uniquely Hungarian in character.³⁸ The repressive policies have driven some 20,000 Romanian citizens of both Hungarian and Romanian background to flee to Hungary which, though a fellow socialist ally, has not repatriated most of them and has provided some economic relief for those of Hungarian origin.³⁹ In 1989 Hungary cosponsored a resolution of the United Nations Human Rights Commission, which was passed, calling for an investigation of the country's human rights practices. Similarly, Romanian violations of the rights of its people in the area of religious observance, freedom of speech, press and emigration sparked continual criticism from the United States, mostly in the framework of the annual review of the country's MFN status. When Congress included in the 1987 draft of the trade act provision for suspending Romanian MFN because of its human rights record, Bucharest reacted by unilaterally renouncing MFN.⁴⁰ In April 1989 the European Community suspended negotiations with Romania on a comprehensive trade agreement because of the country's poor performance on human rights.

The protection of national prerogatives has remained a cornerstone of Ceausescu's international policy. Despite a brief resumption of small scale borrowing in 1985 (\$150 million),⁴¹ the government has continued to reject credits in principle and the policy advice of the IMF and World Bank.⁴² In 1989, with the hard currency debt repaid, the Grand National Assembly passed a law prohibiting the taking of new credits. The protection of economic and national sovereignty also have had an Eastern component. Though a signatory to the 1985 CMEA Plan on Scientific and Technological Cooperation to the Year 2000,⁴³ Ceausescu has made it very clear that he continues to reject the Council's interference in the nation's economy:

Co-operation, I repeat, specialisation, when it seems necessary and is possible, must be based on the national property of each country and on the fact that the product or part of the national product should belong to each country and nation, in accordance with that country's participation in this activity. We cannot establish any kind of supra-national companies.⁴⁴

³⁸ *Financial Times*, May 13, 1988; *New York Times*, May 29, 1988, p. 11. In June 1988 a mass demonstration took place in Budapest protesting the Romanian villages plan. In response, the Hungarian consulate in Cluj was ordered closed. *New York Times*, June 28, 1988, p. 7. *Christian Science Monitor*, June 27, 1988, p. 7; *Financial Times*, June 30, 1988, p. 1. For a chronology of Hungarian-Romanian exchanges during 1984-87, see *Radio Free Europe Research*, Apr. 22, 1987, pp. 11-15.

³⁹ *New York Times*, Apr. 4, 1988, p. 3.

⁴⁰ *Financial Times*, July 10, 1987, p. 2; Bucharest Home Service, Feb. 27, 1988 [SWB, Feb. 29, 1988, p. EE/0087/A1/1]. For a recent report on human rights in Romania, see U.S. Commission on Security and Cooperation in Europe, *The State of Human Rights in Romania*, 100th Congress, 2nd session (Washington, D.C.: U.S. Government Printing Office, 1988).

⁴¹ Organization for Economic Cooperation and Development, *Financial Market Trends*, 39 (Paris: OECD, 1988), p. 33.

⁴² *Scinteia*, p. 7; Dec. 2, 1987, p. 5; Agerpress, Feb. 2, 1988 [SWB, February 5, 1988, p. EE/0067/B/8].

⁴³ Text in *Pravda*, Dec. 19, 1985 [SWB, Dec. 21, 1985, pp. EE/8140/C/1-10].

⁴⁴ *Romania Libera*, Sep. 5, 1986, p. 2.

Bucharest has been particularly cool to the idea of enterprise-to-enterprise connections which were to be the centerpiece of this stage of improving CMEA cooperation. Very few such agreements were announced in the Soviet but not Romanian media in October 1988 after Ceausescu's visit to Moscow.⁴⁵ In July, 1988 Romania declined to join its CMEA partners in proclaiming its readiness to develop conditions allowing ultimately for the free exchange of goods and services in a CMEA common market.⁴⁶

REFORM OF THE ROMANIAN ECONOMY

While the Romanian Communist Party has favored rapid change in the country's economy and has pursued nothing less than the total transformation of the country for nearly three decades, it has not embraced political or economic reform as a means to that end. When Nicolae Ceausescu became party leader he assumed control of a system which was already heavily centralized and characterized by administrative control of the economy. Under his leadership it has become even more so and more than ever subject to demands for fulfillment of his personal vision.

In response to labor upheavals in Poland in 1976 and a brief episode in Romania's own Jiu Valley mines in 1977, changes were made which expanded formal political and economic participation by Romanian society. A New Economic Mechanism was introduced in 1978 ostensibly directed at broadening worker participation through workers' councils and greater enterprise autonomy. In administration, counties (*judete*) were made responsible for their own supplies through a system known as *autoprovizionarea*. In practice, none of the reforms increased local governmental or worker power at the expense of the central government. Workers' councils, for example, were headed by the party first secretary for the enterprise and worker representation was by law kept to a minority.⁴⁷ Similarly, counties were given responsibility for self-provisioning but not the authority to make decisions, which would have allowed them to accomplish their task.⁴⁸ As with workers' councils, the county party first secretary was also head of county government.

After Solidarity had been dealt with in Poland and with the Romanian economic crisis deepening, central state control was extended to greater and greater degrees into society and the economy. As mentioned, food and energy rationing was enacted, and worker remuneration became tied more strictly to production targets. Workers were encouraged to "voluntarily" purchase shares in their enterprises as a way of securing more investment funds. In agriculture, production quotas were instituted for private plots to be sure that export demands were met.⁴⁹

⁴⁵ Radio Moscow in Romanian to Romania, Oct. 5, 1988 [FBIS, Oct. 6, 1988, pp. 32-33.]

⁴⁶ *Pravda*, July 8, 1988, p. 5.

⁴⁷ Daniel Nelson, "Workers in a Workers' State," in *Romania in the 1980's*, Daniel Nelson, ed. (Boulder, CO: Westview Press, 1981), p. 174-197; and Alan H. Smith, "Romanian Economic Reforms," in NATO, Economic and Information Directorates, *Economic Reform in Eastern Europe and Prospects for the 1980's* (New York: Pergamon Publishing, 1981), pp. 35-57.

⁴⁸ See Gabor Hunya, "New Developments in Romanian Agriculture," *East European Politics and Societies* 1, 2 (Spring 1987): 267-271.

⁴⁹ *Christian Science Monitor*, Feb. 10, 1982, p. 9; *Vjesnik*, Nov. 2, 1982; *Financial Times*, June 7, 1984; Reuters, Nov. 3, 1982; *Radio Free Europe Research*, Nov. 12, 1982; *Scinteia*, July 2, 1983, pp. 1-2; Sept. 7, 1983, pp. 1, 5; Jan. 19, 1984, pp. 2-3.

Attempts by Mikhail Gorbachev to reform the Soviet economy through *perestroika*, and open up the political process with *glasnost*, can be contrasted with a Romanian political and economic system which is moving in the other direction. Indeed, as Soviet reform moves gained momentum, Romanian press coverage of events there became exceedingly selective. In rejecting Soviet-style reform, Ceausescu has explicit:

In no way can one speak of improving socialism by looking back, by speaking of the so-called market socialism, of free enterprise, and all this by invoking objective laws. There cannot be improvement of socialism through the so-called development of the small private property. Capitalist property, big or small, is still capitalist property. One cannot speak of socialist economy without basing it on socialist ownership of the productive means. This is an objective law, without which one cannot speak of the building of a better and more just social system.⁵⁰

He has scorned the very idea that reform is necessary in Romania:

Anyone, friends and—to put it this way—also those who do not find to their liking the socialist development of our homeland and the development of socialism in general, can see what the socialist way of development has meant to Romania—industrialization, development of agriculture, science, education, culture, the steady raising of the people's living standard, materially and spiritually, a rational distribution of the productive forces and harmonious development of all zones of the country, vast socio-economic constructions, houses, schools, hospitals and other establishments that, all together, have a decisive role in raising the degree of civilization and development of our homeland.⁵¹

Romania was the last of the East European states to be visited by Gorbachev, to a decidedly cool reception,⁵² and despite the increase in Soviet-Romanian trade noted above, Romania seems no more eager to automatically mimic Soviet foreign or domestic policy than it has been in the past.

THE FUTURE

Nicolae Ceausescu is able to forestall economic reform in Romania because of his dominance of the political mechanism insured through a patrimonial system in which power derives from him personally, potential rivals are kept off guard by constant rotation and demotion, and personal and especially family ties are critical. Ceausescu is certainly powerful enough to effect a change in the Romanian course—say to a more moderate approach to development—but this is very unlikely given his decades-long commitment to the country's broad industrial development and the preservation of absolute state and more recently personal control to insure that development. A change of direction would almost certainly require his replacement and the removal of those, including family mem-

⁵⁰ Agerpress, Jan. 26, 1987 [SWB, Jan. 28, 1987, p. EE/8477/B/9].

⁵¹ *Ibid.*

⁵² In his speech to a rally in Bucharest, Ceausescu reminded Gorbachev of his position:

"Life, realities have shown that the ways and forms of socialist construction differ from one country to another. Only by taking this diversity into account and only by respecting the right of each country to decide its own development paths and forms, in agreement with its specific conditions, can the new system be built successfully, cooperation grow stronger and the forces of socialism in general increase." (Agerpress, May 26, 1987 [SWB, May 28, 1987, p. EE/8579/C1/2]).

For his part, while discussing *perestroika* Gorbachev managed a broadside of his own:

"And the other side of the same problem is the removal of those who are not coping with the matter in hand; who cannot keep up with the times; and, furthermore, who have tarnished themselves with dishonesty, lack of principle, and nepotism, and who, in pursuit of profit have sacrificed the moral image proper to a party member. We all need to learn to work in conditions of democracy" [Soviet TV, May 26, 1987 [SWB, May 28, 1987, p. EE/8579/C1/9)].

bers, who have gained from his rule and who share his ideology. Though in the past 2 years there have been occasional demonstrations and increasing activity of domestic dissatisfaction with Ceausescu's political, economic and ethnic policies, there are few indications at this point that a group or individual exists powerful enough to effect a change.⁵³

Having reduced Western ties substantially, both in terms of trade and borrowing and having continually alienated potential Western partners with repressive policies and personal dictatorship, Ceausescu will be hard put to return to the special favored position he enjoyed during the height of his foreign policy independence. Moreover, if relations continue to improve between the United States and the Soviet Union and economic and political reform in the U.S.S.R. go forward, the relative "value" of Romania to western commercial and political partners will continue to decline. Even Chinese interest in supporting Bucharest will wane if the trend toward improved Sino-Soviet relations continues.

Where will pressure for reform come from then? Unlike Poland, the country does not have a history of civil upheaval or an active oppositional labor force backed by an attentive external public and an independent-minded church. Unlike both Hungary and Czechoslovakia, there has not been a postwar political upheaval which forced recognition of the need for either economic reform and political relaxation, as in the former, or the provision of consumer satisfaction to forestall political action, as in the latter. The RCP's response to social unrest, displayed both after the Jiu Valley miners' strike in 1977 and the Brasov worker demonstrations in 1987, is repression. At the elite level, though there may be dissatisfaction with the direction of regime policy or its consequences, evidence is small of willingness or ability of a group or faction to challenge the position of Ceausescu—at least while he is still on the scene.⁵⁴

Internationally, Ceausescu has demonstrated his total commitment to national economic sovereignty, an objective which led him to reject in turn, Soviet moves to subsume the country's economy under CMEA, Western moves to modify economic policy in order to handle the trade and debt burdens, and Soviet attempts to get the allies to invigorate CMEA and to emulate Soviet reforms. As before on this score, commitment to the objective of unity of the international Communist movement was not allowed to replace or even challenge the objective of securing national economic prerogatives.

As the pursuit of these prerogatives has increasingly come to mean the achievement of goals personally defined by Ceausescu

⁵³ Reports of demonstrations are found in Vatican Radio, Aug. 8, 1986 [SWB, Aug. 12, 1986, p. 8335/B/2], *Financial Times*, Dec. 14, 1987, p. 1; No. 25, 1987, p. 2. In November 1987 thousands of Romanian workers in the industrial city of Brasov marched from the "Steagul Rosu" tractor factory to the center of town chanting antigovernment slogans and ransacked the local government offices. See *Financial Times*, Nov. 19, 1987, p. 2. On dissident groups, see *Radio Free Europe Research*, Mar. 2, 1988, and Mar. 22, 1988.

⁵⁴ In early 1989 a letter of protest was sent to Ceausescu signed by six former party officials. The signers, who included three former politburo members, a former ambassador to the United States and United Nations and a former minister, drew attention to international criticism of Romania and the illegality of many of the regime's policies, including the "systematization" of villages, curtailing of citizens liberties and the abuse of power by the secret police. The signers criticized the management of the economy, the "forced assimilation" policies against minorities and food exports which, they said, threatened "the biological existence of our nation." The text of the letter is found in *Radio Free Europe Research*, Mar. 29, 1989, pp. 8-11. As a result of their action the signers of the letter were detained or exiled from Bucharest.

and as the preeminence of his vision and the power behind it have yet to be challenged, the prospect for reform of the economy and, sadly, for the situation of the country and its people cannot be termed hopeful.

BIBLIOGRAPHY

- Fischer, Mary Ellen. "Nicolae Ceausescu and the Romanian Political Leadership: Nationalization and Personalization of Power." Edwin M. Moseley Faculty Research Lecture, Skidmore College, 1982.
- Georgescu, Vlad, ed. *Romania: 40 Years (1944-1984)*. New York: Praeger and Center for Strategic and International Studies, 1985.
- Jowitt, Kenneth. *Revolutionary Breakthroughs and National Development: The Case of Romania, 1944-1965*. Berkeley: University of California Press, 1971.
- Linden, Ronald H. *Bear and Foxes: The International Relations of the East European States*. Boulder, CO: East European Quarterly, 1979.
- Linden, Ronald H. *Communist States and International Change: Romania and Yugoslavia in Comparative Perspective*. Boston: Allen and Unwin, 1987.
- Montias, John M. *Economic Development in Communist Rumania*. Cambridge: MIT Press, 1967.
- Nelson, Daniel. *Romania in the 1980's*. Boulder, CO: Westview Press, 1981.
- Shafir, Michael. *Romania: Politics, Economics and Society*. London: Frances Pinter, 1985.
- Tyson, Laura. *Economic Adjustment in Eastern Europe*. Santa Monica, CA: Rand Corp., 1984.

STATISTICS AND POLITICAL ECONOMY IN ROMANIA: WHAT COMES NEXT—RELIEF OR MORE EXPLOITATION?

By Marvin R. Jackson*

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SUMMARY

Romania's economy has been dominated by (1) an allocation policy centered on priority repayment of the country's foreign debt, (2) an orthodox Marxist-Leninist organization policy, and (3) unusual characteristics of the country's dictatorship. Any forecast of what comes next in Romania is highly uncertain because of our lack of information about the country's economic state and the mechanisms connecting leadership decisions to economic conditions.

The paper proposes an approach to deflating Romania's official statistics and for developing appropriate categories of distribution suited for analysis of the country's political economy. In addition, the orthodox approach to economic organization is explained as part of a more complex system of political-economic organization that integrates three categories of decisionmakers: the Ceausescu Household, the Elites and the People.

Critical issues are reviewed around three possible outcomes—continuation of the status quo (stable exploitation), revolt or stagnation and decay, and recovery with mild growth. The possibility of instituting significant decentralizing economic reforms is excluded for the near future.

I. INTRODUCTION

Romania's economy has been dominated since 1981 by policies to drive up its export surplus in hard currencies that were first imposed by foreign creditors and then by fiat of the country's dictator, Ceausescu. His target of paying off all foreign debt by 1988 (revised to 1990), first taken seriously by no one, made Romania the only CMEA country to continue reducing debt after 1984, and is now nearly met. Net debt fell by \$6 billion from 1981 to only \$2.5 billion by the end of 1987.¹ One more squeeze like last year's record surplus would put Romania in the black. If not this year, the debt will be gone next year, and the questions remain. Where will Ceausescu go next? Will the Romanian economy survive him?

After its review of Romania's 1987 credit position, PlanEcon suggested that the country should be in a position to immediately raise hard-currency imports by \$1.5-\$2.0 billion or reduce some of its hard goods exports.² A large part of the change in trade balances could be sustained in the long run bringing needed increases in domestic supplies of capital goods and spare parts, energy, or food. That would stimulate productivity, increase the growth rate, and further improve supplies down the road.

Ceausescu and his advisors may have a different view of what constitutes prosperity. If Romania can pay off its debts, why not also accumulate capital and become an international creditor?

¹ Published estimates of net debt vary depending on which assets are subtracted from gross debts. The cited figures are from PlanEcon.

² *PlanEcon Report*, IV:24-25, 26.

Would not such a policy also both limit foreign interference in Romanian affairs and allow continuing mobilization pressure on the population? The big question is whether the country could take such pressure without either collapsing or revolting. What is the margin of Ceausescu's confidence in his political strength?

In seeking answers to these questions, we encounter a dearth of information about fundamental political processes and personalities. There are also great uncertainties about the present state of the economy because a never really good statistical record has recently gotten much worse. But a lack of information is only part of the problem. We also face the lack of a well thought out framework for using the limited information about Romania. My paper addresses that framework more than trying to provide specific information. The approach covers three aspects of Romanian economics and politics: (1) resource allocation policy in the context of the impact of the crash debt repayment program, (2) organization policy in the context of issues of economic reforms, and (3) the configuration of the Romanian system of political economy that generates policies and their changes.

II. ALLOCATION POLICY: HOW TO UNDERSTAND THE BURDEN OF DEBT REPAYMENT WHEN STATISTICS ARE UNRELIABLE

A. THE OFFICIAL RECORD: ONLY INVESTMENT IS LESS THAN IN 1980

Before anything useful can be said about the impact of debt repayment in Romania, one has to face up to the low quantity and quality of Romanian statistics. Consider what the official statistics show.³ Accordingly, debt repayment hardly caused a ripple in the otherwise fast growing economy. Real output, measured by net material product, never declined. Besides the slightly reduced growth rates in 1981 and 1983 have been attributed to weather effects in agriculture. Material consumption fell slightly in 1982 and 1983, but was 25 percent higher in 1987 than in 1980, while services maintained a near constant volume. Net investment flows absorbed most of the squeeze, reaching only 75-80 percent of 1980 levels through the period, 1981 to 1987. But the more significant gross investment flows dipped in 1981 and 1982, but returned to 1980 levels from 1984 through 1987.

Will Zero Debt Bring Zero Statistics?

Ironically, one of the first positive results of having to cooperate with international creditors after 1981 was a promising improvement in the quantity of data. Around 1983 we knew more about what was going on economically in Communist Romania than any time before or after. One would think with such a fine performance as was shown by the official records that Romanian leaders would have wanted even more to be known abroad about their economy.

But this is not the case. Since 1983 or 1985 the published record has deteriorated as fast as the debt balance has gone down. With the 1987 Statistical Yearbook and the apparent suspension of the Romanian Economic Memorandum and reports to international

³ Linden's paper in this volume has more tables.

agencies, the state of information has been plunged back to before the first statistical yearbook in 1959.⁴ Who knows? Maybe the plan is stop publishing official statistics altogether when the debt is paid.

Would No Official Statistics Be Better Than a Few Bad Ones?

Some skeptics among Western analysts would view the reduction of the official record as no great loss. They believe the official yearbook is mostly fabrication anyway. Good evidence, according to them, is the gap between official statistics and direct reporting of normal living conditions. Whereas official figures show real consumption a fourth higher in 1987 than 1980, direct reports from within the country tell of unchanging misery for common people, rationing and queuing for food, unlighted cities, houses without adequate heat and disrupted water and power, collapsing public transportation, decaying medical care, etc. With this discrepancy, how can we trust any part of the official record?

Things Seen Even Worse in Disequilibrium

Conditions have undoubtedly been bad. In fact consumers have faced not one problem, but three. Total supplies have fallen. At the same time, the supply system has weakened so items are delivered even more irregularly. And, as it has become increasingly hard to find goods through normal channels, more supplies have undoubtedly ended up going through illegal and special channels. So while real deprivation has gone up, the sense of deprivation among people with poor connections has gone up even more.

This is a situation, especially given resentment against Ceausescu and his associates, in which the eye is not a very good instrument for recording quantitative changes. Part of what one sees is disequilibrium, and part of what one hears is people's anger, not just their suffering. Conditions are bad, but perhaps not as bad as some reports suggest.⁵

Systemic Data Distortion

At the same time, no one (other than some Romanian officials) would deny that the official record distorts Romanian reality. But that is not the same as calling the Romanian Statistical Yearbook a work of complete fiction. Among other arguments against this point of view is the fact that Romanian authorities simply stop publishing data that reflects badly on the government. That is the case since 1980 with retail sales and consumption of specific commodities. After all, if data are so easily fabricated, why not publish more misinformation?

⁴ An objective recent evaluation is in *PlanEcon Report*, IV:9 (Mar. 4, 1988), 16. More comprehensive inventories are found in my papers, *National Accounts and the Estimation of Gross Domestic Product and Its Growth Rates for Romania*, World Bank Staff Working Paper No. 774 (Washington, DC: The World Bank, 1985); and "Bulgaria and Romania" in *Basket Two Compliance: East European Economic Statistical Quality*, prepared for the Commission on Security and Cooperation in Europe (Washington, DC: Congressional Research Service, May 1982), 53-73.

⁵ It is regrettable that the economic officers of Western embassies in Bucharest have not cooperated in taking sample surveys of the state of supply in the capital city. If properly designed, this would vastly increase our information about the conditions in the country and provide a very useful check on official statistical claims.

I continue to believe as do the authorities on comparative East European statistics (PlanEcon, the Vienna Institute, and the Project on National Income in Eastern Europe) that data distortions are largely systemic. They arise in the routine estimating and reporting of production and income statistics when there are incentives to cheat.⁶

The Problems of Unequal Cheating

The problem of statistical interpretation arises because of unequal cheating across countries and over time in one country. Cheating is a function of the ease of which it is done and the incentive to do so, including the chance of detection and likely punishment by higher authorities. More cheating goes on in Romania because of its lower development level, the poor quality of its statistical service, the ambitiousness of plans compared to reality, the threat of income losses when plans are not met, and the tolerance of superiors all the way up to Ceausescu. Cheating is more likely when plans are ambitious, as they are in Romania. And it is more likely when there is an abrupt change in allocation policy, as in Romania since 1980. And the more Ceausescu's name is personally associated with particular aspects of economic outcomes, the more distorted will be the official records.

Given these problems, the best "correction" of Romanian statistical data would be a sector by sector approach, considering both the ease of cheating and the possible incentives of higher authorities to tolerate and even encourage cheating. Moreover, each sector's distortions should be reconsidered each year according to gaps in plan fulfillment and changes in leadership pressure. What follows incorporates a much simpler approach in order to explore issues and identify limiting assumptions.

B. HOW TO CORRECT INFLATED PRODUCTION STATISTICS AND THE HIDDEN EFFECTS OF TRADE

There are two simple ways of estimating a corrected Romanian GNP. One assumes that input measures are more reliable than output measures. It starts with measures of the main inputs used in production and then adds educated guesses about how productivity might have changed. The other tries to directly estimate the amount of cheating in the output accounts.

In Table 1, I incorporate both approaches, using the first as a check against the second. Also I integrate the effects of imports and exports in order to estimate "domestic absorption" or the amount of final goods and services available for use inside Romania. I go a step further in Tables 2 and 3 using assumptions about how available national income is distributed. My aim is to focus on the problem of estimating a consistent set of numbers—internally

⁶ For example, inflation can be hidden by quality deterioration without discounting prices, or falsely reporting new models in order to increase prices. Physical output can be exaggerated many different ways. Coal or crops can be counted full of waste and moisture. Crop reports can be increased by exaggerating the amount of thief in the fields by neighboring peasants. Peasants can be estimated to have produced and eaten far more than took place. Machinery can be reported as complete when it is missing components. And so on. These are common problems in all Communist-ruled countries.

consistent and consistent with other data that we have about the economy, and come up with a result that helps political analysis.

TABLE 1.—HYPOTHETICAL IMPACT OF DEBT REPAYMENT ON DOMESTIC ABSORPTION ASSUMING GNP GROWTH RATES EQUAL TO OFFICIAL GROWTH RATE MINUS 4 PERCENTAGE POINTS AND EXCHANGE RATES OF 20 LEI PER DOLLAR

	1980	1981	1982	1983	1984	1985	1986	1987a	1987b
Energy consumption—1,000 barrels per day oil equivalent: Amount	1,364	1,355	1,348	1,369	1,422	1,444	1,439	1,490	++
GNP per unit of energy consumption:									
Million lei	459	456	453	447	443	443	454	441	.....
Index	100	99	99	97	97	97	99	96	.....
Ag labor force ¹	3,048	3,003	2,986	3,019	3,033	3,021	3,020	3,019	.....
Ag share .....	.294	.289	.286	.289	.289	.285	.283	.281	.....
Labor force ¹	10,350	10,376	10,428	10,458	10,500	10,586	10,670	10,755	.....
Growth	1.003	1.003	1.005	1.003	1.004	1.008	1.008	1.008	.....
Capital stock ²	1,864	2,019	2,193	2,378	2,593	2,776	2,965	3,143	.....
Growth	1.084	1.083	1.086	1.084	1.090	1.071	1.068	1.060	.....
Corrected	1.044	1.043	1.046	1.044	1.050	1.036	1.034	1.030	.....
L+K growth ³	1.023	1.023	1.026	1.023	1.027	1.022	1.021	1.019	.....
GNP growth .....	.997	.987	.988	1.002	1.032	1.015	1.021	1.006	.....
Productivity .....	.974	.965	.963	.979	1.005	.993	1.000	.987	.....
GNP ⁴	626	618	610	612	631	641	654	658	626
Imports ⁵	268	249	192	183	204	204	219	221	221
Total available	894	867	803	794	835	844	873	879	847
Exports ⁶	222	252	233	235	270	258	276	298	298
Secret exports	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Domestic uses	672	615	570	559	565	586	587	581	549
Growth .....	.976	.914	.927	.982	1.010	1.038	1.019	.973	.....

¹ Official statistics in 1,000 persons.

² Official statistics in billion lei.

³ The average growth of labor force and corrected growth of capital stock.

⁴ Values in billion lei based on actual values officially estimated in 1980 and growth rates equal to the official growth rate minus four percent ("the PlanEcon Method").

⁵ Values in billion lei; based on the estimated values of total imports and exports in 1981 dollars converted to domestic lei at 20 lei per dollar.

Source: Author's calculations from PlanEcon Report, IV:9 (Mar. 4, 1988). Energy consumption from CIA, Handbook of Economic Statistics, 1988 (Washington, DC, September 1988), 98.

The main assumptions in Table 1 are as follows:

(1) Exports and imports in U.S. dollars can be converted into equivalent domestic flows at 20 lei per dollar (the official exchange rate is about 15 per dollar while the highly distorted black market rate is as high as 80 or 90 per dollar); and

(2) Inflation of the official growth of GNP and net fixed capital investment flows can be eliminated by the "PlanEcon method"; simply reduce all reported growth rates by 4 percentage points so, for example, a 1-percent officially reported growth would actually be a negative 3-percent growth.⁷

The reality of these assumptions is discussed later. But first consider their implications for the state of the Romanian economy since 1980.

I begin with a simple calculation of GNP per unit of energy consumed as a check on other calculations. Energy consumption is based on CIA estimates and GNP, as explained, is based on projecting the 1980 official data ahead by using the PlanEcon Method to

⁷ See *PlanEcon Report*, IV:9 (Mar. 4, 1988), 2-4.

deflate official GNP growth figures. This estimate shows output per unit of energy consumed falling about 3 percent from 1980 to 1983 and staying there through 1987.

Next, as inputs, I consider the shift of labor out of agriculture, the growth of total labor force, and the growth of capital stock.⁸ It turns out that there has been only a tiny shift of labor out of agriculture since 1980 so I ignore it. Then I create an index of combined capital and labor growth by deflating the official capital index and weight equally the corrected growth of capital and the growth of labor. The resulting index shows how much GNP would have grown under constant productivity.

The "corrected" GNP estimated by the PlanEcon method grows less than the index of combined capital and labor inputs except in 1984 and 1986. The implied productivity is about 10 percent less than in 1980 from 1983 to 1987. "Corrected" GNP falls about 3 percent by 1982, then rises slowly to 1987 reaching about 5 percent more than in 1980. The fall corresponds to a period of economic disorganization in 1982 and 1983 as a result of unplanned cuts in imports and the sudden reallocation of supplies and rescheduling of major investment projects. Labor productivity would have fallen because of the decline of 15 percent in living standards, shown in Table 3.

Converting imports and exports into domestic currency equivalents shows the combined effects of importing less and exporting more (in constant price terms) that add to slower GNP growth. From supplying the economy with 46 billion *lei* of goods in 1980, the fashion trade sector changes to taking away 77 billion *lei*, a net reduction of 123 billion, by 1987.⁹ Domestic absorption falls 17 percent from 1980 to 1983 and then rises slightly, but never to more than 88 percent of its initial level.

C. HOW TO ESTIMATE EXPLOITATION IN DOMESTIC DISTRIBUTION

Total domestic uses can be divided into investment and consumption. In place of the conventional subdivision, I have divided consumption into three categories: Ceausescu's Household, the Elite's, and the People's.¹⁰

My intention is to include in Ceausescu's Household all that might be used for consumption and security of the Ceausescu family, its immediate advisers, key security personnel and the costs of special equipment, palaces, transportation, etc. Of course, nobody knows how much all of this costs. My estimate is based on giving a

⁸Estimation of an aggregate production function should include an indicator of structural change, especially for centrally planned economies in which there is no presumption of equilibrium in sectoral allocations. This is why the shift of labor out of agriculture is considered.

⁹Using 15 *lei* per dollar, closer to the present official rate, will lower the effect of changing trading balances on domestic absorption. By using an exchange rate of 20, I assume the official exchange rate overvalues the *lei*. On the other hand, the black market rate in Bucharest of 70-90 undervalues it.

¹⁰It would be interesting to estimate more of the special allocation categories associated with Ceausescu. In the tables, I suggest two others. One would cover allocations of investments for his special projects that have a political function or that serve his consumption needs more than productive purposes. Another possibility is that the Ceausescu Household (including security) undertakes secret exports and imports. According to Pacea, chief of Romania's external intelligence service under Ceausescu until his defection in 1978, cash payments for Jewish and German emigrants went in secret account that had a balance of \$400 million in 1978. Ion Pacea, *Red Horizon* (Washington DC: Regency Gateway, 1987), 72-79.

generous allowance to an arbitrarily chosen 0.05 percent of the 1980 population, some 11,000 persons and possibly 3,000 household units.¹¹

The rest of the Romanian population is divided into the Elite of 2.0 percent (444,000 persons) and all the others, the People. The People are further divided into first and last decile groups in terms of income distribution, on the assumption that Romanian income distribution approximates that in the Soviet Union. The figures are in Table 2.

TABLE 2.—HYPOTHETICAL DISTRIBUTION OF CONSUMPTION AMONG ROMANIAN HOUSEHOLDS

Household category	Number of persons (households) in 1980	Consumption in 1980		Growth rates after 1980 percent year
		Per person (household) monthly lei	Total billion lei	
1. Ceausescu's Household: ¹	11,000	² 100,000	² 13	5.0
	³ (3,000)	² (400,000)		
2. The Elite	444,000	15,540	83	3.0
	³ (127,000)	(46,734)		
3. The People	21,746,000	1,218	318	(*)
	³ (7,249,000)	(3,654)		
Of the people:				
Highest decile	2,175,000	⁵ 2,862		
	³ (725,000)	(8,586)		
Lowest decile	2,175,000	⁵ 333		
	³ (725,000)	(1,000)		
All persons	⁶ 22,201,000	1,554	⁶ 414	
	7,379,000	(4,662)		

¹ Includes family, immediate advisers, and security.

² Includes cost of electronics, special transportation, and the like.

³ It is assumed that the average household has 3.0 members and that other households have more members (according to the 1966 census, there were 2.8 persons per household).

⁴ As residual.

⁵ The ratios of highest and lowest deciles to average follow Soviet data.

⁶ Actual data.

Investments and Capital Stock

My estimate of investment allocations since 1980 assumes that the official figures for net investments in fixed capital should be corrected by the PlanEcon Method. The two other categories, investments in inventory changes and fixed capital investments covered by depreciation, are assumed to be the same as the official figures.

¹¹ A few reference numbers can be given. There are 19 full and 25 candidate members of the Politburo, 350-375 full and candidate members of the Central Committee, and about 3,700,000 Party members. On a per capita basis, these are the largest party organizations in Eastern Europe. The top nomenclature in Bucharest is probably no more than 10,000 and extended to districts about 200,000. The latter number surely would include party, economy, administration, and security with room to spare.

A standard figure for the number of security troops under the Ministry of Interior is 20,000, plus 17,000 border guards [International Institute for Strategic Studies, *The Military Balance, 1984-1985* (London, 1984), 28]. Pacea says the main task of these troops was shifted from protecting the Communist Party headquarters to guarding Ceausescu himself [p.211]. He also mentions the Securitate's Directorate V that was responsible for Ceausescu's personal security and was moved from the Ministry of Interior to the presidential office. But he does not give its numbers or make it clear what its connections were to other units [p.159]. There were four top secret units within the security service. One, that had "over 1,000 officers," was used by Ceausescu's for monitoring their relatives and other top Communists [pp. 168-169]. The other two were for counterintelligence in the Central Committee and the Council of Ministers, and within the Securitate itself. Pacea's own unit, for external intelligence, was increased from 700 to 2,800 officers in 1972 [p.8].

In the corrected figures, reductions of investments absorb a large share of the overall decline in the domestic uses. Gross fixed capital investment in this table falls about 14 percent from 1980 to 1987.

Two other official figures help us understand what has been happening with investments and capital stock. First, the officially estimated share of imported machinery in the machinery component of total investments fell from 21 percent in 1980 to only about 5-6 percent in 1987.¹² With correctly adjusted figures, the latter share might have been somewhat higher. In any case it matches import data showing a massive cutback in imported equipment. Domestic industry now supplies virtually all equipment needs.

Second, not surprisingly, the statistical yearbook reveals the fastest growing component of industrial output is the subbranch of machinery and metalworking for capital repairs. Many enterprises are having to make do without imports by repairing old machinery. A big question is what will happen to the quality of Romanian capital equipment and the prospects for technological progress after several years of near complete self-supply.

Consumption of the Ceausescu Household, the Elite, and the People

The amounts of consumption allocated for the Ceausescu household and Elite households is fixed by my assumptions of their priority growth of 5 and 3 percent a year, respectively. The real volume of consumption for Ceausescu's Household rises by 38 percent while that for the Elites rises by 23 percent from 1980 to 1987.

The Elite has two sources of increased economic incentives in the model. Absolute incomes rise 3 percent per year while their relative incomes go up from about 13 times the average income of People to over 19 times.

The People's consumption in the model must bear all the decrease in domestic uses not absorbed in decreased investment spending. Accordingly, as a total, it falls 18 percent below 1980 in 1984 and then rises slightly only to fall again in 1987. In per capita terms the decline is about 1-2 percent more.

TABLE 3.—HYPOTHETICAL IMPACT OF DEBT REPAYMENT ON INVESTMENT AND CONSUMPTION UNDER ASSUMPTIONS OF TABLE 1 CONCERNING PRODUCTION OF GNP AND TRADE

	1980	1981	1982	1983	1984	1985	1986	1987a	1987b
Domestic uses ¹	672	615	570	559	565	586	597	581	549
Growth .....	.976	.914	.927	.982	1.010	1.038	1.019	.973	.....
Investments (in billion lei):									
Net Fixed capital investments ²	164	136	118	113	113	107	104	97	97
Depreciation ³	60	66	71	75	82	87	90	96	96
Total fixed capital investments	224	201	188	188	195	194	194	193	193
Growth .....	.987	.899	.936	.999	1.036	.998	1.000	.993	.....
Index	100	90	84	84	87	87	97	86	86
Of which:									
Ceausescu's unproductive projects	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	.....

¹² The last reported official figure for 1985 was 8.8 percent imported and 91.2 domestically produced.

TABLE 3.—HYPOTHETICAL IMPACT OF DEBT REPAYMENT ON INVESTMENT AND CONSUMPTION UNDER ASSUMPTIONS OF TABLE 1 CONCERNING PRODUCTION OF GNP AND TRADE—Continued

	1980	1981	1982	1983	1984	1985	1986	1987a	1987b
Left over for productive projects	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	.....
Inventory change ^a	35	8	18	27	14	14	19	15	15
Investment total	259	201	188	188	195	194	194	193	193
Left over for consumption:									
Amount (billion lei)	414	414	381	371	370	392	403	388	356
Growth .....	.993	.999	.922	.973	.998	1.058	1.028	.963	.....
Index	100	99	92	90	89	95	97	94	86
Of which:									
Ceausescu's Household covering 11,000 people grows 5 percent per year in real terms:									
Amount	13	14	14	15	16	17	17	18	18
All other consumption	401	400	367	356	355	375	385	370	338
Consumption of the Elite 2 percent or 444,000 people that grows 3 percent per year in real terms:									
Amount (billion lei)	83	85	88	91	93	96	99	102	102
Index	100	102	106	110	112	116	119	123	123
Consumption left over for the people:									
Amount (billion lei)	368	356	312	299	295	314	321	303	236
Index	100	96	85	81	80	85	87	82	74
Population	22,201	22,353	22,478	22,553	22,625	22,725	22,816	22,907	.....
The people	21,746	21,898	22,023	22,098	22,170	22,270	22,361	22,452	.....
Per capita consumption in lei per month:									
The Elite	15,578	16,045	16,527	17,023	17,533	18,059	18,601	19,159	.....
The People	1,218	1,197	1,056	1,001	982	1,044	1,067	993	.....
Index	100	98	87	82	81	86	88	82	.....
Elite income compared to People income: ratio ..	12.8	13.4	15.7	17.0	17.9	17.3	17.4	19.3	.....
Distribution among the People assuming constant decile shares: ⁴									
Top 10%—lei	2,862	2,812	2,481	2,353	2,307	2,454	2,508	2,334	3
Bottom 10%—lei	304	299	264	250	245	261	267	248	.....

¹ From Table 1.

² Values in billion lei; Based on actual values officially estimated in 1980 and growth rates equal to the official growth rate minus 4 percent ("the PlanEcon Method").

³ Based on actual official estimates.

⁴ Assumed decile differences are those for Soviet income estimated by Aaron Vinokur and Gur Ofer, "Inequality of Earnings, Income and Wealth," in "Politics, Work and Daily Life in the U.S.S.R.," edited by James R. Millar (Cambridge: Cambridge University Press, 1987), 187. Other sources from Table 1.

All People would be squeezed by the debt repayment, although in different absolute degrees depending on where a person is in the income distribution. A top decile family with 7,000 lei would manage as long as it could exchange money for goods in the shortage economy. At the bottom decile much depends on incomes of other family members. A pensioned aunt living with a working couple, for example, might do all right. But if each member of a household of three received only 248 lei per month the family would face malnutrition.

I assume a constant ratio of high and low income among the People. Whether the range would have gotten larger or smaller depends on how the rationing system works. In principle, rationing should benefit the relatively poorer members of society who are short on money and long on time to queue. However, in the Romanian case, large shares of available supplies probably have been di-

verted to the second economy where influence, job connections and money all work together. If this effect and the new worker incentives are strong in Romania, then the ratio of top bottom decile of incomes could have increased after 1980. That would have intensified deprivation of the poor.

D. THE EFFECTS OF SOME ALTERNATIVE ASSUMPTIONS

Tables 1 and 3 are generated from a single spreadsheet so the numbers have the virtue of internal consistency. It is easy enough with the technique to change any of the key assumptions used in the tables. Also, production can be disaggregated or other categories of distribution can be added.

Time and space have limited my own explorations. For example, Tables 1 and 3 show a second estimate for 1987 based on a simple assumption of zero GNP growth from 1980 to 1987 without changing the values of imports and exports. With consumption of Ceausescu's Household and Elite households also unchanged, the People's consumption would have fallen to 74 percent of 1980 rather than only 84 percent by 1987.

I have also calculated the implications of an official overstatement of growth of 5 percentage points rather than 4 as in the Plan-Econ Method. In this case, GNP compared to 1980 would have decreased by 5 percent by 1983 and 2 percent by 1987. It would have pushed the People's total consumption down to 70 percent of 1980 levels in 1987.

In either case, small changes in production cause rather big changes in the People's consumption because I allow no other cushioning adjustments in exports, investments, or consumption by Ceausescu or the Elite. Ceausescu could have decided that this was a dangerous course. Suppose he relieved some pressure on the People's by holding Elite incomes to their 1980 levels. Then the People's incomes in 1987 would end up at 76 percent of the 1980 level rather than 70 percent (still assuming an official overstatement of production growth of 5 percentage points per year).

If we worry about the incentives of the Elite in this case, the ratio of their income to the People's would still rise, from about 13 times in 1980 to over 17 times in 1987. So while the Elite no longer have an absolute increase in incomes, they still do better than the People.

III. ORGANIZATIONAL POLICY: MARXIST-LENINIST ORTHODOXY AND PHYSICAL "PERESTROIKA"

The second major aspect of policy under Ceausescu's leadership is the approach to economic organization. It features a strict application of orthodox Marxist-Leninist ideas. This means not only extending central planning and administration, and socialist labor incentives, but also viewing economic organization as a means of elimination of presocialist elements. Like neighbor Zhivkov, Ceausescu initiated a "new economic mechanism" in 1978, but, instead of going ahead with decentralization as in Bulgaria, Ceausescu has given much effort to increasing central intervention.

A. PIECE-RATE PAY WITHOUT ENTERPRISE RIGHTS

Ceausescu and Zhivkov, as old generation Communists with both orthodox Marxist-Leninist ideas and old-fashioned work ethics, probably view NEM as an application of the principles of the necessity to work and to receive wages proportionate to productivity, expounded by Marx in his *Critique of the Gotha Programme*.

The central idea is the application of payment by performance or piece rates as much as possible, from the level of individual worker on up to enterprises.¹³ Wages and salaries are restricted to a share of the value of delivered production and state budget subsidies to cover enterprise losses are to be cut. The same principle is applied to district administrations. They are charged with supplying their own sources of basic foods, not relying on redistribution from central state funds. And, in foreign trade, industrial organizations are called upon to supply their own needs for foreign exchange by exporting.

Besides this, both Balkan leaders remain faithful to the idea of planned economies. Both have denounced "market socialism" and both have insisted on the necessity of central planning. But while inspiration may have been shared on both sides on the Danube, the way ideas are put into practice has not.

Zhivkov approved handing over to economic organizations important rights to determine output, contract interorganizational deliveries, and set prices, and has permitted a partial dismantling of the central economic apparatus. But Ceausescu insists on the primacy of old fashioned central allocations in physical terms and central control of all prices. So while Romanian producers receive only piece wages, they have no rights to determine their supplies of inputs, or to decide what to produce and where it will be sent. In place of rights, economic reform in Romania is the obligation to bear the brunt of the center's errors, as well as the consequences of one's own limited responses to them. This creates massive incentives for cheating, distortion of reports, and simulation of performance. Honesty carries no premium in the Romanian system.

Ceausescu's notions of subjecting all income to centrally determined shares of obligatory production targets has also been extended to what used to be considered "private" agriculture, the once nearly uncontrolled farming on the gardens of peasant households. This sector has remained quite large because of the relatively slow urbanization of the Romanian population. In 1980 still half lived in rural places. Now Ceausescu and his advisers are intent on choking out the private sector. Inventories of animals belonging to households have been taken, restrictions on private slaughtering evoked, and obligatory delivery quotas to the state enforced. It is more and more difficult to find a peasant willing to sell a piglet or even a chicken directly to urban households.

Ceausescu's village resettlement program, on the long-term planning agenda since the early 1970's, aims to do in Romania what earlier industrialization and urbanization already did in Bulgaria. The countryside is to be physically reconstructed by bulldozing vil-

¹³ Also, in Romania was an effort to apply a performance wage system at the level of ministries, but it is doubtful that it could prove functional.

lages and moving their inhabitants to concentrated "agroindustrial" communities. Former village sites will be plowed up by state or collective farms, while facilities for gardens and animal shelters are supposed to be provided in the new settlements. Ceausescu may also have been inspired by Zhivkov's example to seek more rapid assimilation of the country's minorities.¹⁴

B. FROM SHARING THE FRUITS OF GROWTH TO EXPLOITATION

Since organizational policies are essentially extensions of those applied or evolving before 1980 there is less reason to attribute changes in outcomes to them. Nevertheless, there is an important question of the effects of organization when allocation policy changes. Before 1980 orthodox planning and incentives served to control the marginal shares of increased output each year allocated to investments and special programs of the Ceausescu Household. As long as putput and imports were growing, all demands for the use of goods and services could be met, including necessary sums for providing increased economic incentives for the Elite and the People. There was little need to be concerned about either the incentives for work or the efficiency of production.

With the end of growth, an organization designed to control allocation of annual increases in the goods flow not only found it difficult to increase incentives for work and production efficiency, it also became increasingly exploitative in order to keep sufficient resources flowing to investment and special programs of the Ceausescu Household. A clear example of increasing exploitation is the diversion of private farm output from direct outlets in peasant markets to the state trade network. Generally more and more organizational resources are committed to controlling output and less and less to increasing output. *The result is a shift from growth oriented organization to exploitative organization without essentially changing the forms of organization.*

IV. ARE ROMANIAN ALLOCATION AND ORGANIZATIONAL POLICIES SUSTAINABLE?

As in the case of allocation policy, the question arises, is Romanian organizational policy sustainable? Or can Ceausescu see his own objectives benefiting from its change? Will he change organization only if his power is threatened or is he so wedded to what now exists that he would risk his power trying to maintain the status quo? And what about his successors? Will it be to their benefit to change the power structure that Ceausescu has built? Is a Romanian Gorbachev waiting for his chance?

¹⁴ If so, Ceausescu's techniques are at least more subtle than those used by his neighbor. Bulgaria initiated a program of forced changing of Turkish to Bulgarian names of people who were considered Turkish in the winter of 1984-85. Several hundred thousand people were involved with reported violence and deaths. Bulgaria has not relented in what it claims is only reversing what was forced on Bulgarian people under Turkish rule. The case against Bulgaria is made in Amnesty International, *Bulgaria: Imprisonment of Ethnic Turks* (London: 1986). A useful summary of the resulting conflict between Turkey and Bulgaria is found in Radio Free Europe, *Bulgarian Situation Report/3*, Mar. 8, 1988, 9-14.

A. THE MAIN ISSUES

Any answers depend very much on the present state of the Romanian economy. If reality is close to the numbers hypothesized in Tables 1 and 3, then it is difficult to see immediately compelling sources of change in policies other than possibly Ceausescu's death. Nevertheless, at least six key issues should be evaluated.

Issue No. 1.—What is the state of the capital stock and how adequate is Romanian self-supply of investment goods? The cutback in imports left dozens of partly finished investment projects since abandoned, reprojected, or completed with domestic equipment. Now, with the highest level of self-supplied equipment in investments within the CMEA, can Romanian industry provide enough capital goods of sufficient quality to prevent a decline in productivity? And, even if it does this, will it live up to the tougher challenge of supplying production capacity of sufficient quality to maintain the present volume of export earnings in Western markets?

Issue No. 2.—What is the level of tolerance of Romanian workers to low levels of consumption? Workers have no direct voice in Romanian policymaking, but they might influence policy indirectly by either changing work effort or engaging in demonstrations and striking. In terms of work effort, they have been subjected to conflicting influences. On the one hand, the government has been trying to increase the effectiveness of piece-rate wages, including using payments in food on the job. At the same time, the real value of money wages has fallen so there is less incentive to work and more incentive to search for goods.

Romanian workers have so far not shown a propensity for strikes or demonstrations.¹⁵ The question remains: how far can Romanian workers be pushed? Do they have a flash point?

A corollary is what are Ceausescu's opportunity costs? Can he better achieve his own objectives by spending resources on additional consumption goods to reward the positive performance of workers (with possible further returns of higher labor productivity) or by additional sums on the security forces or tighter administration?

Issue No. 3.—What combinations of economic incentives and organizational measures are required for incentives and control of Romanian Elites? As economic and political administrators, the Elites are responsible for the execution of policies made by the Ceausescu Household. I assume they need strong positive incentives, as shown in Table 3. But if Ceausescu has decided to provide the Elite with smaller margins of incentives the question is how small can the margin become before the Elite respond with management so poor that productivity and exports both decrease?

Consideration also must be given to the risk of negative political action by Elites against the Ceausescu Household. However, I assume it is easier to control Elites than workers. Elites have more to lose while their behavior is easier to monitor.

¹⁵ The two main events were the 1977 strike of coal miners in the Jiu Valley and the protest demonstrations of Brasov workers in 1987, both, it should be noted, were locally confined. It is not known whether the lack of protest suggests (1) the efficiency of police control and repression, (2) the weakness of working class solidarity of Romanian workers, (3) the fact that conditions might not have been as bad as assumed, or (4) some combination of the three.

Issue No. 4—Under what circumstances could there be disloyalty within the Ceausescu household? Removal of the party leader is the exception, not the rule under communism because of high-positive and high-negative incentives for those close to the leader.¹⁶

One of the negative incentives is if the leader goes down, those in the leader's household may go, too. In Ceausescu's case, this is even more likely for his family members. Is there any combination of rewards, threats and ability that might lead someone in the household to depose Ceausescu? If so, would that lead to policy changes?

Issue No. 5—Under what circumstances, if any, would Ceausescu be expected to change his policies? When we talk about Ceausescu, are we literally talking about one very powerful and isolated man (like Stalin), Ceausescu and his wife, or a small group, perhaps more than one as he shifts among specialist advisers in his office? I do not know, so I use the term "Ceausescu's Household" as a poorly specified unit of decisionmaking and behavior to cover all of these possibilities.

A second issue is whether Ceausescu's Household is a "rational actor," meaning does he attach relative weights to the arguments in his objective function and try to choose among different means to achieve these objectives on the basis of his perceptions of their relative efficiency and costs? That does not mean that his objectives are "rational" in the sense of being in accordance with the external standards of humanists or socialist ideologues. It means merely the way he pursues them, matching and balancing means to objectives.

Still other "models" may fit Ceausescu better. Should he be viewed as having a completely fixed set of priorities and agendas? Or, is he totally capricious and unpredictable? My inclination is to treat him as a "rational actor."

Issue No. 6.—Can international events and conditions be expected to influence Romanian policy? Ceausescu and his predecessors are described in Linden's paper as being dominated by the objective of "sovereignty." Does this mean that Ceausescu responds to international influences only by trying to eliminate them? For sure he does respond negatively to direct confrontation, as a principle. But are there other less direct ways to influence him? In the economic realm, for example, Romania still must import many critical raw materials. And if Ceausescu wants to accumulate foreign currency reserves, Romania must have export markets. In both cases, the rest of the world can influence the terms of their availability to Romania. In this a concern for Ceausescu?

Romania has been increasingly criticized for its human rights violations and now for the village resettlement program, but mere criticism by foreign governments, even that of the Soviet Union, has not yet had a visible effect on Romanian policy. Stronger measures are represented by the refusal of the U.S. to offer uncondition-

¹⁶The risks of being detected during the organization of a plot are high, while the chances of success are low. In addition, aside from providing inside information, high ranking persons in the Party or security services rarely have marketable skills in the West if they fail and have to run for it. And if the regime falls and they do not leave the country, they may go down, too, since their hands are known to be dirty. By contrast, under the leader they enjoy exceptional privileges of material consumption.

al MFN to Romania that led to its discontinuation altogether.¹⁷ In consequence, Romania has been denied some profitable export markets. The question is, under what conditions might other countries, including the Soviet Union, use economic incentives in attempts to induce domestic policy change in Romania? Would, for example, the possibility of provoking concerted economic sanctions from the West and the Soviet Union have an affect?

B. THE ROMANIAN SYSTEM OF POLITICAL ECONOMY

Any attempt to explore any one of the six major issues listed above has to recognize that it is linked with all of the others in a system of interactions between the more purely economic aspects of what goes on in Romania and its politics. In a full system of interactions, national policies are decided on the basis of their bringing about economic and political outcomes that fulfill leadership objectives, in this case the objective function of Ceausescu's Household (that has more than one argument). Other participants, the Elite and the People, enter the decisionmaking process as agents to carry out leadership policies. They decide their own behavior on the basis of personal objectives, subject to controls and incentives in the system and the system outcomes that determine the amount of resources available and changes in the number of participants at various levels of organization. The system goes from objectives to decisionmaking to policies and behaviors that determine outcomes. Feedback occurs when participants evaluate outcomes and, then, revise policies, behaviors and even objectives.

Feedback From Economic Outcomes to the Political System

In a simple model of feedback, the economy supplies resources to satisfy three distinct participant objectives: (1) the Ceausescu Household's, (2) the Elite's, and (3) the People's. The resources required in each case depend on the particular arguments in each objective function.

I assume Ceausescu's objectives are (1a) staying in power, (1b) "building socialism", and (1c) "enhancing his image." While staying in power is his first objective, there is a margin where he trades off more "staying in power" with increasing priority for either of the other objectives.

The Elite's objectives are assumed to be (2a) receiving a compensation package (material income, power to exercise, chance to rise higher) worth the extra risk and pain of administering Ceausescu's policies, (2b) rising higher in the system, and (2c) maybe some kind of nationalist aspiration. The People seek (3a) a secure basis of life, (3b) rising standards of living, and (3c) also some nationalist aspiration. As Ceausescu fears, neither the Elite nor the People are assumed to care about building socialism, except as that might contribute to their other objectives.

While participant objectives are ranked by the political system, the hierarchy of priority is complicated by the dependency of any participant on the behavior of other. Ceausescu can not fulfill his

¹⁷ Technically Romania renounced the MFN privilege before it came up for annual renewal, but it seemed likely that renewal would not have been recommended by the Congress.

objectives except through the behaviors of the Elite and the People. In order for the Elite to manage and direct according to Ceausescu's policies and specific order, it must be given adequate rewards. In order for the People to produce what is necessary to sustain the Elite and to supply activities that satisfy Ceausescu's objectives, it must receive enough to survive and work.

The Decision Process From Ceausescu's Point of View

Since we are interested primarily in whether Ceausescu might change allocation or organizational policy, the choice problem from his point of view needs to be described. To begin with, he wants two kinds of behavior from the Elites and the People. He wants them to work at some level of efficiency—the Elites to manage and direct the People, the People to produce goods and reproduce themselves. In addition, he wants them to avoid negative political actions against him.

In order to achieve these ends, Ceausescu must allocate his personal resources and resources (wealth and income) from the economy among different techniques of control and inducement, including:

- (1) ordinary economic resource allocations,
 - (a) investments
 - (b) consumption and incentives;
- (2) ordinary economic organization;
- (3) political organization and technique,¹⁸
 - (a) cadre rotation
 - (b) large-sized subunits
 - (c) election of First Secretary by Party Congress
 - (d) reliance on family
- (4) police operations,
 - (a) surveillance
 - (b) blackmail
 - (c) exclusion
 - (d) terror and deprivation
 - (e) control of communications
 - (f) exit control
- (5) socialization through propaganda and education,
 - (a) Ceausescu Personality enhancement
 - (b) nationalism and xenophobia
 - (c) pronatalism
 - (d) hard work.

According to the standard analysis of "production" the application of resources to any one of these techniques ought to be subject to diminishing marginal returns. For example, the addition of ever greater numbers of family members probably results in ever smaller increases in the reliability of Ceausescu's Household. It is also possible that a technique is subject to technological progress, such as, for example, the uses of computers in surveillance.

¹⁸ Items (a) through (c) are devices that draw many people into the political process while diluting the potential power of competition to Ceausescu. In the cases of (b) through (d) Romanian practice is exceptional among Communist countries. But while most Western specialists on Romanian politics emphasize cadre rotation as a special source of Ceausescu's power, I have seen no comparative empirical documentation of their claim.

Ceausescu's Budget Constraint and Resource Tradeoffs

Like all political leaders, Ceausescu faces a budget constraint in terms of his own time and energy, and resources available to him for achievement of his objectives. Of course, he can try to exploit the People more or lower incomes of the Elite in order to build another palace or pay off debts to the West. But that is a reallocation of resources, not an increase in his total budget.

Ceausescu's decision problem is complicated because numerous tradeoffs are involved. On one hand, all five categories of techniques are more or less substitutes for inducing both economic and political responses. Harder work can be induced by higher wages or by appeals to nationalism. Loyalty can be induced by bribes, threats, or acts of leadership (real or created). On the other hand, resources used in one category are denied to others.

The decision problem is partly what the economist would see as *finding the more efficient or lesser cost technique to obtain a given outcome*. Harder work from the People might be induced by either higher wages or appeals to nationalism. Loyalty might be induced by bribes, threats, or acts of leadership.

In addition, Ceausescu has to decide *what mix of outcomes* he wants according to their costs and the values he places on the arguments in his objective function. When more is allocated to consumption for Elites or the People, less is available for Ceausescu's other projects (building public monuments, accumulating foreign reserves, etc.).

The Confusion of Means and Ends

The tradeoffs in Ceausescu's decision problem are more complicated because some of the techniques listed above for inducing correct behavior are not just means to an end, but also ends themselves. This can be illustrated by several examples that include the important comparative trademarks of Ceausescu's rule.

Romanian organization of economic activity is not just a way of directing and allocating resources, but it provide political control and political support. For every central function there is a central functionary who must carry it out and who will be paid to do so. Thus, central planning and administration is a way of building and maintaining support for the leader. Its value as a means enhances its worth to Ceausescu as an embodiment of "building socialism".

A related example concerns the two basic Romanian allocation policies, the construction of a heavy industrial base in defiance of Khrushchev in the early 1960's and the renunciation of international ties and the debt repayment in the 1980's. In both cases, as Linden stresses in his paper, Romanian leaders were protecting their "sovereignty" (what I call "staying in power"), but at the same time, they were also enlarging a dependent industrial Elite and then, in effect, defending it from foreign competition. Policies of autarchy in socialism, like policies of protectionism in capitalism, involve a mutually advantageous exchange between national leaders and national elites.¹⁹

¹⁹ One can add, at the cost of the People in both cases unless they also have very strong preferences for national goods and aversions for foreign goods.

The reconstruction of villages not only will undermine the traditional village culture and, therefore, is a step in "building socialism." It also reduces the degree of autonomy afforded by self-supply, isolation, and private buildings. The resettled population will be more subject to centrally controlled work activity and the costs of police surveillance and political control will be reduced.

In Romania's case, as with higher levels of normal urbanization, the village reconstruction will have a special impact because part of the traditional culture sustained has been that of the country's minorities, especially the Hungarian. Resettlement will reduce the numerical concentration of minorities and facilitate "romanianization" in the new settlements.

Effort involved in the so-called "cult of personality" of Ceausescu also serves more than one purpose. It does not have to be only aberrant personal consumption by the Ceausescu family, but can also serve as a means of enhancing Ceausescu's legitimacy among the People and of weakening potential competition from others high in the political hierarchy.²⁰

A final example is Ceausescu's increasing reliance on members of his family. This, also, has been interpreted as an instance of Ceausescu's irrational consumption preferences, perhaps forced on him by his strong willed and equally ego-inflated wife. But the family is a useful instrument, especially since the defection of Ceausescu's personal adviser and external security chief, Pacepa, in 1978. Pacepa's disloyalty is said to have resulted in a total reorganization of the Household guard under the direction of Mrs. Ceausescu. Both Ceausescus may be convinced that family ensures loyalty.

C. A DIAGRAMMATIC MODEL OF ROMANIAN POLITICAL ECONOMY

Figure 1 portrays the main interactions in the Romanian system. The directions of influence are shown by the solid lines for direct influence and the dotted lines for feedback. The lines are numbered for identification.

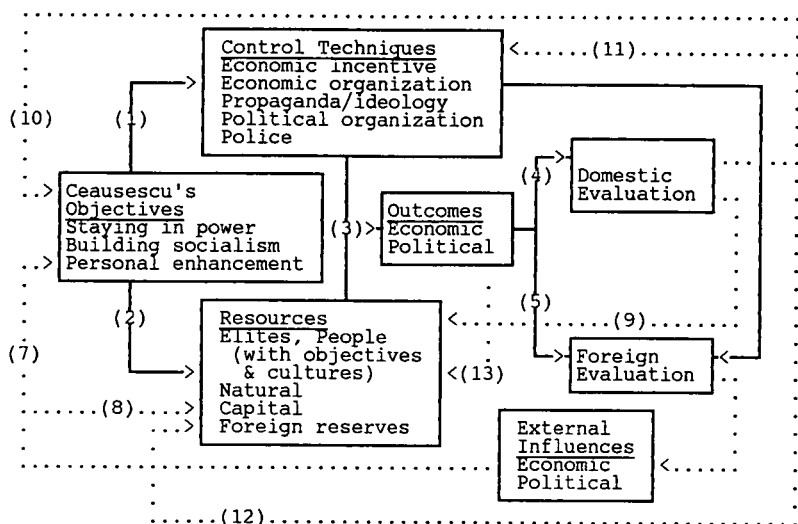
Ceausescu (along with his household of personal advisers) is shown as making policy decisions with respect to organization (1) and allocation (2). The interaction of organization and resources (3) determines economic and political outcomes. Economic and political outcomes are evaluated domestically (4) and abroad (5). In addition, foreign evaluation is made of Romania's organizational and allocation policies (6). Foreigners react not only to outcomes, but how these outcomes are generated. As a result of foreign evaluation, there are attempts to influence Ceausescu politically (7) and economically (8) the latter in the form of economic sanctions, offers of trade, loans of money, etc.

Domestic evaluation also takes place. Elites and the People react (9) by the quality of their work and their political responses. Ceausescu also evaluates outcomes and reconsiders his objectives

²⁰ "Ceausescu plays the role of a royal personage and, as such, satisfies the instinctive needs of the Romanian masses for a strong monarch. At least this is the explanation of the cult usually given by sophisticated Romanian citizens or Romanian officials. . . ." Mary Ellen Fischer "Idol or Leader? The Origins and Future of the Ceausescu Cult," in *Romania in the 1980's*, edited by Daniel N. Nelson (Boulder CO: Westview, 1981), 130.

(10) or his initial set of policy decisions, (11) and (12). Finally, outcomes also change the initial values of resources (13) available from the first period.

FIGURE 1
MAIN INTERACTIONS IN THE POLITICAL ECONOMY OF ROMANIA
(direct influence ——— ; feedback)



D. EXPLOITATIVE VERSUS PRODUCTIVITY ORIENTED POLICIES

With a system model of appropriate complexity in mind, I should like to reconsider where Romania might be headed. Perhaps all issues pertinent to this question ultimately turn on one point: Is the Romania regime under Ceausescu essentially "exploitative," or can it recover part of its former "contract" character in which economic growth permitted the simultaneous satisfaction of the objectives of leaders, the Elite and the People? ²¹ Three alternative outcomes face the country.

Outcome No. 1. Stable Exploitation

The present and immediate future depends on the application of allocation policy and the still unclear state of the Romanian economy. If the state of the economy is actually like I assume it to be in Tables 1 and 3, then it is presently generating rewards for the Ceausescu Household and the Elite, but the People have been put on the edge of insecurity with those at the bottom of the income distribution in deprivation. Given organization, levels of invest-

²¹ For a discussion of the idea of a contract state in Romania, see Steven Sampson, "The Social Contract in Romania," *Cahiers des Etudes Roumaines*, No. 5, 1987. My own use of the contrast between "a contract state" and "the exploitative state" follows that explained in Douglas C. North, *Structure and Change in Economic History*, (New York: Norton, 1981), ch. 3 on the neoclassical theory of the state.

ment, and labor incentives, there would seem no hope for growth to provide better achievement of the People's objectives without a change in allocation policy. On the other hand there is no evident reason to expect further declines in productivity and output. Romania may have reached a stable, self-sustaining exploitative system.

Outcome No. 2. Imminent Revolution or Progressive Decay

The news is full of reports that the state of the economy is worse than I have assumed in Tables 1 and 3. Some predict increased suffering, even starvation this winter and with revolt against the Ceausescu Household likely.²² While I personally think such reports exaggerate, I must admit that the economy could be in a progressive state of decay.

The main dangers are (1) that investments are insufficient to maintain the present quantity and quality of capital stock, (2) incentives, including available nutrition and health care, are so low that labor productivity and output will continue a slow decline. Additional pressure could result from concerted economic measures against Romania from the West and the East. If this happens without an early change in allocation policy, the lot of ever-growing shares of the People will fall to the edge of physical survival, while the Elite and the Ceausescu Household retreat deeper into an inner fortress state.

Outcome No. 3. Renewal of Moderate Growth

A third outcome is possible because Romania may still have some reserves for what is called "extensive" growth. As PlanEcon suggests, immediate pressure could be taken off the economy by changing allocation policy to allow more importing and less exporting. The increase in domestic uses could be as much as 10-15 percent of the present GNP. A somewhat smaller boost of domestic supplies would even permit moderate accumulation of foreign exchange.

An even better outlook would accompany modest changes in organizational policy to forego immediate village resettlement and to unbind private and cooperative farmers from restrictive rules while boosting sharply both their incentives and their access to supplies for farming. This would raise output and marketing even in the first full year of a program and even if output were still marketed through state trade agencies.

Can Ceausescu ever be convinced that his objectives can be better served by renewing "the contract for growth" and simultaneous increases in the well being of all participants in the Romanian system? Can he be convinced that his own survival, the "building of socialism" in Romania and even his image in history need policy changes? Or is there a different configuration of forces in his mind or frozen within the Ceausescu Household?

²² The most extreme statement that I have seen is *Eastern Europe Newsletter*, 2:22, November 9, 1988, in a front page article, "Romania: Disaster," that suggests even the security apparatus is disaffected.

ALBANIA

By Raymond Hutchings*

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SUMMARY

The Albanian economy diverges from Stalinism in circumstances and policy but not in structure; however, the worst diseases of a centralised system are not experienced. Abrupt changes in relationships with other socialist countries have caused sharp variations in growth rates. In response, a high level of self-sufficiency is still aimed at, but is being frustrated by the rapid rate of population expansion. Exports are now being accented, the share of machinery in imports having lately declined. Of the two dominant priorities—to build up industry and to enlarge the population—the former at least is now being modified, in the direction of making agriculture the priority growth sector; moreover, extraction is now emphasized more than manufacturing, apart from subsidiary consumer goods output. Enormous construction of fortifications lowered growth and investment especially in 1976-80; since 1981 there has been a rebound, but chrome and oil are not doing well. As regards living standards, welfare outlays and egalitarianism in incomes have been the chief emphases. The immense growth of savings has recently levelled off; this may reflect an easing of goods shortages but these, notably in food and in villages, remain critical, and favoritism in retail sales has become a problem. Livestock output has been hurt by unwise collectivization while scope to extend the sown area further is minimal. Agriculture has been harmed also by drought, which because most electricity is hydrogenerated also reduces the power supply. Except via population growth, no scope exists either to enlarge the work force. Transport remains difficult. In these circumstances—on the whole more straitly constricting than before—reform appears to have been considered but apart from some, especially geographical, redeployment of cadres has not

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been pressed. Party for ideological reasons, more fundamental reform remains the most difficult option for the Albanian leadership.

INTRODUCTION

Since 1944 ruled by Europe's most uncompromisingly extreme Communist Party, Albania is much the smallest of the Balkan countries with barely 3.2 million people as compared with 9.0 million in Bulgaria (the next smallest) and with an area of only 28,748 sq. km. (The U.S.S.R.'s area's 780 times as large.). She achieved independence more recently than other Balkan states (nominally in 1912 but in practice much later). She is the most mountainous, and probably has the lowest living standards; yet her people is one of Europe's most ancient.

The Albanian economy is often described as Stalinist. It differs significantly in circumstances and policy from the Soviet TCPE (Traditional Centrally Planned Economy): an extreme difference in scale; a more backward starting point; a far simpler production assortment; inability to achieve the same level of self-sufficiency; discouragement of internal migration; much faster population growth; more egalitarian incomes; much more heed to production of spare parts. However, the central planning system, with its hierarchical relationships, centrally determined prices etc. applies fully to Albania, and many similar phenomena result: production for the plan's sake, not for profit or use; fast but unbalanced growth; immobile product assortments; repressed inflation; shortages of consumer necessities. Yet Albania is not at the stage of political or economic development elsewhere in Eastern Europe. If the death, on April 11, 1985, of Enver Hoxha, in power since 1944, is reckoned analogous to that of Stalin—there are many resemblances—Albania would now be in an immediate post-Stalin phase, i.e., three decades earlier than the rest. Moreover, reform is anathema to the Albania leadership because it is seen as part and parcel of revisionism, which Albania denounces. The present paper therefore does not devote much space to reform proposals. However, some developments will be noted. Albania is not immune to outside influences, indeed is becoming more susceptible to them, though it cannot be assumed that they will be imitated. Rather, the paper's objective is to characterize Albania's current and prospective economic situation, so as to establish what changes have been made or are likely.

It relies on Albanian statistics and other published materials, supplemented by observation by the present writer or by others. Available statistics are much scantier than those now available for the U.S.S.R. and for most other East European countries. Statistical handbooks appear only every 5 years. The most recent, *40 Years of Socialist Albania*, goes up to 1983 for most items, although for some up to 1984 or 1982. An annual budget is published. Other quantities are mentioned at irregular intervals, usually by President (since April 1985) Ramiz Alia. It is presumed here that available statistics are correct, except that the usual reservations apply as in other Communist states regarding the claimed astronomical increases in industrial output. It is probable that some industrialization displaced craftsmen whose output was not previously record-

ed. No figures of foreign trade in absolute terms are provided, only percentage shares. The penultimate 5-yearly handbook, *35 Years of Socialist Albania*, gave no information about foreign trade. Some data about trade can be gathered from other countries' statistics. The country being comparatively small, travelers' observations can help to characterize performance and trends.

THE EXTERNAL ENVIRONMENT

Foreign trade—naturally a state monopoly—is conducted on a bilateral basis; ordinarily an approximate balance is called for, but since Albania does not give statistics of trade with individual countries, this cannot be verified from Albanian sources. Production specialization by country is not accepted as a desirable objective. Albania favors "economic co-operation," which in practice can lead to joint ventures. Albania tries to be as self-sufficient as possible and while self-sufficiency is not achievable in any absolute sense, the external environment has less impact than on the Hungarian economy, for instance. This impact nevertheless is increasing, on current trend being to place more emphasis on exports. The high rate of population growth is reducing self-sufficiency, and this trend must continue. The relatively small impact of foreign trade is accentuated by its low volume; on the other hand, Albania supplies one item (chrome) of which there are few world suppliers. As an exporter of oil and bitumen, Albania has been hit by the recent decline in oil prices. Albania chooses to have no diplomatic relations with the U.S.S.R., the U.S., and certain other countries including the United Kingdom; South Africa and the Republic of Korea are among others with which she has no relations. This prevents or inhibits trade with them; however, some trade is done with the U.S. and U.K., but not with the U.S.S.R. Albania's chief trading partners include Yugoslavia, Italy, Greece, Romania, Poland, the FRG, East Germany, France, and Bulgaria; neither rank order nor amounts can be stated precisely. Trade with Greece, the FRG, Bulgaria and possibly Spain is increasing.

Albania is not greatly affected by global debts, because her trade is conducted bilaterally and the Constitution forbids accepting foreign loans; while the ban has in general been observed, economic necessity is likely to compel its revision. Albania, unincorporated in any economic bloc, has been hampered by other countries' protectionist policies. A decade ago, complaints of a "blockade" by other countries were strident; this slogan is heard no longer.

No trade being conducted with the U.S.S.R., Soviet pressure or terms of trade are irrelevant. Khrushchev at one time suggested that Albania would be wise to concentrate on producing Mediterranean delicacies, in return for wheat which the U.S.S.R. sent in return. Enver Hoxha indignantly rejected this suggestion, as intending to perpetuate a "colonial" status for Albania. However, as it embodied a fundamental truth—in the long run Albania cannot feed herself, if rapid population growth continues—Albania has started to emphasize olive growing and other Mediterranean specialties more or less as Khrushchev proposed. Trade relations with other Comecon countries are not visibly affected by the lack of trade with the Soviet Union. Albania in any case prefers to trade,

and in general to conduct economic relations with, countries which are not extremely different in size from herself—such as Greece, Finland, or Romania—rather than with the biggest and most powerful countries. Agreements signed in September 1987 will make the Federal Republic of Germany a partial exception to that rule.

Albania relies on exports of chrome and copper ore, copper wire, ferrochrome, oil and bitumen, nickel and electricity; some consumer goods, such as textiles, socks and handicrafts (briar pipes, kelim rugs, etc.) are also included. The rest comprise agricultural products such as raki, cognac, cigarettes—these are widely smoked in Eastern Europe—tomatoes, cucumbers, olives, tinned sardines and anchovies. (Sardine tins now have an opening key). By 1985, processed items should have comprised 73 percent of exports.

Since 1975, the structure of foreign trade discloses an important change: the share of imports of machinery and equipment within total imports has halved (from 45.2 percent in 1975 to 21.7 percent in 1980 and 22.2 percent in 1982), while shares of imports of fuels and metals, chemical products and rubber, have risen.¹ Although, theoretically, this trend might imply import substitution, it is far more likely that a bigger share of imports is now having to be devoted to maintaining industrial output, rather than to enlarging it: here the decline in oil prices has been influential.

DOMESTIC ECONOMIC POLICIES AND INSTRUMENTS

The dominant priorities have been two: to build up industry and to enlarge the population. The population has more than trebled since 1938 while industrial output is claimed to have risen by 164 times between 1938 and 1984. The rise in electricity output over the same period is claimed to have been 408.6 times.² Thus Lenin's slogan about electrification has been vigorously implemented. Other emphases were dictated by the two dominant ones.

Enlargement of the cultivated area (2.43 times between 1938 and 1983) has almost kept pace with the growth of population; however, its quality deteriorated, 82.9 percent consisting of fields in 1983 compared with 94.5 percent in 1938.³ The deterioration had other dimensions, as marginal land was brought into use; wholesale terracing now brought into cultivation land previously regarded as too dry, sloping, or stony. On the other hand marshes were drained and land was desalinated. In Durrës district a small area previously desalinated has recently shown signs of becoming salty again.⁴ Furthermore, the diet has deteriorated, in the sense that cereals were substituted for livestock products. Mass slaughtering of livestock by peasants in reaction against what they saw as further measures of forced collectivization took place in 1985–86;⁵ following (presumably) initial indulgence in meat eating this intensified the acute shortage of meat and milk. In general the population continues to grow while domestic food production cannot rise pro-

¹ *40 Années d'Albanie socialiste* (Tina, 1984), p. 132.

² *40 Années* . . . , pp. 29, 53, 64.

³ *40 Années* . . . , p. 79.

⁴ S. Gjordeni, *Zëri i popullit*, Sept. 5, 1987, p. 2.

⁵ Economist Intelligence Unit County Report, *Romania, Bulgaria, Albania*, No. 4, 1986, p. 27 and No. 4, 1987, p. 27.

portionately. The tensioning of the balance is fractionally mitigated by a slight deceleration in recent years in population growth (now 2.1 percent per annum as compared with 2.4 percent, yet the former is seven times as high as that of Bulgaria) and by extension of the cultivated area. Greenhouses, imported from Holland, mainly grow for export tomatoes or cucumbers. Albania's Islamic legacy inhibits the eating of pigmeat, which if that obstacle were overcome might offer some additional reserve.

Worsening food supplies are confirmed by other evidence. Agricultural growth targets are high but nowhere near reached; thus in 1986 the target was 17 percent but the achievement 2.8 percent. Rising living standards are normally accompanied by a declining share of food in total retail trade; in Albania this proportion rose from 60.5 percent in 1970 to 61.5 percent in 1983, though in 1980 it had been 62.2 percent.⁶ Although more milk is being produced, less is being turned over to the state. Moreover, like other Balkan countries, though less severely than Bulgaria, Albania suffered a severe drought in 1985. The plains areas not allowing further enlargement of the cultivated area unless by trifling amounts, it is unavoidable for cultivation to advance still further into the mountains and hills which comprise 77 percent of Albanian terrain. Such an advance is taking place.

Concerning other supplies, attention has lately been devoted to production of small everyday consumer goods using industrial leftovers; supposed to be a permanent element, not just a campaign,⁷ this recalls a similar drive in the U.S.S.R. in the immediate post-Stalin period, under Malenkov.⁸

Industrial policies have traversed different phases, due mainly to changes in Albania's economic and political relations with other socialist countries. Reckoned by successive 5-year periods, average annual rates of growth of industry according to official statistics were: 1955-60, 16.9 percent; 1961-65, 6.8 percent; 1966-70, 12.9 percent;⁹ thus in the middle period of these three the rate was well below trend, undoubtedly due to the abrupt cessation of Soviet bloc aid after 1960. One of the consequences was a more marked Albanian concentration on exporting branches, which meant focusing on minerals extraction; exports of finished industrial products being (as they still are) negligible. A further consequence was diversion of effort away from short-term satisfaction of consumer needs.

In 1971-75 the tempo fell everywhere in manufacturing and minerals except in chrome and the food industry, which achieved higher growth; on the whole, the slowdown was much more marked in group A than in group B. During this span the growth rates of group A (9.3 percent) and group B (7.7 percent) were not very unlike. In 1976-80 the growth rate of A remained almost unchanged (at 8.7 percent) while that of B slumped to 2.0 percent.¹⁰ Thus, in the latest complete 5-year period for which results have been given a sharp imbalance has emerged to consumers' disadvan-

⁶ *40 Années . . .*, p. 128.

⁷ *Zëri i popullit*, June 14, 1987, pp. 1-2.

⁸ R. Hutchings, *Soviet Economic Development*, 2d edition (New York University Press, 1982, p. 77).

⁹ *40 Années . . .*, p. 59.

¹⁰ *40 Années . . .*, p. 59.

tage. The general performance of agriculture during 1976-80 is not given, which itself strongly suggests that it was not favorable.

The next 5-year period, 1980-85, is so far less well illuminated even than others in official statistics. The implied annual average growth of industrial output is 4.4 percent, as compared with the 1980-85 plan of 5.5 percent to 5.7 percent; thus at least until 1984 growth was falling short of plan. The growth rates of group A and group B were almost the same, as a proportion of total industrial output group A amounting to 64 percent in 1980 and 64.2 percent in 1984.

As regards the current plan, 1986-90; in 1986 an increase of 5.8 percent in industrial output was claimed, as compared with envisaged average annual growth of 5.2 percent to 5.5 percent; this above-average rise must have been facilitated by the fact that 1985 was an unusually difficult year for the reason (drought) already mentioned. No overall figure has been given for 1987, only that the food industry raised output by 5 percent and chemicals by 7 percent.¹¹ It is thus possible, though at the time of writing uncertain, that the growth rates of group A and group B are so far about equal.

As shown in these marked variations from one 5-year period to another, in comparative growth rates of groups A to group B, either policy has fluctuated or altered circumstances made it impossible to maintain any unvarying course. This second comes nearer to being the correct explanation.

Changes in Albania's economic relations with the socialist bloc of countries were chiefly responsible for the fluctuation in performance in 1955-60, 1961-65, and 1966-70. Albanian policy remained essentially the same but because of changing circumstances the results were different. An illustration is the building of the Elbasan steel combine: when the U.S.S.R. declined to finance its construction Enver Hoxha did not waver, and ultimately (1978) it was completed with Chinese aid, but the eventual result doubtless differed in detail from what Soviet support would have accomplished. The Albanians drew certain conclusions from these experiences which were reflected in changes in their policies, from 1970 or 1978 onwards and especially since 1981, when too there was a prime ministerial change.

The break with China occurred in 1978 and at once—also in reaction to the Soviet incursion into Afghanistan—the Albanians began to pepper their land with fortifications. Enormous numbers (perhaps 50,000?) of conical pillboxes were erected, particularly at the approaches to the capital, lining the coast and barricading other possible invasion routes. They must have absorbed huge amounts of concrete, labor and capital in both building and transport: agriculture must have been inconvenienced by the work as well as by the loss through occupation or spoilage of a not negligible area. The building of fortifications continued apparently until about April 1981 (later ones being bigger and the last known dated April 26, 1981), although the chief damage to economic development would have been within the 5-year plan period 1976-80.

¹¹ Niko Gjyzari, *Zëri i popullit*, Dec. 29, 1987.

The Albanian state budget is drawn up on lines generally similar to the Soviet budget. Growth of the Albanian budget has slowed down very markedly during the past decade. Actual, as distinct from forecast, figures are available only up to 1983, apart from totals of revenues and expenditures. (See Table 1.) A comparison of these latter with forecasts shows that large shortfalls are normal on both sides of the ledger. In 1985 revenues and expenditures even fell as compared with the previous year, whereas increases had been planned. The series also shows variations in unspecified expenditures, in particular a jump in this item in 1985. The inequality of forecast revenues and expenditures, 50 million leks, is purely nominal. The conclusion must be that the budget is under strain; moreover, that economic performance is only to a limited degree under control.

TABLE 1.—THE STATE BUDGET

[In millions of leks]

	1980 actual	1984 forecast	1984 actual	1985 forecast	1985 actual	1987 forecast	1988 forecast
Revenue	7,508	9,200	8,754	9,250	8,433	9,350	9,500
Expenditure	7,419	9,150	8,739	9,200	8,416	9,300	9,450
Including:							
Economy	4,385	5,062		4,831		5,076	5,082
Social and cultural measures	1,795	2,401		2,460		2,682	2,747
Defense	899	1,010		1,007		1,055	1,080
Administration	110	144		138		148	161
Unspecified remainder	238	533		764		339	380
Surplus	89	50	15	50	17	50	50

Sources: "40 Années" . . . , p. 137; Economist Intelligence Unit, Country Report, "Romania, Bulgaria, Albania," No. 1, 1987, p. 34 and No. 1, 1988, p. 311.

A somewhat similar pattern emerges from statistics of plans and their fulfillment. (See Tables 2 and 3.) Only fragmentary official statistics are available which must mean that general results are not good. Whenever in this table comparison of plan and fulfillment is possible, plans turn out to have been seriously underfulfilled. Agricultural output in 1985 and 1986, and fixed investment in 1985, both show this. As regards 5-year plans, only industrial output came anywhere near fulfilling the 1981-85 plan. Clearly these results place a large question mark to the likelihood of fulfillment of the 1986-90 plan.

TABLE 2.—ANNUAL PLANS AND PLAN FULFILLMENT

[Percent changes relative to previous year]

	1982 result	1984 result	1985 plan	1985 result	1986 plan	1986 result	1988 plan
NMP						+7.2	+4.9
Industrial output	+ over 7	+3.3	+6.2		+7.3	+5.8	
Agricultural output	+7.0		+17.7	+2.2	+17.0	+2.8	+7.2
Investment	+2.5	+3.6-4.0	+2.7	-4.5	+3.4		
Retail trade			+4.0		+6.6		+3.9
Exports			+16.8		+31.0		

Sources: Economist Intelligence Unit, Country Profile, "Bulgaria, Albania, 1987-88," p. 28; and Country Report, "Romania, Bulgaria, Albania," No. 2, 1988, p. 10.

TABLE 3.—5-YEAR PLANS AND PLAN FULFILLMENT

[Percent changes relative to previous 5-year plan]

	1981-85 plan	1981-85 fulfillment	1986-90 plan
NMP.....	34-36	16	35-37
Industrial output.....	31-32	27	29-31
Agricultural output.....	31-33	13	35-37
Investment.....	22-24	17	10-12
Export of goods.....	57-61	29	44-46

Source: Economist Intelligence Unit, Country Profile, "Bulgaria, Albania, 1987-88," p. 29.

Independently of this, the series reveal a very significant trend: whereas the 1981-85 plan envisaged that agricultural and industrial outputs would grow at about the same rates, the 1986-90 plan envisages agricultural growth definitely higher than industrial. This marries up with the fact that whereas up to 1980 industry's share in realized NMP was increasing, between 1980 and 1983 that share declined slightly (from 43.6 percent to 43.3 percent) while the share of agriculture, which previously had been declining, improved from 32.7 percent to 34.1 percent.¹² Thus at present agricultural development enjoys priority.

Changes in investment policy have preceded these changes and largely mirror them. Investments are stated in prices of 1981 as regards main destinations (industry, agriculture, etc.) according to type of investment, and whether "productive" or "nonproductive" (a Marxist classification). Dates of completion of major works are indicated.¹³ The growth of total state investments from one 5-year period to the next is shown in Table 4. As would be expected after the break with the U.S.S.R., growth slumped in 1961-65 but recovered in the next 5-year period. Growth held up well in 1971-75, but another decline came in 1976-80 and (as far as can be judged from annual totals) continued during the first 3 years of the next 5-year span. Thus 1976-80 appears depressed from the investment angle; anomalies emerge also from other investment series. Whereas all four major functional divisions (building and installation, machinery and equipment, prospecting and mining, and other) rise continuously from 1951-55 to 1971-75, in 1976-80 "machinery and equipment" falls whereas "other" within this classification discloses a disproportionately big increase. Again, whereas the branch division "other" never previously or since exceeded 13.9 percent, in 1976-80 this division rose to 21.4 percent. All remaining divisions shrank concomitantly but in particular investment in industry, education, culture, health, and housing.

TABLE 4.—PERCENTAGE CHANGES FROM 5-YEAR PERIOD TO PREVIOUS 5-YEAR PERIOD IN STATE INVESTMENTS

	1956-60	1961-65	1966-70	1971-75	1976-80
Total investments.....	+91.3	+38.3	+57.2	+52.1	+17.7
Machinery and equipment.....	+98.9	+20.9	+74.5	+65.2	-9.8

¹² 40 Années . . . , p. 135.¹³ 40 Années . . . , pp. 110-113.

TABLE 4.—PERCENTAGE CHANGES FROM 5-YEAR PERIOD TO PREVIOUS 5-YEAR PERIOD IN STATE INVESTMENTS—Continued

	1956-60	1961-65	1966-70	1971-75	1976-80
Other.....	+93.4	-3.7	+59.4	+16.2	+45.8

Source: Based on "40 Années d'Albanie socialiste" (Tirana, 1984), p. 103.

It seems probable that what all these series reflect is the all-out building of fixed defenses. The consequences (a reduced growth tempo of total investments, a lesser share of "machinery and equipment" and abrupt increases in "other" investments, whether defined by branch or by function) are predictable. One cannot determine the fortifications' assessed value with precision or certainty, but building them appears to have depressed investments by between 1,000 and 2,000 mn leks. Budget defense spending in 1980 was 899 mn leks. Obviously the fortifications were not funded out of the reported defense budget. As the share of consumption in "utilized national income" rose sharply in 1976-80, from 63.3 percent to 70.1 percent, having previously been falling,¹⁴ building for defense purposes is probably included under consumption; it may also figure in regional accounts.

Apart from this episode, the composition of investments does not exhibit pronounced changes. Industry's share has remained always between 47.0 percent and 52.6 percent; that of agriculture between 16.5 percent and 21.2 percent; of transport and communications between 7.8 percent and 10.8 percent etc. In a socialist state, these shares tend to be stabilized due to continuous pressure from all sectors for investment grants. However, events impinging from outside may compel change. If the Albanians fall out with foreign partners, the Albanian reaction to what follows is to emphasize investment in industry and "other" and in building and installation; that happened in 1961-65 and 1976-80. Investments in education, culture and health suffer. These responses are merely what one would expect of a nation which is determined to uphold its independence. The latest period mentioned in the handbook, 1981-83, discloses a rebound: emphasis on both industry and agriculture, a sharp drop in "other" and a rise in housing.

Within industry developmental priorities seem to be shifting from manufacturing toward mining, where the opportunity to expand exports is greatest. Even the Elbasan steel combine no longer enjoys the same priority as before. In August 1984 the Pish-kash mines which should have kept it flush with ferronickel were preferring to overfulfil export plans instead;¹⁵ visiting in May 1986 Alia insisted that "Steel of the Party" had to perform better.¹⁶ Yet mining itself is not doing well, chrome and oil being now often mentioned in the same breath as not performing adequately.

While investment in electricity generation has been assigned at all times a high priority, the extent that electricity is generated by

¹⁴ *40 Années . . .*, p. 136.

¹⁵ J.Papa, *Zëri i popullit*, Oct. 14, 1984, pp. 1-2.

¹⁶ *Zëri i popullit*, May 17, 1986, p. 1.

hydroelectric stations has altered markedly. As shown in Table 5 the share of hydrogenerated electricity rose sharply by 1960, then declined until 1970 but has since risen continuously. The 1984 share, 86.1 percent is extraordinarily high, yet will rise still higher as the Koman station comes on stream. Since 1980, thermal generation has even fallen in absolute terms. (See Table 5.) The high proportion generated by water affects the economy in many ways. As hydroelectric plants take many years to build, electricity supply remains fairly stable for long periods, then rises abruptly. During the earlier phase electricity shortage becomes more acute, so strict saving is demanded. Electricity generation varies considerably from quarter to quarter. In the U.S.S.R., electricity is up to twice as seasonal as industrial output;¹⁷ *hydrogenerated* electricity is much more seasonally variable.

Since the water level then governs both electricity generation and irrigation (moreover, in Albania irrigation pumps too are driven by electricity), both industrial and agricultural output are affected. Finally, power output is made more dependent on the weather.

TABLE 5.—ELECTRICITY GENERATION

[In millions of kwh]

	1938	1950	1960	1970	1980	1984
Total.....	9.3	21.4	194.2	964.5	3,717.2	3,800.0
Hydro.....	4.0	4.0	120.7	450.9	2,952.4	3,270.0
Thermal.....	5.3	17.4	73.2	500.0	764.8	530.0
Percent Hydro.....	43.0	19.0	62.2	46.7	79.4	86.1

Source: Based on "40 Années d'Albanie socialiste" (Tirana, 1984), p. 64.

POLICIES ON PRICES (INFLATION) WAGES AND EMPLOYMENT

No price indices are available. Retail trade, for example, is reported in current prices. However, prices stay unaltered over long periods, only reductions being publicized; shortages are encountered rather than price rises. In March 1983 and again in February 1987 cuts were made in certain drug prices.¹⁸ A number of items being entirely unavailable and in order to match the narrow range of incomes, that of prices is also unusually narrow, though durable goods are dear relative to wages. As in other TPCE's, rents are very low, and, as stated in 1983, a village house can be built for 20,000 leks.

The line regarding inflation is that in Albania, in contrast to Yugoslavia, it does not exist. Possibly as elsewhere in Eastern Europe and in the U.S.S.R., some upward drift of average prices occurs due to disappearance of cheaper brands; given the low standard of living and narrow wage band the scope for that to happen is limited.

¹⁷ R. Hutchings in F.L. Altmann (ed.), *Jahrbuch der Wirtschaft Osteuropas*, Band 8 (1979), p. 261.

¹⁸ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 2, 1983, p. 20; and No. 2, 1987, p. 28.

Whoever of working age can do so is supposed to work. Observation tends to confirm that this is the case in practice, the utility of some jobs being obviously very low (the raking smooth of plots of sand on Durrës beach being a classic example). The participation rate for women is high, especially considering the Third World level birthrate. Within the state sector, women comprised 42.5 percent of the 1983 Albanian work force, hardly different from 1978 (42.0 percent). Not surprisingly, the proportion is highest in health, education and culture, and in trade, lowest in construction. The proportion of women in state agriculture, 45.9 percent at that time, also had scarcely changed since 1978 (45.7 percent).¹⁹ The female proportion remains below that in the Soviet Union (51 percent and stable); in Albania, Muslim attitudes may still exert greater influence (though since 1967 all institutional religion is banned) apart from the much higher average birthrate. Including cooperatives, the female proportion would rise to 46.5 percent). *Visible* female employment appears even higher, because collective agriculture also comes into the picture. In the fields one sees mainly women; likewise in schools and the health service. Male employment is less conspicuous as men comprise the majority of the work force in mines and heavy industry, as well as in the armed forces; doubtless as well they are a majority in prisons and labor camps.

In 1983, the number of workers in the state and agricultural sector was 152,400.²⁰ At that time there were 269,703 cooperatives' families,²¹ but how many workers should be reckoned per family was not stated. If the average were 3.0 the total work force would have been 1½ million, or more than 50 percent of the population, which is probably too high an estimate.

STANDARD OF LIVING POLICIES, ETC.

Growth of living standards has obviously been subordinated to growth of the population and to building up self-sufficiency and defence capacity. Prewar Albania is thought to have suffered from underpopulation; thus population growth up to a point was a prerequisite for raising living standards. The statistical handbooks contain no data explicitly on living standards. Two objectives seem, nevertheless, to have been targeted: to enlarge welfare spending (on health, culture, education, and social assistance), and to achieve a relatively egalitarian income distribution. In theory—if effects on incentives are disregarded—equal distribution helps to maintain or to raise living standards, by comparison with unequal; in a society living barely above subsistence this can be useful.

Per head spending on social and cultural measures from the state budget rose almost tenfold between 1950 and 1983. The biggest proportionate rise, over fiftyfold, was in social assurance and social assistance. A rising share of social, within total, consumption dates from 1961–65: in the previous decade that share had fallen slightly. The differences from one quinquennium to another are

¹⁹ *40 Années* . . . , p. 44.

²⁰ *40 Années* . . . , p. 42.

²¹ *40 Années* . . . , p. 78.

not great, with individual consumption still comprising overwhelmingly the largest share: in 1976-80, 84.8 percent.²²

The main emphasis relates therefore to achieving a relatively egalitarian income distribution; however, due to secrecy no explicit figures are available. If, by analogy with the U.S.S.R., total budget spending might amount to 55 percent of the net material product (NMP), the latter would total at present about 16,400 mn leks annually, corresponding to per head about 5,300 leks or monthly to about 442. For 1986 the national total would be 16,151 mn leks. These figures compare with monthly wages as quoted in 1983 in the range of 450 leks for the average worker to 900 leks for a manager.²³ Unless managers are unusually numerous—which is unlikely—these figures appear too small or 442 leks per head of the whole population appears too large. The gap would be narrowed if the workforce comprised an unusually high proportion of the population (perhaps as much as 50 percent, as compared with 46 percent in Bulgaria or Romania). As noted already it is also possible that wages and salaries have drifted upward slightly.

Another possibility is that the budget comprises more than 55 percent of the NMP. If it were instead 60 percent, the 1986 total would become 14,805 mn leks, yielding per head about 4,902 leks and monthly 409. Individual income, as represented by the totals of 450 or 900 leks, is augmented by social income; in 1976-80 the addition was 17.9 percent, in 1983 it may have been a shade more (say 20 percent). Thus we might reach totals of about 409 leks per head per month on NMP and average monthly wages of 654 leks. (This last figure officially equals about U.S. \$93 monthly, but its real purchasing power would be appreciably higher). It exceeds the 550 leks told to Schnytser in 1975²⁴ and perhaps is indeed too high. At any rate about 600, or slightly more, leks per month must be the right general magnitude.

By another approach, total retail sales in 1983 not including circulation in agricultural cooperatives totaled 6,961 mn leks, which would equal 192 leks per head per month or 2,305 per annum. (Slightly more, 2,450 per annum, according to the handbook.)²⁵ The volume of trade in agricultural cooperatives not being known, it is impossible to state total trade per head; 192 leks might be compatible with the totals suggested in the previous paragraph.

If the retail total appears too low, it must be taken into account that savings are comparatively large. Albania claims to be the world's most saving society, though this is far from true in terms of absolute amounts. A high rate of saving seems incongruous given the impossibility of private investment, the steep rise in budget spending on social assistance, education and health, and the few outlets for private spending on these latter; it must be explained chiefly by goods shortages as well as to a slight extent by hopeful expectations. In 1983 892 mn leks were on deposit in savings banks, equivalent to 314 leks per head of the population or to national retail trade aggregated over 1½ months. The growth of savings lev-

²² 40 Années . . . , p. 136.

²³ M. Kaser in JEC, *East European Economies: Slow Growth in the 1980's* (U.S. Government Printing Office, 1986), p. 13.

²⁴ M. Kaser in JEC, *East European Economies* . . . , p. 13.

²⁵ 40 Années . . . , p. 126.

eled off dramatically in 1980-83, between those years being only 28 percent as compared with 155 *times* between 1950 and 1978.²⁶ Presumably during 1980-83 goods shortages eased or at least did not become more acute.

Egalitarian incomes must impair incentives, even if less than could be expected because traces remain of idealism. Yet egalitarianism is likely to be diluted. According to Alia, Hoxha had "suggested many times" that it should be legalized to employ boys and girls as pupils in the economy at a lower rate of pay, yet the matter had been blocked, allegedly as being still under study.²⁷ Egalitarianism is already impaired by favoritism, as is strikingly shown in retail distribution in the Party's decision that senior and medium grade officials who have dealings with the public had to change their jobs at once (in June, July or September 1988) and then again at intervals of not more than 5 years. Two ministries went even further by announcing that their job changes had to be made more often.²⁸ The problem apparently is favoritism within the regular retail network as well as in assignment of vacation places etc.; privileged shops are not known to exist. Except where adulterated by favoritism, egalitarianism probably contributes to political stability. The lack of special privileged outlets—or if they do exist, popular ignorance of the fact—would generate the same result.

The combination of welfare-oriented budgets and world inflationary trends leads inevitably to higher budget subsidies and distorted price relationships, as is now clearly recognized in the Soviet Union and Poland. In Albania, similarly, large subsidies are needed to hold down prices of necessities, as Alia has noted and criticized.²⁹ Purchasing power has got ahead of availability.³⁰ There must be debate behind the scenes as to what to do, but as yet there is no action; a solution of sharp price rises might be politically dangerous, as it would be elsewhere in Eastern Europe, and Alia is apparently unwilling to take the plunge. The evil consequences of price distortion therefore persist.

Policies and instruments to respond to unexpected developments are various, but more physical than financial. The state budget includes a residue, which probably (as in the Soviet budget) includes a reserve of the Council of Ministers, though in recent years shrinkage of the Albanian budget residue is especially marked. (See Table 1.) Whereas the Soviet budget clause Finance of National Economy is almost always overspent the corresponding Albanian clause is almost always underspent, usually by 10 percent or more. On the other hand, Albanian planners evidently store on work by students and school children, indeed by virtually all teenage and adult folk on "Days of Enver"—corresponding to, or surpassing, the *subbotniki* in the U.S.S.R. soon after the Bolshevik Revolution. The armed forces, especially the army, may be called on for harvesting, clearing up after an earthquake etc. (Minor earthquakes are quite

²⁶ *40 Années . . .*, p. 140.

²⁷ *Zëri i popullit*, July 12, 1987, pp. 1 and 3.

²⁸ *Zëri i popullit*, June 17, 1988, p. 1, and June 18, 1988.

²⁹ *Zëri i popullit*, Sept. 25, 1987, pp. 1-2.

³⁰ *Zëri i popullit*, Apr. 25, 1987, Ramiz Alia, pp. 1 and 3.

common, but usually do not cause much damage or casualties.) Albania has not called for outside aid in coping with disasters.

Due to the mountainous and rugged terrain, problems loom each winter in ensuring supplies to the less accessible regions. This problem may have been aggravated in recent decades owing to reduced self-sufficiency of villages resulting from their more varied wants in provisions, durable goods, spare parts, et cetera. Though if anything people are quitting the more inaccessible regions the rate of natural growth there tends to be very high, which implies a youthful and traditional society. Moreover, the north is important to the entire country because it supplies most of the hydrogenerated electricity and more valuable minerals. Hence greater attention is having to be paid to assuring supplies during the winter months.

The government and Party have to hand other levers. As noted above in regard to electricity, major supply increments occur rarely: it becomes therefore important to enforce economies, and press campaigns to that end are almost constant. On the other hand, maneuverability is constrained by certain features. There is no unemployment in Albania (leaving out of the equation gypsies) hence no labor reserve. Given the very high birthrate, the scope for employing more women is minimal or nil; for the same reason, health provision has to be fairly expensive and labor consuming. Children make a labor contribution already; intellectuals too must do some work with their hands. People in jobs of low productivity are mainly, though not wholly, in the countryside. The vital northern regions are short of cadres if not of manpower.

Capability to respond to the unexpected is confined to domestic events. Except in chrome where her offering, which is of low quality, can only nudge the market price, Albania cannot influence prices of her imports or exports, except by less or more skilful bargaining.

The transport situation is not easy: Albania has several ports but only two (Durrës and Vlorë) of substantial size, while overland communications must cross either Greece, with which a "state of war" existed until 1987 (which did not prevent trade, but did inhibit communication), or Yugoslavia with whom relations remain cool; again, trade is not prevented, but communications are inhibited; the first Yugoslav tourists for many years have only just been received into Albania. Until the summer of 1986 the Albanian railways (standard gauge, nonelectrified) were not linked with the outside world: a link then opened joining Shkodër to Titograd (Montenegro)³¹ but following their complaints that the line was insufficiently used the Montenegrins have now closed this down, again leaving Albania without any rail outlet.³² With Greece, on the other hand, relations have grown much warmer: the "state of war" is now terminated and even earlier, in January 1985, two frontier crossing points which had been closed for 40 years were reopened.³³ Invited visits to either country of high-level personages and some lesser officials from border regions have begun. As Albania has no other land frontiers not much else can be done to im-

³¹ *Zëri i popullit*, Sept. 3, 1986, p. 4.

³² *Eastern Europe Newsletter*, Vol. 2, No. 14, p.8.

³³ *Zëri i popullit*, Jan. 13, 1985, pp. 1 and 4.

prove external surface transport, but a freight ferry service between Durrës and Trieste (just beyond the northern Yugoslav border) began operations in December 1983³⁴ while an agreement on "international road transport" between Albania and Turkey (with which Albania has friendly relations) was signed on August 2, 1988.³⁵ Within Albania railway building, mainly to serve mining sites, continues while the road network remains scanty and potholed.

Albania's position not quite within sight of Italy's long coastline, plus her secretiveness, could offer opportunities for smuggling into Italy, which is alleged to have been occurring.³⁶

STABILITY VERSUS CHANGE IN THE ECONOMIC AND POLITICAL SYSTEM

Up to 1944 Albania's internal disorders were frequent except under King Zog, 1928-39; the recollection has doubtless assisted the Communists to enforce orderliness. Albania's Communist Party (now entitled the Party of Labor of Albania), was headed by Enver Hoxha until his death from natural causes. Its other principal personalities had mostly been executed: Xoxe in 1949, Mehmet Shehu (the wartime commander and later prime minister) in December 1981. The role of the populace has been to applaud the regime that exists; since 1962 its affirmative vote has allegedly been over 99 percent, recently over 99.99 percent. The succession as Party leader and President of Ramiz Alia, who for several years was being groomed as Hoxha's heir apparent, have therefore not evoked any stirrings of political democracy. On the other hand, it need not be concluded that the Party controls all spheres as completely as the "vote" suggests. Despite censorship, some Albanians are quite well informed about the outside world.

Some changes in general policy are apparent but certain of their beginnings can be dated to the Hoxha (post-Shehu) period. This latter is true of the rapprochement with Greece, to which Enver Hoxha made a literary contribution. The Albanian section of the international rail link with Yugoslavia was complete before his death. In some directions, Hoxha's influence has proved more lasting than Stalin's—making an Albanian near parallel with Lenin. For instance, March 15, 1987, a "Day of Enver" on a nationwide scale, embraced the usual melange of production above plan, collecting scrap iron, gathering and moving dung, etc.³⁷ Certain other Stalinesque policies press on. In animal husbandry, besides the existing centralized collective farm herds, brigade herds (attached to specific teams, the beasts being acquired mainly from private holdings) are now being formed; perhaps for camouflage, this process is called *Tufezim* ("clumping"). By the end of 1988 26.5 percent of cattle are expected to be in brigades.³⁸

Following Stalin's death Soviet defense spending, which had been rising, began to decline.³⁹ Only forecasts of defense spending are

³⁴ Economist Intelligence Unit, Country Profile, *Bulgaria, Albania*, 1987-88, p. 36.

³⁵ *Zëri i popullit*, Aug. 3, 1988, p. 4.

³⁶ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 1, 1988, p. 32.

³⁷ *Zëri i popullit*, Mar. 17, 1987, pp. 1-2.

³⁸ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 2, 1988, p. 29.

³⁹ R. Hutchings, *The Soviet Budget* (SUNY, 1983), p. 190.

available for Albania: there had been a very small drop in the 1985 forecast and a bigger one was made in 1986, which suggests that Alia favored reduction. Against this, in 1987 the forecast rose again, as it did also in 1988, perhaps in part due to less intense pressure for investment grants near the 5-year plan's midpoint.⁴⁰

DISCLOSURES AND POLICY CHANGES BY ALIA

After Stalin died, various categories of Soviet political prisoners were released. In Albania, an amnesty to certain categories of prisoners was announced on January 10, 1986—9 months after Alia's succession. One quarter of the length of sentences, more in some cases, was remitted.⁴¹

Various changes may be ascribed to Alia's new style of leadership. More visible publicly than Hoxha in his later years, Alia speaks an elegant Albanian and conveys an impression of being more cultivated and moderate. This did not prevent him from repeating the grotesque charge that Shehu had been a polyagent of the U.S., Soviet, and Yugoslav secret services;⁴² the "election" results too remain meaningless. A curious sequence of events in March 1986 when, just before the death of Alia's wife, Hoxha's widow was appointed to head the Democratic Front, momentarily suggested a Hoxha comeback at least on the distaff side, but probably was coincidental.⁴³ Yet it is likely that radical change has been opposed by an "old guard" in which Enver Hoxha's widow is prominent. Alia is clearly not averse from some economic reform but without being an enthusiast in the Gorbachev mould.

In some directions more has been disclosed than before. Following Stalin's death, the first major disclosures were about Soviet agriculture. In Albania, after Hoxha died, they were about supplies to villages, where 65 percent of Albanians still live, though the timing of the announcement should also be related to unusually severe snowfalls early in 1985. This last taught the lesson that bigger reserves had to be created in zones which would be cut off in winter: in remoter parts a 5-month stock of principal foods had to be built up, in towns a stock of 1 to 2 months. Nonfood supplies (clothing and footwear, consumer durables) had also to be assured. Later, it was announced that all winter reserves would be made about 15 percent larger than before. Qirjako Mihali's recommendations in this matter also went beyond what the weather demanded. He laid stress on improving supplies of consumer goods to the villages. More had to be done to ensure year-round supplies of vegetables, potatoes and beans and in the longer term of milk, meat, and eggs. By 1990, relative to 1985, sales in villages of items such as fats, sugar, macaroni, rice, soap, cloth, shoes, furniture, and cement had to rise by between 14 percent and 40 percent.⁴⁴ These statements are highly revealing of what must have been prevailing many-aided shortages.

⁴⁰ *Eastern Europe Newsletter*, Vol. 2, No. 1, pp. 3-4.

⁴¹ *Zëri i popullit*, Jan. 10, 1986, p. 1.

⁴² *Zëri i popullit*, Nov. 4, 1986.

⁴³ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 2, 1986, pp. 35-36.

⁴⁴ *Zëri i popullit*, June 27, 1985, pp. 2-3.

Another Soviet post-Stalin development was the fixing of higher prices for state purchases of agricultural products. Increases of this sort were made also in Albania after Hoxha's death, in accordance with Decision No. 421 of December 19, 1986. Starting in 1987, prices were raised and more differentiated, with higher prices being paid to cooperatives in hill and mountain areas. Veal, beef, wool, hides, tobacco, beans, barley, cotton, sugar beet, sunflower, and olives were affected. Peasants' incomes were expected to be augmented by 50 mn leks a year.⁴⁵

Ramiz Alia, speaking on April 23, 1987, at a party plenum, regretted that "the cooperativist sits down in town with a basket of figs, a handful of parsley or a dozen eggs."⁴⁶ (Similar sights could indeed be seen in Tirana in 1983.) Clearly Alia was concerned, yet his tone did not convey determination to cure the situation, and nothing has been done.

Three years after Stalin's death and following a 20-year gap, publication of Soviet statistical handbooks was resumed. After Hoxha's death the difference has been much less pronounced: a new 5-year handbook appeared at a predictable time and was somewhat, but by no means sensationallly, more informative than before. The handbook showed *inter alia* that chrome output had fallen by 5 percent between 1979 and 1984.⁴⁷ Subsequent mention of a need to "stabilize" the situation in the chrome and copper mines "within 2 to 3 years"⁴⁸ must have meant that outputs of these ores had been declining (or in the case of chrome had gone on declining). This did provoke some action, mentioned below.

One of the more interesting post-Hoxha initiatives concerns relocation of cadres. The northern alps not only experience the harshest winter and are the most likely to be isolated seasonally, but are the most backward in social development. Hence intellectuals who are free to choose tend not to settle here. This matches the fact that in general migration within Albania is discouraged. However, at the 14th Party Plenum (March 24, 1986) Alia apparently alluded to problems in the northeast and to how to overcome them. As subsequently taken up, the need was to reinforce cadres in the northern districts, so as to improve the quality of local leadership. In consequence, 141 specialists "volunteered" to go to work in the north for 2 to 3 years.⁴⁹ As well as effecting the stabilization in chrome and copper above mentioned, their task was to improve organization and discipline and to solve local scientific and technical problems.⁵⁰ Later, it was stated that 12 "cultural brigades of youth" would also be going to the northeast.⁵¹ Female specialists were also to go.⁵² Cadres would go from Shkodër for 1-3 years.⁵³

⁴⁵ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 2, 1987, p. 27.

⁴⁶ *Zëri i popullit*, Apr. 25, 1987, pp. 1 and 3.

⁴⁷ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 1, 1986, p. 33.

⁴⁸ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 2, 1986, pp. 37-38.

⁴⁹ *Zëri i popullit*, Apr. 14, 1986, p. 1.

⁵⁰ *Zëri i popullit*, May 15, 1986, pp. 1 and 3.

⁵¹ *Zëri i popullit*, Sept. 9, 1986, pp. 1 and 3.

⁵² *Zëri i popullit*, May 17, 1986, pp. 1 and 3.

⁵³ *Zëri i popullit*, May 28, 1986, p. 1.

To a limited extent a parallel may be drawn with the virgin and idle lands campaign in the Soviet Union which started in 1954, though that was intended to provide food rather than minerals and power and vastly more people were affected.

To sum up, though of course there are local variations, Hoxha's death is comparable to Stalin's and to some extent with Lenin's, making the Albanian timescale quite different from the Soviet one. This applies to economic activities among others. The Albanian defense posture, as reflected in the building of fortifications, has no Soviet parallel (it recalls World War I along the Western Front). The new leadership inherited a difficult situation politically, ideologically and economically, constricting its scope for venturesome decisions. Stalin's reputation has been upheld in Albania long after it has been deposed within the Soviet Union; explicit abandonment of the TCPE has therefore to be avoided. Thus, politically or historically Albania has not reached a stage when its leadership would be likely to be specially receptive to reforms.

Economically, a similar unreadiness obtained for varied reasons: Albanian industrialization was already diverging significantly from a Stalinist model. Internal migration was far less; demographic growth far more; self-sufficiency not so all embracing. Consequently much more heed had to be paid to agricultural growth, industry had to focus more on producing spare parts (to service equipment of varied provenance), etc. This left less scope to catch the diseases of a Stalinist system.

Second, Albania's earlier stage of development and smaller scale mitigate the disadvantages of a TCPE. Due to the earlier stage of development, output assortments are much simpler, thus choice of product is simplified. This applies *inter alia* to centralized decisions. The simplification is accentuated by Albania's small size; for example, there being only three textile factories, central planning of textile production does not imply any high degree of centralization. If—as is incontestable—a Stalinist system generates excessive investment⁵⁴ and relative disregard of the consumer, this after all was the course that the leadership intended to follow. A Stalinist system also conduces to expanding heavy industry, which the Party included among its objectives to the extent of retaining on its agenda, in the face of difficulties, construction of a steel combine.

Certain developments in Albania's circumstances are nevertheless making it more likely that some reforms will be adopted eventually.

First, Albania, like the other East European states, is needing to place more emphasis on "intensification," which is harder to accomplish than extensive development as by definition it signifies growth which is not facilitated by proportionate additions to production factors. This in turn demands operation at enhanced efficiency by each individual unit, which TCPE's are notoriously incompetent to ensure. "Intensification" is urgently demanded in agriculture because of the declining area of agricultural land per head of the population. The increasing importance of exports necessitates improving quality and broadening variety, which at grass-

⁵⁴ R. Hutchings, *The Structural Origins of Soviet Industrial Expansion* (St. Martin's Press, 1984).

roots demands more initiative and keener incentives. The alternative, more ambitious plans, may result in raising output in the short run but causes damage in the long run. Livestock rearing and fishing are illustrations: 1987 witnessed excessive slaughtering of young livestock, while in KorÇë district fishing did poorly because the fish were too small.⁵⁵ In Tropojë district, too many young animals were being slaughtered.⁵⁶

Favoritism in retail trade has recently become a problem. As reported in March 1987, at Durrës, synthetic yarn was sold to privileged people while ordinary shoppers were kept waiting: the correspondent claimed that Durrës had many responsible salespeople but admitted that others kept things like milk and butter for themselves or their friends.⁵⁷ This casual allusion to shortages of basic foods in Albania's second largest city, at the hub of the rail system, also reveals the seriousness of the general situation at that time in retail supply.

Investment too is not yielding the required results. In July 1987, Alia said that if a shaft were dug down thousands of meters but no oil was found, it had to be specified clearly whose fault it was:⁵⁸ the illustration was surely not chosen at random. As in other TCPE's, investments drag on or do not generate the expected return: for instance, the building of wharves at Durrës.⁵⁹ In these circumstances the virtues of competition have occurred to some, but what is more significant, cautious expression of that view has been allowed. A leading commentator of the Party daily, Franc Zhupa, argued that fulfilment of "overall" production in light industry was at the expense of the consumer, which would not be the case if there were competition.⁶⁰ Yet this testing of the water has not been followed by action. Similarly, the appointment of November 1986 of Foto Cami (an ideologist and critic) and Besnik Bekteshi (an economist) to the Politburo seemed to herald a reform drive,⁶¹ but in the end nothing came of it.

However, the new requirement that administrative jobs must not be held longer than 5 years shows an intention to reshuffle and probably reduce the bureaucracy. The staff of the Ministry of Finance has been reduced by 10 percent.⁶² This is a new sign of determination to undertake some reforms, though along original lines. In foreign affairs it is plainer sailing, except as regards Britain (a naval incident going back to 1946), and Yugoslavia, where Albania has 1.7 million compatriots. Hoxha's influence in foreign policy remains gospel also as regards the Soviet Union; indeed, to the Albanians it seems to be vindicated by Gorbachev's ideological apostasy. Yet if Albania is to survive and prosper, Alia must find ways of circumventing Hoxha's ban on foreign credits. At present, reform remains the most difficult option for the Albanian leadership.

⁵⁵ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 4, 1987, pp. 27-28.

⁵⁶ Th. Sahatciu, *Zeri i popullit*, July 24, 1987, p. 1.

⁵⁷ Economist Intelligence Unit, Country Report, *Romania, Bulgaria, Albania*, No. 2, 1987, p. 29.

⁵⁸ *Zeri i popullit*, July 12, 1987, pp. 1-3.

⁵⁹ S. Gjordeni, *Zeri* . . . , Nov. 25, 1986, p. 2.

⁶⁰ F. Zhupa, *Zeri i popullit*, Sept. 20, 1986, p. 2.

⁶¹ *Eastern Europe Newsletter*, Vol. 1, No. 5, p. 1.

⁶² *Zeri i popullit*, June 16, 1988, p. 1.

II. TRADE AND FINANCE

OVERVIEW

By Jean F. Boone*

For the countries of Eastern Europe, the expansion of foreign economic activity and the implementation of domestic economic reform are integrally related, but it is a relationship that is complex and, in some respects, paradoxical. The restructuring and modernization of industry demands imports from the West and increased exposure to the competitive standards of the world market, yet effective and efficient trade demands prior changes in economic structures, mechanisms, and production. The East European countries that in the 1970's attempted to resolve this dilemma by increasing trade and debt as an impetus to reform (Poland, Hungary, and Yugoslavia) found that reform and restructuring proceeded only slowly and with great difficulty, while debt soared in the face of rising interest rates, Western recession, and exchange rate fluctuations. Those countries that chose to remain relatively detached from the world market (Czechoslovakia, for example), though spared the debt problems now constraining the others, nevertheless have generally seen economic performance decline in the 1980's and thus, have also come under pressure to tackle the trade-reform dilemma. As the papers in this chapter clearly illustrate, the challenge to be met is in developing foreign economic policies that both support and can be supported by domestic changes, in an international environment that may be unfavorable or, at least, unpredictable.

The vulnerability of Eastern Europe to changes in the international environment is particularly highlighted by William Kunkle, who notes that, despite significant improvement in 1987 in the region's current account balance (from a deficit of \$830 million in 1986 to a \$2.2 billion surplus), overall East European debt rose to its highest level—\$114.3 billion—largely because of exchange rate changes. According to his balance of payments model, even under the best conditions, East European debt is likely to continue to rise through 1995, requiring both additional borrowing in order to meet repayment obligations and a restrained imports policy. Should interest rates rise or Western lenders draw back, the region's financial situation could deteriorate still further, with especially negative consequences for Poland, Hungary, and Yugoslavia. These forecasts suggest that the adjustments made by individual countries to date to overcome balance of payments deficits have been only

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short-term solutions, based primarily on reducing imports, and have not addressed the more fundamental problem of expanding the range and competitiveness of exports.

This kind of short-term approach, while it has allowed most of the East European countries to maintain a degree of creditworthiness and, therefore, continued access to Western credit, may have diminishing viability as an option in the future. In recent years, as Przemyslaw Gajdeczka suggests, Western financial markets seem to have judged East European "creditworthiness" according to the criteria of each country's willingness and/or ability to meet payment obligations, rather than by its overall economic performance. But, he concludes, "both the markets and East European borrowers learned that there are limits to amounts of voluntary borrowing;" in the future, the stabilization of debt to exports ratios and improvement in economic performance are likely to be increasingly important factors in determining a country's access to new foreign capital. Such a reassessment of lending criteria may not be entirely unwarranted. As the case of Romania clearly illustrates, a policy that rests solely on reducing domestic absorption without domestic change, growth or expanded exports, may successfully accomplish debt repayment requirements but at the expense of the country's economic health and stability.

Still, the dilemma remains: if Western credit is tightened in the absence of sufficient reform, how will the East European countries pay for the imports of equipment and technology needed to achieve domestic change, growth and expanded exports? As Steven Popper's commentary indicates, many of the East European countries appear to be reliant on the developed West for the high-technology imports that are critical for raising industrial productivity. Observing that the reliance measure used in his study was especially persistent in the metal-working machine tool category, Popper concludes that "there may be a relatively high level of fundamental reliance on Western machine-tool imports . . . necessary to maintain reasonable and prudent levels of basic growth in CMEA economies." While the degree of reliance declined somewhat for most countries between 1981 and 1984, when hard currency was particularly scarce, it remained sufficiently significant to suggest that much high-technology equipment is not available within CMEA, including from the Soviet Union. It would also appear from his study that the countries that need Western technology most are those that may be least able to afford it: Yugoslavia, Hungary, Bulgaria, and Poland.

Given the conditions established so far—rising debt, potentially more stringent credit conditions, and inelastic demand for certain Western imports—the need to expand exports, specifically hard-currency exports, would seem to take on even greater importance for the countries of Eastern Europe. Still, as competition has intensified among major exporting nations, now joined by the East Asian newly industrializing countries (NIC's), to maintain shares in the world market, opportunities for the East Europeans to carve out their own export niches may be harder to find. Looking at East European exports to the industrial West, Leyla Wood's paper indicates that, over the period 1980-87, these exports increased by 10 percent, not a bad record in light of the region's debt developments

and the trade environment during the period. In comparison with the performance of less-developed countries, whose exports to the industrial West dropped by 31 percent, the 10 percent increase looks in fact quite impressive; in comparison with the performance of the NIC's, however, whose exports to the industrial West increased 167 percent, it appears somewhat more discouraging. As important as the quantity of exports, however, is their composition, and here Woods offers more troubling data. Noting that chemicals and intermediate manufactures continue to comprise a large share of East European imports, she concludes that these economies remain relatively resource intensive and, as a result, have been unable to devote scarce hard currency to increasing their Western machinery imports, imports that might then allow for an increase in machinery exports. Instead, the structure of East European-Western trade has remained basically unchanged over the period while other country groups have increased the share of machinery in both their imports and their exports. But as Woods notes, "even significant increases in East European imports of technology and capital goods from the industrial West are unlikely to lead to notable improvements in East European export performance in the absence of thorough and effective systematic reforms." Just as East European balance of payments policies that relied on import reductions without economic change were seen as producing short-term success but at long-term cost, so an import strategy that is not based on domestic restructuring and reform may only prolong old patterns of trade and prove incapable of producing gains in the long run.

One area of trade that would appear to offer opportunities for breaking out of old patterns and developing new export markets is East European trade with the South, the less-developed countries of Asia, Africa, and Latin America. Nevertheless, both Marie Lavigne and Kazimierz Poznanski observe difficulties for Eastern Europe in these countries as well and find that, instead of increasing in importance, the Third World seems to have become less significant in East European trade in the mid-1980's. Not only did the level of trade with the Third World decline relative to earlier years (between 1983 and 1987, exports dropped 22 percent and imports 6 percent), but this trade also diminished as a proportion of total East European trade (from 13 percent of total exports in 1982, to 8 percent in 1987; from 9 percent of total imports to 6 percent).

In part, this decline can be explained by factors beyond the control of the East Europeans themselves; the debt crisis among Third World countries led many to sharply reduce imports and the drop in oil prices further damaged some Southern partners' ability to purchase goods for hard currency. Given the East Europeans' own debt constraints and need for hard currency earnings, Third World demands for credit and compensation arrangements found little response in the CMEA countries. Furthermore, though this barrier to increased trade may derive from conditions in the current international environment, it is reinforced by the inconvertibility of socialist currencies which, as Lavigne notes, "prevents the socialist countries from offering a specific financing to the developing countries."

Notwithstanding the payments problem, Lavigne and Poznanski both argue that there are other, more troubling, factors inhibiting

East-South trade—an apparent unwillingness to direct attention to this region as a matter of policy, and a question of East European technological competitiveness. While observing that “the reforms going on in some Eastern European countries should bring about an openness to foreign economic relations,” Lavigne concludes that “this is felt as a necessity only with the West.” Poznanski confirms the apparent bias against increased interaction with the South, finding that the share of manufactured goods in East European imports from the developing countries is lower than the share imported by the West, despite the fact that, “it is essential for the promotion of trade with the South that its trading partners provide outlets for those [manufactured] products.” Instead of actively fostering trade relationships with the developing countries, then, the East Europeans seem to be focusing attention on the more familiar and immediately beneficial [particularly from the perspective of debt repayment] markets of the West.

Still, if more priority were given to southern markets, could East European products compete? Here Poznanski finds that the NIC's present a growing threat to East European export possibilities in the Third World. Looking particularly at East European export performance in Brazil and India, he argues that the East Europeans have lost market share in these countries during the 1980's not to the West, but to other southern countries, especially those of Asia. Unable to match the technological level offered by the West and now with a reduced technological lead over some of the developing countries themselves, the East European countries will need both better quality products and more flexible and diverse trade mechanisms to establish a place for themselves in southern markets—the changes that might result from domestic reform. While reform would support opportunities for expanded Third World trade, reform might also be supported by it, as Poznanski suggests: “East Europe can somewhat expand its trade with the South, mostly by rationalization of the product structure. For instance, with its high labor costs and consumer goods hunger, East Europe may allow more imports of southern products for the consumption market. This would release some domestic resources for other applications . . . [and] would generate support for . . . change.”

This proposal notwithstanding, the papers of this chapter, taken together, underline the difficulty facing East European countries in expanding the foreign economic relations necessary for supporting reform efforts, without having the basic elements of a reform system already in place (and in many cases, already burdened with substantial foreign debt). Under these conditions, does participation in the international economic organizations (IEO's)—the General Agreement on Tariffs and Trade (GATT), the International Monetary Fund (IMF), and the World Bank—offer support or solutions for the centrally planned economies' dilemma? By providing the prospect of financial support and trade privileges, within a framework of market-oriented requirements, these institutions might appear as a vehicle for bridging the seemingly inescapable trade-reform paradox. Nevertheless, the paper of Paul Marer and Jozef van Brabant demonstrates that membership in these organizations, under present procedures and requirements, offers “no guarantee that comprehensive, market-oriented reforms will be introduced.”

in fact, some accession arrangements (for example, quantitative import commitments within the GATT) may even be counterproductive to reform.

That the IEO's could, however, play a large role in prompting reform in the East European countries while helping them to become more integrated into the world economy, is the conclusion reached by Marer and van Brabant. They propose the development of "transitional arrangements" thereby, in exchange for access to the IEO's resources and benefits, the country seeking membership would spell out, in agreement with the IEO, a reform program (including commitment to decentralization, implementation of a unified exchange rate, domestic price reform, and eventual currency convertibility) and its implementation would be closely monitored by the IEO. Failure to carry out the program as agreed would result in the loss of privileges associated with membership. In this way, the international economic organizations could both help to ease the difficult transition of these countries as they undertake reform and exercise some leverage and discipline over how a reform program is carried out. Certainly, such procedures cannot substitute for strong commitment by East European leaders to changes in domestic policies and mechanisms, but only reinforce it where it exists. Still, such a proposition offers some glimmer of promise for East European trade and finance prospects where often only pressures and constraints seem clear.

EAST EUROPEAN BALANCE OF PAYMENTS PROSPECTS

By William Kunkle*

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I. SUMMARY

Projections of the Eastern Europe's balance of payments, generated by a set of seven country financial models, show that the region will remain vulnerable to adverse developments in export markets, interest rates, and credit availability into the next decade. Our best-case assessments of future developments (the baseline scenario) show that East European debt will rise to an all-time high of \$118 billion by 1995. This additional debt will in turn increase the amount of new borrowings needed to cover financial obligations and constrain funds for growth in needed imports. A deterioration from the baseline scenario—caused by a steep cutback in lending by Western creditors, steep declines in export earnings, or a return to double-digit interest rates—would force the regimes to make difficult choices between meeting financial obligations and cutting imports. Under these conditions Western creditors would probably be compelled to extend larger amounts of debt relief to several problem debtors.

This study describes a series of East European Balance of Payments models which were developed in order to improve our understanding of the financial workings of these countries. These models provide a framework for organizing a vast array of historical data,

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as well as anticipating the emergence of future balance of payments crises such as those experienced by Hungary, Poland, Romania, and Yugoslavia in the early 1980's. They can also be used to evaluate the impact of events beyond Eastern Europe's control, such as a change in Western interest rates, or to simulate the effects of various policy options, such as cuts in import levels.

II. OVERVIEW OF THE METHODOLOGY

The purpose of each balance of payments model is to forecast key financial flows (endogenous variables), used in analyzing a country's financial position, out to 1995. These projections include estimates on interest receipts and payments, principal repayments, levels of debt, and foreign exchange reserves. These forecasts are conditional, however, because they hinge on certain assumptions about the future. By varying these assumptions (the exogenous variables) the model can be used to view the impact of external events or policy decisions.¹ The three major groups of exogenous variables include: assumptions about the future economic climate, variables over which Western creditors have some degree of control, and variables controllable by the East European regimes. (See Box 1.)

¹ Our use of the terms "exogenous" and "endogenous" varies somewhat from the conventional uses in econometrics. Although these models represent the financial flows within a country through the use of accounting identities, they do not include stochastic equations in the conventional sense. We use this terminology, however, to denote whether a variable is an input or output.

BOX 1
KEY VARIABLES USED IN THE MODEL

ENDOGENOUS

INTEREST RECEIPTS AND PAYMENTS: Interest receipts -- earnings on foreign deposits -- are calculated by applying a simulated interest rate to a two-year moving average of foreign exchange reserves. Interest payments are calculated in a similar manner. Interest payments for countries that generate arrearages in the projection period include interest on arrearages to unspecified creditors.

MEDIUM AND LONG TERM PRINCIPAL REPAYMENTS: Future principal repayments are calculated from estimated levels of debt and projected average maturity expressed either in terms of years or as a percentage of outstanding debt repaid annually.

DEBT: Debt in the current year equals the previous year's debt plus new credit drawings minus any scheduled principal repayments. When a country runs a financing gap, the value of this gap is added to the principal and interest arrears component of debt.

RESERVES: Reserves are defined as central bank holdings of foreign exchange deposits with BIS or IMF member banks. Gold holdings and claims on foreign countries are excluded due to problems of valuation and lack of sufficient information. Future levels of foreign exchange reserves are projected by assuming the historical ratio of reserves to imports remains constant.

EXOGENOUS

ECONOMIC ENVIROMENT: This group of variables reflects world economic conditions over which neither the East European countries nor their Western trading partners have direct control. The main variables in this category are hard currency exports, Euromarket interest rates for commercial debt, and medium and long term debt maturities.

WESTERN POLICY VARIABLES: This set of variables can be manipulated by Western governments acting individually or in unison. This category includes interest rates for multilateral and official debts, extension of multilateral or official credit, and the terms of official rescheduling agreements.

EASTERN POLICY VARIABLES: These variables are those over which the regimes have the most control and may be considered policy instruments. The main ones in this category are hard currency imports, travel payments, credits to foreign countries, and borrowing levels for countries which have access to Western financial markets.

The basic structure of each balance of payments model, for organizational purposes, may be considered as comprising five categories of information including the financing gap, financing requirements, financing sources, debt information (including levels of debt, maturity structure, and interest rates), and rescheduling agreements. Each category consists of a series of equations which combine measurements of financial flows, statistical analysis of key relationships, and assumptions about external events.

The Financing Gap.—The difference between financing requirements and financing sources is the key variable because it indicates whether a regime needs to either reduce requirements by slowing import growth or cutting back credits to foreign countries, or boost sources through borrowings and debt refinancing. If this adjustment cannot be made, the country will generate arrears which will accumulate and increase future financing requirements.²

Financing Requirements.—This variable represents the amount of money needed for a country to finance its trade and meet its obligations in any given year. Errors and omissions are included in the historical time period to equilibrate requirements with sources, but they are set to zero for projections.

Financing Sources.—Funds, other than net current earnings, which can be used to meet financing requirements for any given year. This includes credit utilization (borrowings), debt reschedulings, and new arrearages.

Debt Information.—The financial summary data include information on levels of short- and medium-term debt, unspecified principal and interest arrearages, foreign exchange reserves, interest rates, and the maturity structure of medium- and long-term debt.

Rescheduling Agreements.—The rescheduling agreements include information on amounts rescheduled, arrearages covered, the grace period, length of the repayment period, the schedule of repayments, applicable fees, and the interest rate (specified as a spread over some domestic or international benchmark). In order to maintain balance, the value of the rescheduled maturities for each year are counted both as a credit and as a principal repayment. The construction of repayment schedules has grown progressively more complex as payments covered under initial rescheduling agreements are being incorporated into new reschedulings.

III. BALANCE OF PAYMENTS FORECASTS THROUGH 1995: THE BASELINE SCENARIO

The baseline scenario presents our assessment of the most likely combination of external events and our resulting modelbased forecasts.

A. A REGIONAL OUTLOOK

Although Eastern Europe's current account performance recovered dramatically in 1987 from the disappointing results of 1986,

² The concept of a financing gap can really only be used in reference to a projection because any actual shortfall of funds will automatically produce a change in financing requirements, sources, or arrearages in the current year.

several factors still produced a runup in hard currency debt. Our preliminary estimate is that the region posted a hard currency trade surplus of \$2.5 billion, up from a \$400 million deficit in 1986, but still well below the record surplus of over \$6.0 billion in 1984. (See Table 1.) Coupled with a small improvement in earnings from services and transfers, the trade surplus enabled the region's current account balance to rebound from a \$830 million deficit in 1986 to a \$2.2 billion surplus in 1987. The improvement in the region's current account, however, was overshadowed by exchange rate movements and the large outflow of export credits to LDC's—resulting in East European debt soaring to a new all-time high of \$114.3 billion in 1987.

TABLE 1.—EASTERN EUROPE: 1982-90 BALANCE OF PAYMENTS TABLE

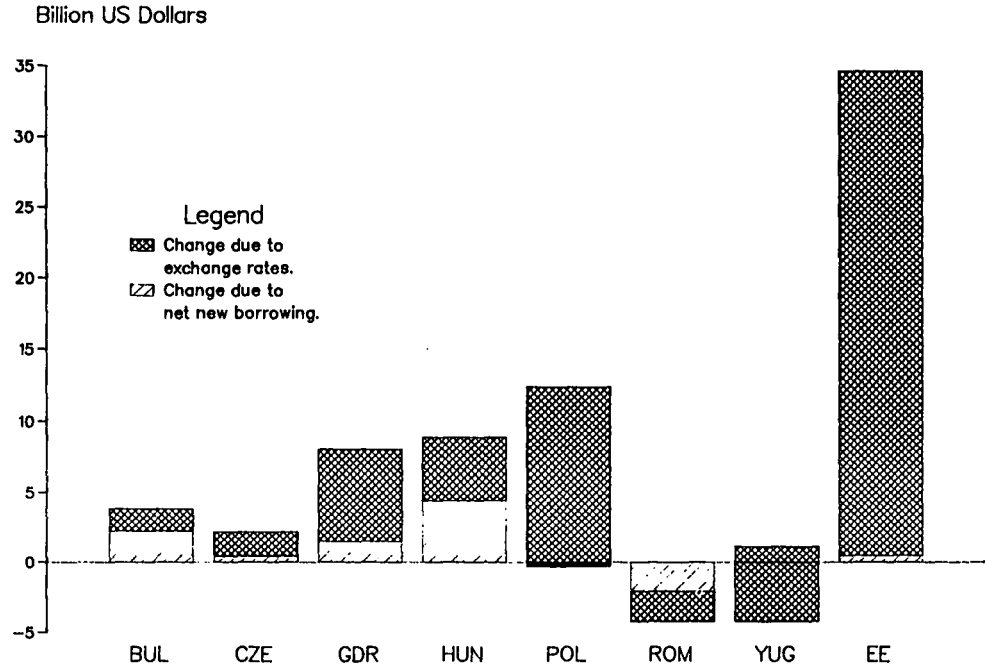
[In millions of U.S. dollars]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Financing gap.....	0	0	0	0	0	0	610	2,762	5,200	8,975	11,753	15,870	19,931	24,228
Financing requirements.....	31,118	32,282	31,138	35,784	29,250	32,021	30,368	29,663	31,707	34,634	36,080	40,352	44,729	49,468
Current account balance.....	-1,925	2,314	4,686	1,926	-830	2,160	2,952	2,121	2,899	2,566	2,479	2,346	2,565	3,147
Trade account balance.....	1,672	4,272	6,040	2,755	-424	2,528	3,767	3,500	3,225	2,743	2,230	1,891	1,582	1,676
Exports.....	36,399	37,523	39,639	38,336	39,013	43,468	45,937	47,849	49,873	52,086	54,356	56,818	59,475	62,370
Imports.....	34,727	33,251	33,599	35,581	39,437	40,940	42,170	44,349	46,648	49,343	52,136	54,927	57,893	60,694
Services and transfers.....	-3,597	-1,958	-1,354	-829	-406	-368	-815	-1,379	-326	-177	249	455	983	1,471
Net interest.....	-8,994	-6,995	-6,408	-6,461	-6,771	-6,936	-7,720	-8,553	-7,755	-7,752	-7,506	-7,586	-7,367	-7,236
Other services.....	5,397	5,037	5,054	5,632	6,365	6,568	6,905	7,174	7,429	7,575	7,755	8,041	8,350	8,707
Debt repayments.....	28,835	24,094	22,027	20,231	24,999	27,382	30,049	28,719	29,460	28,641	26,475	27,627	27,846	29,028
Credits to foreigners.....	-1,638	-1,486	-1,864	-2,146	-3,108	-2,996	-2,550	-2,150	-1,950	-1,950	-1,950	-1,950	-1,950	-1,950
Arrearages from last year.....	1,716	7,805	10,800	12,136	0	0	0	610	2,762	5,200	8,975	11,754	15,870	19,931
Change in reserves.....	-955	2,430	2,878	2,822	973	878	722	301	431	1,407	1,160	1,370	1,626	1,706
Errors and omissions.....	-2,041	-1,219	-1,745	375	-660	2,925	0	0	0	0	0	0	0	0
Financing sources.....	31,118	32,282	31,138	35,784	29,250	32,021	29,758	26,901	26,507	25,657	24,328	24,482	24,798	25,240
Credit utilization.....	18,649	18,035	15,634	21,298	25,326	26,290	23,979	23,892	23,488	23,292	23,082	23,624	24,191	24,633
Reschedulings.....	4,664	3,447	3,368	14,486	3,924	5,731	5,779	3,009	3,019	2,365	1,246	853	607	607
Arrearages in current year.....	7,805	10,800	12,136	0	0	0	0	0	0	0	0	0	0	0
Debt information:														
Gross debt.....	80,669	81,856	79,752	88,354	100,800	114,306	114,625	114,957	114,438	115,237	115,857	116,829	117,841	118,349
Short term.....	9,960	9,645	9,088	10,440	13,036	14,549	13,629	13,534	13,233	12,075	12,011	12,223	12,472	12,668
Medium and long term.....	70,709	72,211	70,664	77,914	87,764	99,757	100,386	98,661	96,005	94,187	92,092	88,736	85,438	81,453
Principal and interest arrears.....	0	0	0	0	0	0	610	2,762	5,200	8,975	11,754	15,870	19,931	24,228
Foreign exchange reserves.....	6,749	9,179	12,057	14,879	15,852	16,730	17,452	17,753	18,184	19,591	20,751	22,121	23,747	25,453
Net debt.....	73,920	72,677	67,695	73,475	84,948	97,576	97,173	97,204	96,254	95,646	95,106	94,708	94,094	92,896

Sources: Various issues of The WEFA Group's "CPE Outlook for Foreign Trade of Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, INF International Financial Statistics, and the "Handbook of Economic Statistics".

Exchange rate fluctuations have, in fact, had a major impact on East European indebtedness over the past few years. While East European debt—when measured in dollars—climbed \$34.6 billion between 1984 and 1987, we estimate that exchange rate movements accounted for \$34.1 billion of the increase, or almost 99 percent. (See Figure 1 and Table 2.) The impact has, however, varied widely across countries. While most of Eastern Europe has benefited from a positive inflow of net new lending two countries, Romania and Yugoslavia, have faced large outflows of funds during 1984-87—\$4.2 billion and \$3.9 billion respectively.

Figure 1
 ESTIMATED CHANGE IN EAST EUROPEAN DEBT¹
 1985-87



1. Absolute change in debt represented by top of exchange rate bar

TABLE 2.—IMPACT OF EXCHANGE RATE MOVEMENTS ON EAST EUROPEAN INDEBTEDNESS

[In millions of U.S. dollars]

	1985	1986	1987	Total
Bulgaria:				
Change in debt	1,355	1,321	1,203	3,879
Change due to exchange rates.....	359	520	725	1,604
Czechoslovakia:				
Change in debt	244	660	1,326	2,230
Change due to exchange rates.....	570	550	659	1,779
East Germany:				
Change in debt	1,674	2,992	3,377	8,043
Change due to exchange rates.....	1,971	2,023	2,506	6,500
Hungary:				
Change in debt	2,925	3,326	2,651	8,902
Change due to exchange rates.....	1,146	1,384	1,901	4,431
Poland:				
Change in debt	2,500	4,200	5,700	12,400
Change due to exchange rates.....	3,903	3,731	4,911	12,545
Romania:				
Change in debt	-456	-239	-1,372	-2,067
Change due to exchange rates.....	806	648	669	2,123
Yugoslavia:				
Change in debt	360	186	621	1,167
Change due to exchange rates.....	1,738	1,641	1,697	5,076
Eastern Europe:				
Change in debt	8,602	12,446	13,506	34,554
Change due to exchange rates.....	10,494	10,497	13,068	34,059

Sources: Various issues of The WEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", and the IMF International Financial Statistics.

Projections of the region's balance of payments show that Eastern Europe will continue to need new credits and refinancings through at least 1995. Even with modest export growth, most countries will require additional credits for debt service and to finance essential imports. These trends will result in regional debt rising by a projected 3.5 percent to slightly more than \$118 billion by 1995. All countries except Poland are projected to have access to enough Western credit to meet these borrowing needs; Warsaw, however, will have to obtain more debt relief from their creditors or go into arrears. The divergence in financial health of the individual countries, which has emerged over the past 3 years, will probably grow even wider:

Poland, which has been reluctant to impose the tough adjustment policies needed to produce large payments surpluses, will face cumulative financing gaps of \$24.2 billion through 1995.

Despite progress in its external account last year, longrun financial prospects for Yugoslavia appear uncertain. While we project that Belgrade will likely avoid another rescheduling through 1995, deeply ingrained economic problems—inflation, unemployment, and low-economic growth—are likely to continue.

Hungary continues to raise new loans from Western banks, but it will face even larger borrowing needs by the early 1990's. It will have to impose more domestic austerity and obtain IMF assistance to avoid another liquidity crisis and rescheduling.

Bulgaria could be heading for a payments crisis as a result of rising principal repayments, continued need for export trade credits, and limited capability to expand exports outside its traditional LDC markets. Gross debt is expected to peak at \$9.9 billion in 1994, an increase of 61 percent.

Romania, struggling with several years of deep import cuts, is projected to virtually eliminate its debt by 1990. Bucharest, however, has shown no sign of using the greater financial flexibility this would entail to lift its policy of draconian austerity.

Czechoslovakia and East Germany have considerable financial flexibility due to their conservative trade and payments policies and could afford higher levels of imports to support selective modernization programs should they wish.

B. COUNTRY ASSESSMENTS

The following sections summarize the individual countries' recent financial performances and discuss their baseline projection through 1995. The order of presentation is to assess the countries with the weakest financial position first and the strongest financial position last.

1. *Poland*

Poland's financial morass continues, and the numbers will grow worse through at least 1995 even under reasonably optimistic assumptions. Warsaw has recorded annual trade surpluses of over \$1 billion during 1983-87 due mainly to reduced imports, but it has been unable to generate enough hard currency earnings to cover all interest payments, let alone repayments of principal. Warsaw gained some breathing room in 1987 by concluding agreements with both Western banks and governments to reschedule almost \$18 billion of its then outstanding \$34 billion debt, including a significant portion of principal and interest falling due in 1987-88. Most of the remaining obligations had been covered in earlier rescheduling agreements or are owed to creditors outside the Paris Club of government creditors and Western banks.

Our baseline scenario assumes that neither Warsaw nor Western creditors will pursue policies that will lead to a permanent solution to Poland's debt problem. We assume that hard currency exports grow at an average annual rate of 4.0 during 1988-95, while imports grow 4.5 percent annually during the same time period. Imports will grow at this rate because Warsaw will attempt both to shield consumers from renewed cuts in living standards and to meet industry's needs for inputs and investment goods. This scenario also assumes that Poland's entry into the IMF along with loans from the World Bank will yield between \$300 and \$550 million in new credits annually. Commercial banks, in contrast, will continue to grant only limited amounts of short-term trade financing as specified in the rescheduling agreements.

In 1988-95 we anticipate the following major developments:

The current account is not expected to improve dramatically over the period. The combination of a slow decline in interest obligations and lackluster trade performance will result in the

current account climbing only slowly out of deficit, reaching \$108 million by 1995. (See Table 3.)

Owing to rescheduling agreements reached in 1987, Poland probably will run up only \$610 million in additional arrearages in 1988. Unless Warsaw can obtain additional reschedulings, however, we project the country will run up roughly \$24.2 billion in arrears by 1995.

Poland will be unable to pay enough principal and interest to halt the growth of its debt. The new credits, unmet principal payments, as well as the growing amount of interest either rescheduled or in arrears will push Poland's hard currency debt up from \$39.2 billion in 1987 to almost \$42.6 billion by 1995.

TABLE 3.—POLAND: 1986–90 BALANCE OF PAYMENTS TABLE

[In millions of U.S. dollars]

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Financing gap	0	0	610	2,762	5,200	8,975	11,754	15,870	19,931	24,228
Financing requirements	3,408	4,916	5,109	5,985	8,704	12,182	13,865	17,623	21,433	25,730
Current account balance	-650	-60	-419	-639	-317	-323	-113	-94	20	108
Trade account balance ..	1,035	1,040	1,056	1,071	1,086	1,101	1,114	1,127	1,138	1,149
Exports	5,316	6,163	6,410	6,666	6,933	7,210	7,498	7,798	8,110	8,434
Imports	4,281	5,123	5,356	5,594	5,846	6,109	6,384	6,671	6,972	7,285
Services and transfers ..	-1,685	-1,100	-1,475	-1,710	-1,404	-1,424	-1,227	-1,221	-1,119	-1,041
Net interest ¹	-2,542	-2,458	-2,868	-3,153	-2,888	-2,956	-2,811	-2,857	-2,811	-2,790
Other services	857	1,358	1,393	1,443	1,484	1,532	1,584	1,636	1,692	1,749
Debt repayments	3,867	4,014	4,490	4,537	5,424	6,459	4,576	5,575	5,382	5,708
Credit to foreign countries	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Arrearages from previous years	0	0	0	610	2,762	5,200	8,975	11,754	15,870	19,931
Change in reserves	-172	797	0	0	0	0	0	0	0	0
Errors and omissions	-1,137	-155	0	0	0	0	0	0	0	0
Financing sources	3,408	4,916	4,499	3,223	3,504	3,207	2,111	1,753	1,502	1,502
Credit utilization	1,275	1,231	1,100	1,526	1,702	1,702	1,502	1,502	1,502	1,502
Reschedulings	2,133	3,685	3,399	1,697	1,802	1,505	609	251	0	0
Arrearages in current year	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt	33,500	39,200	39,819	40,657	41,175	41,698	42,011	43,305	42,485	42,577
Short term	1,753	1,825	1,817	1,867	1,867	850	850	850	850	850
Medium and long term	31,747	37,375	37,392	36,028	34,108					
Principal and interest arrears	0	0	610	2,762	5,200	8,975	11,754	15,870	19,931	24,228
Foreign exchange reserves	698	1,495	1,495	1,495	1,495	1,495	1,495	1,495	1,495	1,495
Net debt	32,802	37,705	38,324	39,162	39,680	40,203	40,516	40,810	40,990	41,082
Debt service ratio	0.81	0.69	0.77	0.78	0.81	0.79	0.66	0.74	0.69	0.69

¹ Based on interest owed.

Sources: Various issues of the WEEA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, IMF International Financial Statistics, and the "Handbook of Economic Statistics".

Financial recovery would require austerity measures in the short run to reduce the demand for imports and release more goods for export, and fundamental reforms to improve the efficiency and

competitiveness of production. Warsaw, however, has shown little of the resolve necessary to end this crisis—particularly in the wake of the August 1988 strikes when the government promised to improve the supplies of consumer goods by diverting exports and increasing hard currency imports. Even if Warsaw manages to arrange and abide by an IMF standby program, it will struggle with financial insolvency for the foreseeable future.

2. Yugoslavia

Prospects for longrun improvement in Yugoslavia's financial condition remained guarded. While there has been a marked turnaround in the external accounts, helped in part by the two rescheduling agreements signed in early 1988, domestic economic conditions continue to deteriorate—inflation is running at over 200 percent annually, industrial and agricultural production is down, and unemployment remains around 15 percent.

The baseline case assumes that Belgrade's trade deficit will widen during 1988-95 as imports grow at a projected annual rate of 5 percent while exports rise by 4 percent per year. Credit utilization during the forecast period is assumed to remain between \$1.9 and \$2.7 billion, barring another collapse in new lending to Eastern Europe as occurred in the early 1980's.

In 1988-95 we anticipate the following major developments:

Growing trade deficits will more than offset lower interest payments and cause the current account to fall steadily from its 1988 surplus of \$1.4 billion to only \$378 million in 1995 even if Belgrade can hold imports to our assumed growth rate. (See Table 4.)

The combination of reduced borrowings and steady level of principal repayments are projected to begin to lower hard currency debt from a high in 1987 of \$20.0 billion to \$17.3 billion by 1995.

TABLE 4.—YUGOSLAVIA: 1986-90 BALANCE OF PAYMENTS TABLE

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
[In millions of U.S. dollars]										
Financing gap	0	0	0	0	0	0	0	0	0	0
Financing requirements	4,004	4,001	5,070	3,758	3,731	3,010	2,496	2,522	2,773	3,259
Current account balance	227	1,037	1,353	1,018	1,009	777	513	343	244	378
Trade account balance	-2,492	-1,068	-919	-1,249	-1,508	-1,791	-2,097	-2,306	-2,529	-2,493
Exports	7,413	8,521	8,862	9,216	9,585	9,968	10,367	10,782	11,213	11,662
Imports	9,905	9,589	9,781	10,465	11,093	11,759	12,465	10,388	13,742	14,154
Services and transfers	2,719	2,105	2,272	2,268	2,517	2,567	2,610	2,649	2,773	2,871
Net interest	-1,669	-1,789	-1,756	-1,836	-1,623	-1,578	-1,543	-1,593	-1,560	-1,578
Other services	4,388	3,894	4,028	4,104	4,140	4,145	4,153	4,242	4,333	4,449
Debt repayments	5,084	5,241	5,445	4,526	4,489	3,536	2,728	2,542	2,690	3,339
Credit to foreign countries	-273	-186	-250	-250	-250	-250	-250	-250	-250	-250
Arrearages from previous year	0	0	0	0	0	0	0	0	0	0
Change in reserves	365	-762	728	0	0	0	31	73	76	48
Errors and omissions	-1,492	373	0	0	0	0	0	0	0	0
Financing sources	4,004	4,001	5,070	3,758	3,731	3,010	2,496	2,522	2,773	3,259
Credit utilization	2,567	2,417	2,690	2,446	2,514	2,150	1,859	1,915	2,166	2,652

TABLE 4.—YUGOSLAVIA: 1986–90 BALANCE OF PAYMENTS TABLE—Continued

	(In millions of U.S. dollars)									
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Reschedulings.....	1,437	1,584	2,380	1,312	1,217	860	637	607	607	607
Arrearages in current year.....	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt.....	19,364	19,975	19,610	18,842	18,083	17,556	17,325	17,304	17,387	17,307
Short term.....	1,340	1,275	1,340	1,300	1,336	1,143	988	1,018	1,152	1,410
Medium and long term.....	18,024	18,700	18,270	17,542	16,747	16,414	16,337	16,286	16,235	15,897
Principal and interest arrears..	0	0	0	0	0	0	0	0	0	0
Foreign exchange reserves.....										
Net debt.....	1,460	698	1,426	1,426	1,426	1,426	1,457	1,530	1,606	1,655
Debt service ratio.....	17,904	19,287	18,184	17,416	16,657	16,130	15,868	15,774	15,781	15,653
Debt service ratio.....	0.45	0.42	0.42	0.35	0.32	0.25	0.20	0.19	0.19	0.22

Sources: Various issues of The WEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, IMF International Financial Statistics, and the "Handbook of Economic Statistics".

Although the baseline scenario projects a decline in Yugoslav debt, Belgrade is still far from reestablishing its creditworthiness with Western lenders. As the first steps toward longrun financial recovery, Belgrade reached agreement with the IMF on a standby program in 1988, signed rescheduling agreements with both commercial and government creditors, and secured enough credits to make it through the year. Problems with Yugoslavia's IMF standby program may reappear within the next few months, however, if the regime fails to meet performance criteria on wage and monetary growth limits. This, in turn, would likely sour Western creditors confidence and require Belgrade to enter another round of lengthy and contentious negotiations with the IMF.

3. Hungary

Hungary, once considered on the road to recovery following its financial crisis in 1982–83, is again grappling with poor hard currency trade performance, rapidly rising debt, and higher interest payments. Beginning in 1984, when Budapest eased import restrictions, hard currency imports have risen over 36 percent to about \$5.1 billion in 1987. Export earnings over the same time period have risen only 2.3 percent to \$5.1 billion. Hence, Hungary registered a slightly positive hard currency trade balance while large interest payments pushed its current account deficit to over \$800 million.

Our baseline scenario assumes that Budapest undertakes a modest effort to impose austerity. This would entail holding imports to only 4.0 percent average annual growth. To achieve the projected export growth of 6.1 percent annually, Hungary must be successful in implementing economic reforms aimed at improving its competitiveness on world markets. Foreign exchange reserves will likely remain slightly below the level of 1985 when they topped \$3.1 billion, because of large debt service requirements.

In 1988–95 we anticipate the following major developments:

Although Budapest is expected to generate large hard currency trade surpluses during 1988-95, these gains will be partially offset by rising interest outlays—generating continuous current account deficits until 1995. These deficits and rising debt repayments will, in turn, force the regime to borrow between \$4.4 and \$5.9 billion per year. (See Table 5.)

If Hungary raises the credits needed to meet its borrowing needs, hard currency debt will likely rise nearly 21 percent from \$17.7 billion in 1987 to \$21.5 billion in 1990. Higher levels of gross debt, in conjunction with slow growth of hard currency reserves, will boost net debt by \$3.4 billion to \$18.9 billion by 1990.

TABLE 5.—HUNGARY: 1986-90 BALANCE OF PAYMENTS TABLE

	[In millions of U.S. dollars]									
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Financing gap	0	0	0	0	0	0	0	0	0	0
Financing requirements	6,224	5,062	4,358	4,428	4,474	4,878	5,391	5,794	5,910	5,942
Current account balance	-1,418	-847	-499	-593	-275	-187	-144	-139	-40	42
Trade account balance	-539	3	581	717	865	971	1,020	1,071	1,124	1,181
Exports	4,136	5,078	5,630	5,968	6,326	6,705	7,041	7,393	7,762	8,150
Imports	4,675	5,075	5,049	5,251	5,461	5,734	6,021	6,322	6,638	6,970
Services and transfers	-879	-850	-1,080	-1,310	-1,140	-1,158	-1,164	-1,210	-1,164	-1,139
Net interest	-829	-924	-1,189	-1,469	-1,384	-1,416	-1,437	-1,508	-1,489	-1,492
Other services	-50	74	109	159	244	258	273	298	325	353
Debt repayments	4,355	4,709	4,059	3,559	3,921	4,390	4,941	5,343	5,554	5,660
Credit to foreign countries	-378	-256	-200	-200	-200	-200	-200	-200	-200	-200
Arrears from previous year	0	0	0	0	0	0	0	0	0	0
Change in reserves	-57	-790	-400	75	78	101	106	112	117	123
Errors and omissions	130	40	0	0	0	0	0	0	0	0
Financing sources	6,224	5,062	4,358	4,428	4,474	4,878	5,391	5,794	5,910	5,942
Credit utilization	6,224	5,062	4,358	4,428	4,474	4,878	5,391	5,794	5,910	5,942
Reschedulings	0	0	0	0	0	0	0	0	0	0
Arrears in current year	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt	15,087	17,738	18,037	18,905	19,458	19,946	20,396	20,847	21,204	21,485
Short term	2,422	1,954	1,682	1,709	1,727	1,883	2,081	2,237	2,281	2,293
Medium and long term	12,665	15,784	16,355	17,196	17,731	18,063	18,315	18,611	18,923	19,192
Principal and interest arrears	0	0	0	0	0	0	0	0	0	0
Foreign exchange reserves	3,062	2,272	1,872	1,947	2,025	2,126	2,232	2,344	2,461	2,584
Net debt	12,025	15,466	16,165	16,958	17,434	17,820	18,164	18,503	18,743	18,901
Debt service ratio	0.73	0.55	0.51	0.48	0.48	0.51	0.54	0.54	0.52	0.50

Sources: Various issues of the WEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, IMF International Financial Statistics, and the "Handbook of Economic Statistics".

Hungary's position is manageable for now, but a downturn in export performance, worker unrest over lower living standards, or a deterioration in economic performance could sour the attitudes of Western banks and precipitate another liquidity crisis through cutbacks in new lending. To retain the confidence of Western credi-

tors, Hungary will continue to need support from the IMF and to press ahead with austerity and reform measures in exchange for financial assistance.

4. Bulgaria

Bulgaria's financial position improved somewhat in 1987 after the previous year's particularly harsh winter required greater imports and borrowings to offset shortfalls in agriculture and energy supplies. Improved export earnings, coupled with lowered requirements for food imports, led to a trade and current account deficit of \$357 million in 1987 down from \$1.1 billion in 1986. Even with this improvement, higher levels of debt repayments and net interest forced Sofia to borrow over \$2.7 billion for the third straight year. As a result of the increased borrowings and exchange rate movements, gross debt rose to \$6.1 billion in 1987.

The baseline scenario assumes Sofia will limit imports from the West in an effort to improve its trade picture while encountering some success in promoting exports to its traditional LDC markets. Many of these exports, however, will not generate cash quickly and will have to be supported by trade credits from Sofia. Nominal hard currency exports are projected to grow 5.0 percent annually beginning in 1988 while imports will grow by 1.9 percent per year after declining in 1987. Credit utilization is projected to be strong during the forecast period, between \$3.2 and \$4.1 billion annually, due to continued trade credits to LDC countries and increasing principal repayments.

In 1988-95 we anticipate the following major developments:

The current account is projected to improve steadily during the forecast period, reaching \$705 million by 1995. This rosy picture assumes, however, that the restraint in import growth does not begin to undermine economic performance. (See Table 6.)

Bulgarian gross hard currency debt will grow by 5.9 percent annually climbing to \$9.7 billion in 1995. Although this rate may seem high, it is far lower than the 1983-87 period when gross debt rose by 17.3 percent per year. Despite a modest increase in reserves, net debt will also increase rapidly, up \$2.9 billion to almost \$8.0 billion.

TABLE 6.—BULGARIA: 1986-90 BALANCE OF PAYMENTS TABLE

(In millions of U.S. dollars)

	1986	1987	1988	1989	1990	1991	1992	1993	1996	1995
Financing gap	0	0	0	0	0	0	0	0	0	0
Financing requirements	3,182	3,362	4,059	4,034	3,898	3,840	3,753	3,668	3,486	3,202
Current account balance	-1,088	-357	-289	268	-89	31	183	310	496	705
Trade account balance	-1,095	-359	-220	-105	17	114	218	296	379	469
Exports	2,384	2,787	2,926	3,073	3,226	3,388	3,557	3,735	3,922	4,118
Imports	3,479	3,146	3,146	3,177	3,209	3,273	3,339	3,439	3,542	3,648
Services and transfers	7	2	-69	-164	-106	-83	-35	14	117	236
Net interest	-192	-319	-426	-578	-582	-624	-649	-679	-654	-643
Other services	199	321	357	414	476	541	614	693	781	879
Debt repayments	1,861	2,159	2,627	3,200	3,344	3,391	3,455	3,482	3,484	3,407

TABLE 6.—BULGARIA: 1986–90 BALANCE OF PAYMENTS TABLE—Continued

	[In millions of U.S. dollars]									
	1986	1987	1988	1989	1990	1991	1992	1993	1996	1995
Credit to foreign countries	-785	-969	-750	-550	-450	-450	-450	-450	-450	-450
Arrears from previous year	0	0	0	0	0	0	0	0	0	0
Change in reserves	-710	-302	394	15	15	30	31	47	48	50
Errors and omissions	158	180	0	0	0	0	0	0	0	0
Financing sources	3,182	3,362	4,059	4,034	3,898	3,840	3,753	3,668	3,486	3,202
Credit utilization	3,182	3,362	4,059	4,034	3,898	3,840	3,753	3,668	3,486	3,202
Reschedulings	0	0	0	0	0	0	0	0	0	0
Arrears in current year	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt	4,932	6,135	7,567	8,400	8,954	9,403	9,700	9,887	9,889	9,684
Short term	1,593	1,842	2,224	2,210	2,136	2,104	2,056	2,010	1,910	1,754
Medium and long term	3,339	4,293	5,343	6,190	6,819	7,299	7,644	7,877	7,979	7,930
Principal and interest ar- rears	0	0	0	0	0	0	0	0	0	0
Foreign exchange reserves	1,381	1,079	1,473	1,487	1,502	1,532	1,563	1,610	1,658	1,708
Net debt	3,551	5,056	6,095	6,913	7,452	7,871	8,138	8,277	8,231	7,976
Debt service ratio	0.23	0.28	0.35	0.43	0.44	0.46	0.46	0.45	0.43	0.41

Sources: Various Issues of the WEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlement (SIS) statistics, and the "Handbook of Economic Statistics".

Even though Bulgaria is still in good financial shape when compared with most of Eastern Europe, a potential crisis could develop within a few years. Debt service, as a result of higher borrowings since 1985, is expected to rise significantly over the next few years. In addition, financing needs could rise dramatically if poor weather results in another year of depressed agricultural harvests and increased energy needs. As a result, Sofia could be faced with a liquidity crunch if bankers become nervous over the regime's ability to handle large amounts of additional debt and begin restricting access to new credits.

5. Romania

Romania, in an unrelenting effort to eliminate its hard currency debt, continues to enforce a harsh program of austerity. Bucharest reduced its gross hard currency debt from just over \$10 billion in 1981 to an estimated \$5.0 billion at year end 1987, the only sustained reduction achieved by an East European country in the 1980's. This large debt repayment, unlike the course followed by Poland, is primarily due to severe import cuts. Between 1980 and 1982 hard currency imports fell about 41 percent, from \$8.0 billion to \$4.7 billion. The emphasis on trade surpluses continued in 1987 as exports and imports rose 10.7 and 10.8 percent respectively, generating \$2.1 billion in hard currency.

The baseline scenario assumes the Ceausescu leadership will continue its drive to repay debt and eventually build up foreign exchange reserves. Exports are expected to remain virtually stagnant through 1995 as a result of soft prices for refined oil products and the adverse effects of long-term import compression on export production. Import growth is expected to average 4.2 percent annually

during the 1988-95 time period presuming Romania reaches its goal of "zero debt" in 1990 and allows modest sustained growth in Western purchases. Even with this rise in imports, trade surpluses will only fall to \$503 million by 1995.

In 1988-90 we anticipate the following major developments:

Bucharest probably will not encounter a financing gap unless, in its rush to prepay debt, it inadvertently exhausts its cash holdings temporarily. (See Table 7.)

Due to small financing requirements and continued prepayment of principal, hard currency debt is expected to fall from \$5.0 billion in 1987 to only \$200 million in 1990. This reduced debt—combined with a large build up of foreign exchange reserves to protect against future financial crises and creditor demands—will result in Romania becoming a net creditor with reserves of \$5.0 billion in 1995.

TABLE 7.—ROMANIA: 1986-90 BALANCE OF PAYMENTS TABLE

[In millions of U.S. dollars]

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Financing gap	0	0	0	0	0	0	0	0	0	0
Financing requirements	971	1,062	532	372	200	200	200	200	200	200
Current account balance	1,408	1,807	2,226	2,073	1,823	1,469	1,160	955	834	874
Trade account balance	1,917	2,116	2,409	2,137	1,771	1,341	963	687	520	503
Exports	5,960	6,596	6,889	6,751	6,616	6,550	6,484	6,484	6,549	6,713
Imports	4,043	4,480	4,480	4,614	4,845	5,209	5,521	5,797	6,029	6,210
Services and transfers	-509	-309	-183	-64	52	127	197	268	313	371
Net interest	-591	-339	-225	-99	30	125	210	288	334	382
Other services	82	30	43	35	22	2	-13	-20	-21	-11
Debt repayments	1,995	2,206	2,508	1,983	1,433	200	200	200	200	200
Credit to foreign countries	-244	-272	-250	-250	-250	-250	-250	-250	-250	-250
Arreages from previous years	0	0	0	0	0	0	0	0	0	0
Change in reserves	383	0	0	212	338	1,219	911	706	584	624
Errors and omissions	-244	391	0	0	0	0	0	0	0	0
Financing sources	971	1,062	532	372	200	200	200	200	200	200
Credit utilization	617	600	532	372	200	200	200	200	200	200
Reschedulings	354	462	0	0	0	0	0	0	0	0
Arreages in current year	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt	6,395	5,023	3,047	1,436	200	200	200	200	200	200
Short term	310	400	382	200	200	200	200	200	200	200
Medium and long term	6,085	4,623	2,665	1,136	0	0	0	0	0	0
Principal and interest arrears	0	0	0	0	0	0	0	0	0	0
Foreign exchange reserves	582	582	582	794	1,132	2,351	3,261	3,967	4,550	5,174
Net debt	5,813	4,441	2,465	642	-932	-2,150	-3,061	-3,766	-4,350	-4,974
Debt service ratio	0.35	0.32	0.32	0.24	0.16	0.0	0.0	0.0	0.0	0.0

Sources: Various issues of The WAEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, IMF International Financial Statistics, and the "Handbook of Economic Statistics".

While Romania may yet require another rescheduling if it is not careful in managing its cash-flow, this possibility will quickly fade

as more debt is paid off. As long as Romania's export performance does not suffer substantially more than our baseline scenario predicts—owing, for example, to further declines in the price of oil or a sharp decline in industrial production due to 6 years of import restrictions—Bucharest eventually could increase imports well above the projected levels and begin to lift the heavy burden of debt repayment off the consumer. This course of action supposes, however, a change in import policy not yet seen from the Romanian leadership.

6. *East Germany*

East Germany, despite apparently higher levels of borrowing³ that have pushed debt service obligations up, remains in a financially strong position. In 1987 it enjoyed another year of hard currency trade and current account surpluses, declining interest rates, and large foreign reserves. Although confronted with over \$6.5 billion in total debt payments, the East Germans met all obligations, increased their sizeable foreign exchange reserves, and maintained imports near their 1986 level.

Part of the reason for East Germany's strong financial position remains its lucrative relationship with West Germany. Since the mid-1970's East Berlin has exploited this special standing to obtain a wide variety of financial assistance. Bilateral trade conducted on a clearing account basis frees hard currency for other uses, and special credit facilities have permitted the GDR to run up a trade debt of roughly 4 billion deutsche marks to the FRG.⁴ Long-term agreements covering tourism, emigration, construction, and other services provide East Berlin with approximately \$1 billion annually in hard currency.⁵ In addition, Bonn guaranteed two loans for a total of about \$1 billion when the East Germans faced liquidity problems in 1983-84.⁶

The baseline scenario assumes East Berlin will continue to carefully control its financial position. Nominal hard currency exports will likely grow at an average annual rate of 6.4 percent, slightly lower than the growth rate of 7.4 percent predicted for imports. These growth rates translate into shrinking hard currency surpluses, ending in 1995 with a surplus of \$449 million. Credit utilization, while high by recent East German standards, will likely decline steadily from the peak of 1987 as a result of reduced debt servicing requirements.

In 1988-95, we anticipate the following major developments:

The falloff in hard currency trade surpluses will only be partially offset by the growth in service payments and transfers, particularly from West Germany. The current account surplus is, therefore, projected to fall slowly from its 1987 level of \$918 million to \$760 million by 1995. (See Table 8.)

³ Because credit utilization is often calculated as a residual in the models, the high levels of borrowing by East Berlin could be the result of exchange rate fluctuations and high levels of errors and omissions rather than a need for credit.

⁴ West German Institute for Economic Research, "Economic Bulletin," July 1988.

⁵ Various issues of PlanEcon's "PlanEcon Trade and Finance Review" and the WEFA Group's "CPE Outlook for Foreign Trade and Finance."

⁶ Joint Economic Committee, "Eastern Europe Faces Up To the Debt Crisis," Mar. 28, 1986.

East German hard currency debt to the West is expected to decline from its 1987 high of \$20.4 billion to \$18.6 billion in 1995. Net debt figures will decline to \$7.8 billion by 1995 due to a rise in BIS foreign exchange reserves held in Western banks beginning in 1993.

TABLE 8.—EAST GERMANY: 1986–90 BALANCE OF PAYMENTS TABLE

[In millions of U.S. dollars]

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Financing gap	0	0	0	0	0	0	0	0	0	0
Financing requirements	8,899	9,760	7,294	7,013	6,647	6,436	6,267	6,448	6,842	7,098
Current account balance	518	918	873	790	869	850	842	834	806	760
Trade account balance	453	940	914	881	838	785	722	645	555	449
Exports	9,217	9,520	10,129	10,778	11,467	12,201	12,982	13,813	14,697	15,638
Imports	8,764	8,580	9,215	9,897	10,629	11,416	12,261	13,168	14,142	15,189
Services and transfers	65	-22	-42	-91	31	65	120	189	251	311
Net interest	-698	-805	-880	-939	-827	-794	-748	-686	-631	-576
Other services	763	783	838	848	858	859	868	875	882	887
Debt repayments	5,935	6,521	7,666	7,403	7,165	6,936	6,759	6,587	6,605	6,764
Credit to foreign countries	-613	-616	-500	-400	-350	-350	-350	-350	-350	-350
Arrearages from previous year	0	0	0	0	0	0	0	0	0	0
Change in reserves	958	1,554	0	0	0	0	0	345	692	743
Errors and omissions	1,912	1,987	0	0	0	0	0	0	0	0
Financing sources	8,899	9,670	7,294	7,013	6,647	6,436	6,267	6,448	6,842	7,098
Credit utilization	8,899	9,760	7,294	7,013	6,647	6,436	6,267	6,448	6,842	7,098
Reschedulings	0	0	0	0	0	0	0	0	0	0
Arrearages in current year	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt	17,041	20,418	20,026	19,656	19,136	18,636	18,144	18,005	18,241	18,575
Short term	3,651	4,333	3,320	3,192	3,026	2,930	2,853	2,935	3,114	3,231
Medium and long term	13,390	15,975	16,726	16,463	16,111	15,706	15,291	15,070	15,126	15,343
Principal and interest arrears	0	0	0	0	0	0	0	0	0	0
Foreign exchange reserves	7,452	9,006	9,006	9,006	9,006	9,006	9,006	9,351	10,043	10,787
Net debt	9,589	11,412	11,040	10,650	10,130	9,630	9,138	8,654	8,198	7,788
Debt service ratio	0.36	0.36	0.38	0.43	0.39	0.37	0.34	0.31	0.29	0.27

Sources: Various issues of the WEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, and the "Handbook of Economic Statistics".

East Germany will likely retain its status among Western bankers as one of the most favored borrowers in Eastern Europe. Unless another financial crisis occurs, similar to the one in 1982–83, the combination of strong financial reserves (over 100 percent of total debt payments in 1987), East Germany's continued special relationship with the West German government, and conservative financial policy all point to continued access to Western financial markets for East Berlin.

7. Czechoslovakia

Czechoslovakia has softened its extremely cautious policy on external debt since 1986. Borrowing was greater than \$2.5 billion for the second consecutive year in 1987, in part reflecting the continued growth of imports and a falloff in export earnings. These trends produced the first hard currency trade deficit this decade.

This modest change in policy, however, probably does not signal an end to the financial conservatism that has been the hallmark of the Prague leadership. Prague still has both the lowest debt-service ratio and level of net debt in all of Eastern Europe—17 percent and \$4.2 billion in 1987 respectively.

Because of Prague's innate financial caution, the baseline scenario assumes that regime planners will try to bring the trade account back into surplus. We project imports to grow by slightly over 5 percent on an average annual basis after 1987 while exports will grow at a 6-percent rate. Because we predict Prague will run only small current account surpluses at best, the regime will have to borrow on average approximately \$4.1 billion annually to cover debt payments.

In 1988-95 we expect the following major developments:

Current account balances, primarily due to the steadily improving trade balance, will likely become positive again around 1992. The projected growth of imports will probably remain too low to have a major impact on industrial modernization. (See Table 9.)

Czechoslovak hard currency debt will rise by \$2.7 billion, from \$5.8 billion in 1987 to \$8.5 billion in 1995. While this level of debt is large by Czechoslovak standards, it will still leave Prague with the second lowest level of gross debt in Eastern Europe (after Romania).

TABLE 9.—CZECHOSLOVAKIA: 1986-90 BALANCE OF PAYMENTS TABLE

(In millions of U.S. dollars)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Financing gap	0	0	0	0	0	0	0	0	0	0
Financing requirements	2,562	3,858	3,946	4,073	4,053	4,086	4,110	4,097	4,085	4,037
Current account balance	173	-338	-292	-262	-120	-50	40	137	206	279
Trade account balance	297	-144	-54	46	146	221	292	371	394	417
Exports	4,587	4,803	5,091	5,397	5,720	6,064	6,427	6,813	7,222	7,655
Imports	4,290	4,947	5,154	5,351	5,565	5,843	6,135	6,442	6,828	7,238
Services and transfers	-124	-194	-238	-308	-276	-271	-252	-234	-188	-138
Net interest	-250	-302	-375	-479	-481	-509	-528	-551	-546	-539
Other services	126	108	137	171	205	238	276	317	358	401
Debt repayments	1,902	2,532	3,254	3,511	3,682	3,729	3,816	3,898	3,931	3,950
Credit to foreign countries	-615	-497	-400	-300	-250	-250	-250	-250	-250	-250
Arrearages from previous year	0	0	0	0	0	0	0	0	0	0
Change in reserves	206	381	0	0	0	57	83	87	109	116
Errors and omissions	12	111	0	0	0	0	0	0	0	0
Financing Sources	2,562	3,858	3,946	4,073	4,053	4,086	4,110	4,097	4,085	4,037
Credit utilization	2,562	3,858	3,946	4,073	4,053	4,086	4,110	4,097	4,085	4,037
Reschedulings	0	0	0	0	0	0	0	0	0	0
Arrearages in current year	0	0	0	0	0	0	0	0	0	0
Debt information:										
Gross debt	4,481	5,807	6,499	7,061	7,432	7,788	8,081	8,281	8,435	8,521
Short term	1,967	2,800	2,864	2,956	2,941	2,965	2,983	2,973	2,965	2,930
Medium and long term	2,514	3,007	3,636	4,105	4,491	4,823	5,099	5,307	5,470	5,592
Principal and interest arrears	0	0	0	0	0	0	0	0	0	0
Foreign exchange reserves	1,217	1,598	1,598	1,598	1,598	1,655	1,737	1,824	1,934	2,050
Net debt	3,264	4,209	4,901	5,463	5,834	6,134	6,344	6,457	6,501	6,472

TABLE 9.—CZECHOSLOVAKIA: 1986–90 BALANCE OF PAYMENTS TABLE—Continued

	[In millions of U.S. dollars]									
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Debt service ratio.....	0.16	0.17	0.16	0.20	0.19	0.20	0.20	0.20	0.19	0.18

Sources: Various issues of The WEFA Group's "CPE Outlook for Foreign Trade and Finance", PlanEcon's "PlanEcon Report" and "Trade and Finance Review", Bank of International Settlements (BIS) statistics, and the "Handbook of Economic Statistics".

Czechoslovakia seems unlikely to face borrowing or liquidity problems over the next few years even with higher credit needs and will likely remain a favored East European borrower among Western bankers. While this opens the possibility of a more aggressive borrowing campaign to finance modernization, we doubt that the replacement of Gustav Husak by Milos Jakes as head of the Communist Party signals a major change in the country's financial strategy. The new leadership will likely remain cautious—like its predecessor—and will back away from even a modest boost in imports financed by borrowing at almost any sign of trouble in export earnings or creditor nervousness.

IV. ALTERNATIVE SCENARIOS: EXERCISING THE MODELS

These models can also be used to simulate the impact on regional financial prospects of changes in our assumptions about either world economic conditions, or the policies of West and East European regimes. The baseline predictions presented above are based on assumptions about future events including interest rates, lender attitudes, and regime decisions about levels of imports. By changing an exogenous variable to reflect possible alternatives, we can judge the sensitivity of our predictions to deviations in our assumptions about future events.

Three different scenarios are presented to demonstrate how changes from the baseline assumptions might affect East European balance of payments. First, we vary an environmental variable (one neither under the control of lenders or borrowers), then a variable under Western control, and finally a Eastern policy variable.⁷

Scenario I illustrates an increase in worldwide interest rates as a result of tighter monetary policies by Western governments or raising inflation. In this scenario all interest rates in the model from 1988–95 are increased by 2 percentage points above the baseline scenario.

Scenario II demonstrates the effects of a retrenchment in lending by Western governments and banks similar in size to the pullout of 1980–82 when credit utilization fell by 51 percent. This could come about, for example, if additional countries became unable to service their debt, worker unrest in the region flared up, or East-West relations cooled.

Scenario III tries to illustrate the magnitude of the debt servicing problem facing Poland by showing the impact on imports if

⁷ The distinction between environmental and policy variables can become blurred. We treat interest rates as environmental even though they are determined by the fiscal and monetary policies of Western nations. Here by environmental we mean the rates are not specifically directed at Eastern Europe but to the world as a whole.

Warsaw chose to cut hard currency purchases to eliminate its financing gaps.

In the first two scenarios, countries were allowed to develop financing gaps. The regimes have a range of options for closing these gaps including cutting imports, drawing down reserves, restricting discretionary outflows such as credit extensions to foreign countries, allowing debt payments to fall into arrears, or a combination of all four. A number of political and economic factors will affect the policy response chosen by a regime.⁸

A. IMPACT OF HIGHER INTEREST RATES

A 2 percentage point increase in interest rates over the baseline assumptions boosts Eastern Europe's financing requirements \$20.6 billion through 1995, an increase of almost 7 percent. While most regimes could offset all or part of this increase in financing requirements by reducing reserves or imports, they probably would be reluctant to impose the entire adjustment on these two variables because of the already low levels of reserves, the risk of consumer unrest, and the possible impact on economic performance. The countries in the best financial position, moreover, would attempt to borrow more, although this would be difficult in tightening financial markets. (See Table 10.)

TABLE 10.—COMPARISONS OF BASELINE AND ALTERNATIVE SCENARIOS

[In millions of U.S. dollars]

Scenario	Baseline	Scenario I: Interest rates rise by 2 percent	Scenario II: Retrenchment in lending by West	Scenario III: Import cuts necessary to eliminate gap
Bulgaria:				
Financing gap (1995) ¹	0	1,692	2,014	N.A.
Gross debt (1995).....	9,684	11,376	9,690	N.A.
Czechoslovakia:				
Financing gap (1995).....	0	1,277	2,798	N.A.
Gross debt (1995).....	8,521	9,798	8,487	N.A.
East Germany:				
Financing gap (1995).....	0	1,499	5,042	N.A.
Gross debt (1995).....	18,575	20,073	18,534	N.A.
Hungary:				
Financing gap (1995).....	0	4,272	10,705	N.A.
Gross debt (1995).....	21,485	25,757	21,634	N.A.
Poland:				
Financing gap (1995).....	24,228	32,400	27,931	0
Imports (1988-95).....	50,215	51,215	50,215	33,346
Gross debt (1995).....	42,577	50,748	42,554	18,349
Romania:				
Financing gap (1995).....	0	² -200	116	N.A.
Gross debt (1995).....	200	0	192	N.A.
Yugoslavia:				
Financing gap (1995).....	0	3,917	4,294	N.A.
Gross debt (1995).....	17,307	21,223	17,307	N.A.

⁸ The policies selected may have implications beyond the scope of the model. For instance, cutting imports to achieve financial equilibrium would decrease gross debt but could damage future growth and export potential. Using credits, on the other hand, would increase debt, probably complicating still further the country's capability to manage its debt. Because the choice of policy is beyond the scope of this model, financing gaps are allowed to accumulate in the first two scenarios, and only imports were cut in the third to demonstrate the impact on future financial positions of this adjustment policy.

TABLE 10.—COMPARISONS OF BASELINE AND ALTERNATIVE SCENARIOS—Continued

[In millions of U.S. dollars]

Scenario	Baseline	Scenario I: Interest rates rise by 2 percent	Scenario II: Retrenchment in lending by West	Scenario III: Import cuts necessary to eliminate gap
Eastern Europe:				
Financing gap (1990).....	24,228	44,857	52,900	N.A.
Gross debt (1995).....	118,349	138,975	118,398	N.A.

¹ A projected financing gap means that a regime would have to make one or more of the following policy adjustments: step up credit utilization, cut imports, draw down reserves, restrict discretionary outflows, or request credit relief. A number of political and economic factors will affect the policy response chosen by a regime.

² Romania actually benefits from higher interest rates due its high level of reserves. A negative financing gap illustrates the need to increase financing requirements, primarily through increased imports.

In this scenario—in which we also exclude debt renunciation—Poland would feel the greatest burden while Romania would bear it the best.

Poland, which already faces large financing gaps, would see higher interest rates drive financing requirements up another \$8.2 billion. This gap probably would be too large to close by slashing imports without risking further damage to industrial performance and consumer unrest. Hence, the regime would likely need additional debt relief through commercial and governmental reschedulings.

Hungary and Yugoslavia, which already are susceptible to a liquidity crisis, would be hard pressed to meet such increased financing needs—\$4.3 billion and \$3.9 billion respectively by 1995—and would have to raise more credits from commercial, official, and multilateral lenders or face rescheduling debt.

Bulgaria, Czechoslovakia, and East Germany, although hampered by rising debt service costs, would still be able to adjust to the \$1.3–\$1.7 billion financing gap. All three regimes would likely adjust through a combination of cutting reserves and increasing borrowing, but Sofia would have the most difficulty, particularly if financial markets tighten severely.

Romania, the country with the lowest projected debt, would actually benefit from an increase in interest rates due to its high level of reserves.

Were higher international interest rates to coincide with slower growth in developed countries, Eastern Europe's financial position would be further complicate by falling export earnings, reduced credit availability, and possibly, a stronger dollar which would push up repayment costs in comparison to hard currency earnings.

B. IMPACT OF CREDIT CUTBACK SIMILAR TO 1980–82

Eastern Europe's financing gap during 1988–95 would grow by \$28.7 billion, or over double the baseline estimate, if worsening international debt problems, a political crisis in one or more East European countries, a downturn in East-West relation, or severe economic problems in the West led Western lenders to repeat the 51 percent falloff in new lending to Eastern Europe that occurred during 1980–82. While some countries could adjust to the precipitous fall in new lending, most would have to negotiate rescheduling agreements with lenders to avoid substantial arrears.

Poland, the only country that already faces financing shortfalls under the baseline scenario, would be unable to do more than watch arrearages rise by a further 15 percent while continuing to ask creditors for additional reschedulings.

Hungary and Yugoslavia, in need of substantial new lending during the 1988-95 time period in the baseline forecast, would join the troubled ranks of Poland if this substantial cutoff of funds took place. Neither Budapest nor Belgrade would be able to close much of their multibillion-dollar gaps even with substantial reserve drawdowns and import cuts.

The remaining countries would experience financing gaps ranging from \$116 million in 1995 for Romania to \$5.0 billion for East Germany. With the policy option of new borrowing closed to them, the regimes would need to undertake some combinations of reducing imports, drawing down reserves, falling into debt arrears, or convincing creditors to reschedule debts. East Germany, with its large foreign exchange reserve holdings, could adjust to this retrenchment by drawing down reserves to their 1984 levels. Romania, on the other hand, would likely adjust by trimming imports slightly. Bulgaria and Czechoslovakia would likely adjust to the new conditions through cuts in imports and drawdown of reserves to meet the most critical financing needs.

C. IMPORTS CUTBACK TO ELIMINATE FINANCING GAPS

This scenario, uses Poland as an example to illustrate how large a cutback of imports would be required to eliminate financing gaps projected under the baseline scenario. While the regime is unlikely to adjust by import reductions alone because of the impact on consumer supplies, export potential, and economic growth, this scenario underscores the severity of the financial problems facing the country unless they undertake major economic reforms to improve efficiency and export performance.

Poland would be required to cut imports by \$16.9 billion dollars, or almost 34 percent from the baseline scenario over 1988-95. Such an adjustment seems infeasible given Warsaw's concern over consumer unrest and the impact of such a cutback on materials and capital goods needed by Polish industry. Warsaw's reluctance to accept the costs of a large adjustment in imports—such as Romania has done—leave it little alternative but to keep pressing demands for IMF support, new credits from Western banks and governments and further reschedulings.

CREDITWORTHINESS OF EASTERN EUROPE

By Przemyslaw Gajdeczka*

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SUMMARY

The purpose of the paper is to evaluate East European relations with external creditors in the light of changes in actual and perceived creditworthiness of the region. The discussion of market perceptions of creditworthiness demonstrates that several countries of the region managed to preserve their creditworthiness. Then, it is shown that most countries experienced some deterioration in their solvency. However, the paper points out that the markets are relatively unconcerned with overall economic performance and instead pay more attention to short term economic management of external accounts and especially to ability to fulfill contractual obligations and make payments on time.

1. INTRODUCTION

Relations of East European countries with international capital markets have had several distinct features which despite some obvious commonalties differentiate many of the countries of the region from most developing countries and enhance their relations with the markets. In the 1970's the commonalties prevailed—all shared lack of experience in dealing with commercial bank creditors, started with low levels of external indebtedness and were determined to take advantage of the abundant financial resources offered by the international banking system. Also common were the principal sources of their difficulties: domestic economic mismanagement and international economic shocks (high-interest rates and falling demand for developing country exports).

However, there were important differences, both in the political context of mutual relations and in the post-1981 experience. East European countries were considered to be relatively well developed and possess significant growth potential, but also the existence of the "Soviet umbrella" and central control over the economy were

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viewed as additional assurance of debt servicing capacity.¹ In fact, the expectations with regard to external debt management were confirmed by the developments of 1981-84. This experience was significantly different from the experience of majority of other indebted countries.

With the onset of the Polish crisis commercial banks initiated credit rationing which was soon extended to other countries experiencing payments difficulties—Romania and Yugoslavia, and eventually to all countries of the region. By 1982-1983, the Latin American crisis eclipsed the problems of Eastern Europe, which in the meantime undertook severe adjustments in external accounts and in fact managed to stabilize or reduce nominal debt levels. It appears that this generally successful period of external adjustment helped several countries restore access to financial markets and now only Poland and Yugoslavia face credit rationing and implicit or explicit conditionality on additional lending. However, the ability to restore markets access does not seem to have been influenced by external sector's performance alone. In 1987 for example, the debt to exports ratio of Yugoslavia was significantly less than for Hungary and only slightly more than for Bulgaria, and yet the other two countries preserved their access to financial markets.

The paper presents the evaluation of East European relations with external creditors in the light of changes in actual and perceived creditworthiness of the region. First, market perception of creditworthiness as summarized by selected indicators are discussed and factors explaining their change presented. Then, concept of creditworthiness is defined and evaluation of changes in solvency of individual countries of the region is presented. Discussion of willingness to pay and conclusions close the paper.

2. MARKET ASSESSMENT OF CREDITWORTHINESS

The state of market assessment of creditworthiness can be gauged from the volume of new voluntary lending, terms of new loans and reschedulings, and various ratings. All three types of information are readily available and will be discussed in more detail.

The volume of new publicized lending is a good indicator of the general state of creditor relations. When payments difficulties persist and perceived risk of arrears or renegotiation of original terms of contract increases, creditors tend to withhold access to voluntary new financing. In the case of six East European countries (excluding Yugoslavia) total volume of funds raised on international capital markets collapsed from nearly \$3.6 billion in the record setting 1979 to barely \$552 million at the bottom of the region's debt crisis in 1982. That year only Hungary was able to raise any significant amount of money, and even that with support from the international financial institutions. Soon after, however, the region regained access to capital markets and by 1985 total volume of borrowing almost recovered to the 1979 volume. In the following 2 years East European borrowing activity weakened considerably,

¹ High-energy prices actually benefited several East European countries who were either exporting their own or reexporting Soviet energy resources while the energy prices from the U.S.S.R. did not yet increase. In this sense, the "Soviet umbrella" did work.

largely due to lower demands for new funds from East Germany and Bulgaria.² Similar trends were observed in the financial terms of new loans which hardened through 1983 and became increasingly competitive afterwards.³ Indeed, the ability of selected East European countries to regain access to international financial markets went hand in hand with a spectacular improvement in borrowing terms. As reported by the OECD, average margin on new syndicated credits extended to European CMEA countries and the Soviet Union fell from a peak of 112 basis points over Libor in 1983 to only 24 points in 1987. Also average maturities shortened significantly to 4 years and 5 months in 1983, and during 1984-87 they were extended to well beyond 8 years. And that occurred simultaneously with a substantial increase in the volume of borrowing. Total amount of new funds (publicized facilities only) raised on international financial markets rose to \$5,298 million in 1985 and then dropped to \$3,564 million in 1987.⁴

The improvement in financing terms was shared by the three East European debtors (Poland, Romania, and Yugoslavia) who have repeatedly renegotiated repayment of their external obligations. While improved economic performance may have contributed to that fact, it seems that precedents set in agreements concluded with other countries were at least as important a factor. In the early 1980's the reschedulings negotiated by East European countries were setting precedents as these countries were among the first larger countries to encounter serious payments difficulties. When the debt crisis widened and large Latin American and other debtors entered the rescheduling scene, the Polish and Yugoslav debt negotiators insisted on terms comparable with those granted to other debtors as if enforcing implicit "most favored debtor clause."⁵ Finally, commercial banks realized that concessions in the form of lower spreads on rescheduled debts tend to thwart demands for new money.⁶

Another measure of market assessment of changes in creditworthiness is provided by various surveys and ratings. One of the best known set of ratings has been compiled semiannually since 1979 by the journal *Institutional Investor*. The ratings are based on exposure weighted results of a survey conducted among major interna-

² See Financial Market Trends, OECD, Paris, February 1988, p. 33.

³ It is fair to notice that in the 1980's very good borrowing terms and then spreads are similarly attributable to generally more competitive market conditions and a declining number of creditworthy borrowers economic performance and especially to the borrower's payments' record as viewed by the commercial banks.

⁴ Op.cit., pp. 33 and 87.

⁵ Recent reschedulings of Poland's and Yugoslavia's debts seem to confirm that observation. In fact, in August 1988, Poland's debt negotiators requested another cut of the interest rate spread to thirteen-sixteen percent over Libor on the deal approved just a year ago. See, M. Duggan, "Lower Margins—Keeping Up With the Joneses," Financial Times Euromarket Letters and Report, August 1988.

⁶ Terms of rescheduling should be well understood. Even though they represent relief for the debtor, if only because his obligations are rescheduled, this has been a relatively profitable operation for the commercial banks. Margins applied to rescheduling agreements were quite high and in the first few years of the crisis they significantly exceeded spreads on original loans extended during the lending boom and amounted to roughly 2 percentage points above Libor. Assuming that cost of funds is about 2 percentage points below Libor (differences in costs exist between money center and other banks), the effective margin paid by a rescheduling country amounts to 4 percent of the rescheduled debt, and this does not include other various "administrative" fees charged by the banks. Overall, this is well above the inflation adjusted "real" cost of funds in international financial markets which hovered within a 2.5-4.1 percent margin in 1982-87.

tional banks. In order to provide a basis for international comparisons, next to the listings for East European countries ratings for selected major developing country debtors are also presented.

TABLE 1.—COUNTRY RISK RATINGS, 1979–88

	1979	1981	1982	1983	1985	1987	1988
Bulgaria	NA	4.55	3.98	4.00	4.85	4.81	4.77
Czechoslovakia	6.26	5.51	4.61	4.27	5.04	5.31	5.43
East Germany	NA	5.55	4.65	4.19	5.28	5.74	5.84
Hungary	6.25	5.47	4.85	4.40	5.06	4.79	4.64
Poland	4.95	1.95	0.88	0.85	1.39	1.69	1.78
Romania	5.48	4.51	2.01	1.75	2.84	3.11	3.33
Yugoslavia	5.75	4.74	3.84	2.98	2.99	3.08	2.90
Argentina	6.24	5.64	3.67	2.82	2.10	2.51	2.48
Brazil	6.49	4.89	5.22	3.76	3.09	3.17	2.94
Mexico	7.18	6.90	5.48	3.39	3.92	2.71	2.80
Chile	5.42	5.48	4.94	3.28	2.33	2.63	2.72
Peru	3.07	4.33	3.76	2.89	1.82	1.35	1.40
Philippines	5.37	4.14	3.88	3.26	1.84	2.33	2.37

Source: Institutional Investor, various issues in 1979–87.

In the initial phase of debt crisis (1980–83), country risk ratings of East European countries fell dramatically from their peak precrisis level of 1979. However, after 1983 (1984 for Yugoslavia) their level was edging up, in some cases quite significantly. In four instances the improvement continued through early 1988. As demonstrated by the ratings, three countries with the most severe balance of payments difficulties (Poland, Romania, and Yugoslavia) experienced the most dramatic decline in creditworthiness. The loss of confidence in other countries' ability to manage their external accounts as displayed by the ratings was relatively minor, especially if compared with the experience of the "rescheduling" countries, and is reflected by their ability to fairly quickly restore access to market financing. The experience of other major debtor countries differs significantly from that of Eastern Europe in that their risk ratings continued to fall through 1985 (also because they entered the debt crisis later) and recovered only to levels comparable with the experience of the "rescheduling" countries of Eastern Europe.

3. CREDITWORTHINESS AND SOLVENCY

A decline in creditworthiness is usually blamed on poor economic performance which is generally viewed as the most important factor behind payments difficulties.⁷ Even though this proposition is intuitively beyond doubt, it seems worthwhile to examine whether there is close relationship between economic performance and market assessment of creditworthiness.

Creditworthiness is defined here as ability to attract foreign credit (capital) on a voluntary basis at prevailing market terms. Despite its apparent intuitive clarity, the concept of creditworthiness is quite ambiguous and complex because it contains a large

⁷ For more recent example in the East European studies area see, W. Siwinski, "Why Poland Lost Its Creditworthiness" in P. Marer and W. Siwinski, ed., "Creditworthiness and Reform in Poland," Indiana University Press, Bloomington and Indianapolis, 1988, pp. 25–31.

subjective component stemming by and large from high level of uncertainty inherent in international creditor-debtor relations which change over time as these relations reach different stages. It is therefore helpful to break the concept of creditworthiness into its major components. Here we will differentiate between solvency and willingness to service debts as major factors which determine creditors' willingness to lend. Solvency is determined by fundamental ability to service external obligations. The other component of creditworthiness is of more discretionary nature. Willingness to service debt will be understood as willful compliance with original or renegotiated terms of borrowing contract. Willingness to lend will refer to creditors' readiness to extend financing on a voluntary basis.

It is assumed that vast majority of countries is inherently solvent, i.e., present value of income generated by their economies will exceed present value of payments necessary to repay their external debt.⁸ In other words indebted countries will in most cases have at their disposal enough resources to repay their debts in the indeterminate future. The problems arise when there is incompatibility of time preference between the debtors and creditors and which usually surface as problems of confidence and liquidity. That in turn is usually precipitated by a weakening of solvency position and then debtors' commitment to service external debt or their "willingness to pay" is in question.

The purpose of the following analysis is to assess the direction of change in solvency of Eastern Europe and the impact of such change on creditworthiness, rather than determine which of the countries are "bust," as such effort would be futile. It is therefore implicitly agreed that during the lending boom in the 1970's commercial bankers were right when they claimed that countries cannot become insolvent. The crucial element is whether policies are moving the countries in the right direction, and creditors approve of such changes and are prepared to finance such processes over required periods of time. Here the analysis will be limited to relative change in solvency of a nation. Assuming that most countries were still creditworthy by 1980 (with the exception of Poland probably), we can trace evolution of solvency and make judgment as to its impact on creditworthiness.

The analysis is based on simple relationship between interest rates and rates of economic growth.⁹ A necessary condition to stabilize debt to Net Material Product (NMP) and debt to export ratio requires that both debt and national income and exports grow at the same rate. The direction of changes in solvency can be therefore determined on a basis of evolution of these indices. Growth of exports and NMP can be derived from national statistics. If debt service is fully refinanced debt stock will increase by the amount determined by the level of interest rates; in this sense the growth

⁸ See discussion and survey of related issues in K. Kletzer, "External Borrowing by LDC's: A Survey of Theoretical Issues," Economic Growth Center, Center Discussion Paper No. 523, Yale University, New Haven, December 1986, pp. 2, 10.

⁹ The idea of index of solvency was drawn from D. Cohen, "How To Evaluate the Solvency of an Indebted Nation," *Economic Policy*, November 1985, Great Britain, pp. 145-147. See also D. Avramovic, et al., "Economic Growth and External Debt," John Hopkins University Press, Baltimore, 1964.

rate of debt is determined by the level of international interest rates. Therefore, in order to stabilize debt to exports or debt to NMP ratios either exports (NMP) have to grow at least at the rate determined by the level of international interest rates, or some debt service payments have to be made.

TABLE 2.—CHANGES IN FUNDAMENTAL SOLVENCY, 1981–87

(Annual averages in percent)

	1981–83	1984–87	1981–87
Bulgaria	-2.0	-0.3	-1.1
Czechoslovakia	-5.1	-1.7	-3.2
East Germany	-2.1	.1	-.8
Hungary	-4.1	-3.3	-3.7
Poland	-9.7	-5	-4.6
Romania	-3.1	-1.8	-.3
Yugoslavia	-5.6	-3.0	-4.1

Source: Authors calculation based on data from UN ECE.

We start with the assessment of changes in debt to NMP ratio which constitutes the fundamental condition required to persevere solvency of the nation. In order to avoid problems with conversion of debt and national income into common units a ratio of NMP growth to real interest rate is calculated (real interest rate calculated as Libor minus OECD GNP deflator). The index presents condition under which debt to national income ratio will remain stable without any debt repayments, disregarding the impact of terms of trade. Stabilization of debt to NMP ratio is satisfied when coefficient presented in Table 2 equals to zero. A positive number indicates improvement in fundamental solvency condition. A negative coefficient can represent either a relative deterioration in solvency or an amount equal to the proportion of external debt required as payment necessary to stabilize debt to NMP ratio.

As shown, on average during 1981–87 all East European countries suffered a relative deterioration in their solvency. In all instances there is a clear pattern in changes of the index. The strongest deterioration occurred during the first 3 years of the period, when very high levels of real interest rates coincided with generally weaker growth performance in most countries. During the latter part of the period under examination the degree of deterioration substantially weakened and in two instances (East Germany and Romania) the trend was actually reversed.

While long-term position is better evaluated by a solvency index based on rates of economic growth, it has several flaws for shorter term analysis. It implicitly ignores the possibility of various constraints in the supply of tradable goods, what seems to be the case of East European countries. Furthermore, a worsening of terms of trade may lead to a loss in purchasing power of exports and thus may cause an underestimation of the actual level of real interest rates, and eventually also the minimum rate of economic growth necessary to stabilize debt to NMP ratio. Ratios based on nominal interest rates and nominal value of hard-currency revenues are therefore more appropriate.

Index based on nominal values establishes conditions for stable debt to export ratio; either export growth has to match the level of nominal interest rates or net debt service payments have to be made to compensate for the corresponding shortfalls. Such ratio deteriorates if nominal interest rate is higher than the rate of growth of exports. Therefore the difference between the two corresponds to the fraction of total debt required as interest payments necessary to stabilize debt to exports ratio. A difference between such amount and the actually achieved surplus on current account augmented by effectively made interest payments would describe the policy stance in relative terms and would correspond to a shortfall or surplus in actual payments.

Table 3 presents the results of such calculations. The left part of the table presents the values of the relative "nominal" solvency index while the right side tabulates shortfalls in payments necessary to stabilize debt to export ratio.¹⁰ If value of the index is positive, then a country should have spent more on interest payments than its actual financial surplus. Negative values imply "overadjustment" or improvements in debt to exports ratios. Thus for example, in 1984-87 period Bulgaria spent just enough while Hungary should have spent 60 percent more on debt service payments to stabilize their solvency situation.

TABLE 3.—SHORT-TERM CHANGES IN ABILITY TO PAY, 1981-87

	Payments' ability ¹			Shortfalls in payments—U.S. \$ billion		
	1981-83	1984-87	1981-87	1981-83	1984-87	1981-87
Bulgaria	0.6	1.0	0.7	1,062	13	1,075
Czechoslovakia	1.0	.2	.5	51	2,471	2,523
East Germany	-.3	.4	.1	8,464	5,838	14,302
Hungary	1.3	1.6	1.4	-685	-1,011	-1,696
Poland	6.5	.5	1.9	-13,927	4,294	-9,633
Romania	1.2	.3	.6	-729	6,079	5,350
Yugoslavia	2.2	-.1	.4	-3,262	10,498	7,236

Ratio of the amount necessary to stabilize debt to exports ratio relative to current account balance plus interest payments made. (Annual averages.)

Source: Author's calculation based on data from PlanEcon, Wharton Econometrics, U.N. ECE.

Contrary to the previous index, there is no uniform trend in changes in solvency of East European countries. Czechoslovakia, Romania, Yugoslavia, and particularly Poland all have demonstrated efforts aimed at improvement in their relative solvency position. Quite contrasting was the situation of East Germany, and especially Bulgaria and Hungary, whose relative solvency has undergone substantial deterioration in the 1984-87 period. However, even among this group some differences exist. East Germany and to a significant extent also Bulgaria managed to better control the rise in their indebtedness, while Hungary entered the grey area between creditworthiness and lack of market access.

In the second part of the table the shortfall in the amount of payments required to stabilize debt to exports ratio is denoted by a

¹⁰ Index for aggregated periods of time generally does not correspond to an exact amount of resources necessary to stabilize debt to exports ratio because it is not cumulative and merely adds incremental amounts from every year for changing external debt levels.

negative sign, and they correspond to positive values of the solvency index. For the whole period only Poland and Hungary were unable to make sufficient payments. However, while Poland's situation has been gradually improving, that of Hungary continued to deteriorate.

The above analysis would be sufficient under conditions of constant exchange rates. However, nominal debt stocks change not only due to net borrowing but also as a result of changes in the international value of the U.S. dollar in which debt stocks are denominated. In fact, neither of the indexes incorporates the impact of exchange rate valuation changes which since 1985 have been pushing up nominal debt stocks by substantial amounts. While the nominal solvency index quite well illustrates the policy stance which can accommodate the impact of foreign exchange risk only with considerable lag, in the longer run adjustments in trade volumes are necessary to neutralize such shifts in the nominal value of debt. Similarly, differences in effective cost of credit to individual countries (spread) would affect the amount of required debt service payments.

Therefore, there are conspicuous discrepancies between conclusions drawn from the above indexes and actual changes in debt to exports ratio. Three countries (Poland, Romania, and Yugoslavia) who encountered severe payments difficulties in the early 1980's experienced significant deterioration of debt to exports ratio in 1981-83 but thereafter only Poland continued the unfavorable trend, while solvency index indicates modest improvements. All other countries went through the opposite process. In the first period their debt to exports ratios improved and then by 1987 rebound above the 1980 levels.

TABLE 4.—CHANGES IN DEBT TO EXPORTS RATIO, 1981-87

[Total debt relative to exports of goods in percent]

	1980	1982	1984	1986	1987
Bulgaria	117	89	68	188	182
Czechoslovakia	109	95	79	88	95
East Germany	265	163	129	177	170
Hungary	184	160	179	338	342
Poland	319	485	426	515	524
Romania	145	160	114	103	87
Yugoslavia	308	335	280	275	279

Source: Author's calculation based on data from PlanEcon.

The nominal solvency index and particularly the calculation of surplus in payments necessary to stabilize debt to exports ratio indirectly capture the impact of trade policies on the overall payments situation. However, the improvements via trade policies, i.e., export expansion and import cuts have obvious limits of expenditure switching policies in a stagnant economy. That is especially important in the case of Eastern Europe because in most instances (if not all) solvency was improved by cutting imports rather than by expanding exports, thus it was a negative pattern of adjustment, which is not reflected in the solvency ratio. The feature of external adjustment pattern of Eastern Europe was also observed in many

developing countries in the 1980's. That in fact indicates relative deterioration in the region's solvency.¹¹

4. OTHER FACTORS AFFECTING CREDITWORTHINESS

The rather gloomy picture of declining solvency and unimpressive economic performance do not seem to find adequate reflection in market perceptions of East European creditworthiness and imply the existence of some other factors affecting market perceptions. Among them one can distinguish factors that are to a large extent country or region specific but also other that stem from good performance relative to other countries or regions and are rooted in general terms of commercial bank relations with sovereign borrowers. The most significant are external adjustment, borrowers' payments performance, growing competition in international financial markets, adoption of a differentiated approach and some other market systemic factors.

It appears that change in approach to individual East European borrowers stemmed from a general shift in commercial bank strategy in dealing with sovereign debtors. In the deepening phase of the crisis the banks restrained lending to all potentially noncreditworthy borrowers, and perception of the systemic risk prevailed over country specific factors. When several countries experienced an actual decline in their debt levels, a differentiated approach regained popularity and lending to selected borrowers resumed. However, at that time increasing process of securitization in international financial markets generated intense competition among banks for new syndications. The process was strengthened by the polarization among developing country borrowers; the majority had no market access or chose to actually make net repayments, while the few were taking advantage of their high ratings. Therefore, creditworthy borrowers in Eastern Europe—those with either low-debt level or proven ability to conduct effective external adjustment—have been able to take advantage of growing competition among banks and command increasingly better terms in international financial markets.

It seems to be generally accepted that in the early 1980's the improved perception of East European creditworthiness was due largely to the decline in absolute debt levels.¹² Commercial bank liabilities of seven East European countries fell from \$52 billion in 1981 to \$41 billion at the end of 1984. Even if one accepts that to a large extent this fall in commercial bank debt resulted from the favorable valuation change, the fall was quite remarkable and was even more pronounced in relative terms. Over the same period of time BIS-reporting banks claims on Eastern Europe declined from 3.4 percent of their total international assets to only 1.9 percent in 1984. For comparison, claims on Latin America jumped by nearly 40 percent to over \$212 billion, while their share fell only marginally from 10.2 percent to 9.8 percent in 1984. This flexibility must

¹¹ In many instances, terms of trade gains were again the main source of trade balance improvements. This pattern continues in several countries of the region as documented in current reports. See, "Economic Survey of Europe 1987-1988," Economic Commission for Europe, United Nations, New York, 1988, p. 200.

¹² See, e.g., Financial Market Trends, OECD, February 1988, p.31.

have been very impressive, because commercial banks' claims on Eastern Europe soared by nearly 48 percent in the next 3 years, and a lot of lending was done at what was termed "razor thin margins."

There are several indications that the greatest importance was attached by the markets to borrowers' payments performance. Indeed, the mere fact of having rescheduled debt led to a serious reassessment of creditworthiness. As it is generally observed, a country which rescheduled debt or ran arrears experiences a sharp deterioration in its relations with financial markets and is barred from new voluntary financing. Several studies which examined factors affecting secondary loan prices used the existence of rescheduling or arrears as an explanatory variable which turned out to be of greatest importance.

In one study the estimated equation included the following factors: level of indebtedness measured by net debt to exports ratio, GNP per capita as measure of wealth, and three dummy variables—rescheduling, arrears in interest payments, and debt equity program.¹³ On a basis of this equation, secondary market prices for 1986 (expressed as fraction of face value) were calculated for Poland (42), Romania (98), Hungary (109), and Yugoslavia (54). These estimated prices were in fact very close to the actual prices recorded in the markets.¹⁴ It is worth pointing out that the secondary market price of Yugoslavia's debt is so low in spite of the fact that the country's debt to export ratio is only about half of that of Hungary. This observation stresses the importance of one single factor—debt rescheduling—which in the markets' view undermines country's creditworthiness and implies lack of willingness to service external debt.

5. CONCLUSIONS AND PROSPECTS

The most important conclusion is that creditworthiness is not immediately affected by a decline in overall solvency situation, instead, ability to fulfill contractual obligations and project confidence are vital. Most East European countries were able to satisfy these conditions and therefore continue to be viewed as creditworthy. However, countries who preserved creditworthiness did it within a traditional CPE framework which appears to be detrimental to their long-term economic performance. Moreover, external adjustment occurred not by more growth and exports but at the expense of domestic absorption without substantial change in domestic economic structure; negative adjustment prevailed.

It appears that fairly smooth external adjustment was possible because East European countries were relatively little involved in convertible currency trade. Import cuts necessary to restore sound

¹³ See, J.F.H. Purcell and D.J. Orlansky, "Developing Country Loans: A New Valuation Model for Secondary Market Trading," *International Loan Trading Analysis*, June 17, 1988, Salomon Bros., Inc., see also H. Huizinga, J. Sachs, "U.S. Commercial Banks and the Developing Country Debt Crisis," *Brookings Papers on Economic Activity*, 2:1987, The Brookings Institution, Washington DC, December 1987.

¹⁴ Currently, Hungarian debt is valued at par, Romanian debt is traded at 87 percent, Poland's at 40 percent, and Yugoslavia's at 48 percent of the face value. See, "Indicative Prices for Less Developed Country Bank Loans", *International Loan Trading*, Salomon Bros., Inc., Aug. 18, 1988.

balance of payments positions were not very large in relative terms and neither were repercussions for domestic growth and consumption. In addition, there was little domestic political pressure and the poor growth record was not a problem. Therefore, most countries of the region were willing and able to generate sufficient payments surpluses in order to keep debt levels within prudent limits.

That demonstrated willingness to fulfill external obligations was rewarded by the increasingly improving terms on new loans. As long as such a pattern can be repeated, there is no danger of losing creditworthiness even with poor economic performance. However, both the markets and East European borrowers learned that there are limits to amounts of voluntary borrowing. Therefore now they have to stabilize debt to exports ratios if they want to preserve their creditworthiness—if they go beyond this point they'll follow the fate of Poland and Yugoslavia.

Preserving creditworthiness by negative adjustment would be enough to maintain refinancing or only marginal increase of existing debts but not substantially increase net inflow of foreign credits. The banks will try to establish the level beyond which further lending will endanger the quality of their loan portfolio. This point will be determined by the borrower's political ability to squeeze domestic absorption and reduce imports and growth to service debts as in the early 1980's. (Relatively weak political constraints allowed such a traditional mode of adjustment to be fairly successful in Bulgaria, Czechoslovakia, East Germany, and Romania.)

However, in the longer run, political factors link economic performance with creditworthiness. This is well demonstrated by examples of Poland, Hungary, and Yugoslavia who substituted adjustment and/or reform with external borrowing and whose troubles were aggravated by the external shocks of the early 1980's. Hungary continues its experiments with economic reform which so far are unsuccessful and therefore led to a quite substantial rise in external indebtedness. Poland and Yugoslavia face the most serious situation, because of high indebtedness and lack of will to introduce meaningful economic reform; recurrence to political and economic repression in Poland epitomizes the severity of current problems which cannot be resolved via traditional means. Political change will be required to gain acceptance of necessary additional sacrifices to improve the economy and external financial position, and also to guarantee success of an indispensable economic reform.¹⁵

Therefore, in the final account it appears that the roots of problems with creditworthiness are both economic and political. While political factors are not a subject of this paper, they seem vital in explaining patterns of adjustment and prospect for maintaining creditworthiness by Eastern Europe.

Given the declared will to reform and expand relations with the world economy (e.g., attempts to create joint ventures, and steps taken to establish relations with the European Community) good relations with international financial markets are prerequisites. However, barring any imprudent lending on the part of commer-

¹⁵ The events of early 1985 in Poland confirm this observation made late summer of 1988.

cial banks, any increase in net lending to the region will be dependent on improvements in economic performance. Therefore, only with dynamic growth and successful expansion in foreign trade can these countries benefit from an inflow of capital and then also on very good terms.

EAST EUROPEAN TRADE WITH THE INDUSTRIAL WEST

By Leyla Woods*

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I. SUMMARY

East European (EE) trade with the Industrial West (IW) peaked in 1980. Under the impact of East European adjustment to the debt crisis of the early 1980's, the IW trade balance with Eastern Europe swung from a surplus of \$2.9 billion in 1980 to a record deficit of \$3.5 billion in 1984. Although IW-EE trade has recovered since 1983, EE exports to the Industrial West in 1987 were only 10 percent above the 1980 level and EE imports from the Industrial West remain below the previous record. The recovery in IW-EE trade since 1983 has been accompanied by a narrowing in Eastern Europe's trade surplus with the Industrial West to \$1.9 billion in 1987.

The East European response to the pressures of external indebtedness and Western recession in the early 1980's has led to further declines in the East European share of Industrial Western trade. Eastern Europe now provides only 1 percent of total IW imports and exports. IW-EE trade is far more important to Eastern Europe: the Industrial West accounts for between one-fourth and one-third of East European total trade. On the Industrial Western side, the FRG is predominant in IW-EE trade, absorbing one-fourth of IW imports from Eastern Europe and supplying one-third of IW exports to Eastern Europe (excluding FRG trade with the GDR).¹ The U.S. share of IW-EE trade dwindled during the 1980's to 9 percent of IW imports and 4 percent of IW exports in 1987. Although Poland remains the leading East European partner in IW-EE

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¹ Since the FRG does not report trade with the GDR in the United Nations data base from which the data used in this study are drawn, FRG-GDR trade flows are excluded from the data provided in this report unless otherwise noted. In this case, adding in inter-German trade raises the FRG shares to over one-third of IW imports from Eastern Europe and almost one-half of IW exports to Eastern Europe.

trade, its prominence has declined dramatically since 1980 with the onset of external debt difficulties and domestic economic and political crises.

The commodity composition of IW-EE trade exhibits strikingly little change between 1970 and 1987. By contrast, the composition of Industrial Western trade with other country groups changed significantly—in a few cases, dramatically—over the 1970-87 period. Although machinery grew as a proportion of IW exports and imports for all country groups included in this study, its share increased much less for Eastern Europe than for the other country groups. More importantly, the disparity between the share of machinery in IW exports and in IW imports declined significantly for the other country groups while remaining virtually unchanged for Eastern Europe. Chemicals and intermediate manufactures continue to bulk large in East European imports from the Industrial West. In contrast, the share of chemicals and intermediate manufactures in imports of other country groups from the Industrial West has declined significantly.

The stagnation in the structure of East European trade with the Industrial West indicates Eastern Europe's continuing inability to reduce the resource intensiveness characteristic of its production and trade and to increase substantially the manufactures share of its exports to the Industrial West. Overall hard currency constraints and the continuing need to import large amounts of chemicals and intermediate manufactures limit possible increases in imports of the Western capital goods necessary to improve the competitiveness of East European products and support the desired transformation of East European production and trade structures. Even if Eastern Europe were able to increase substantially its imports of Western machinery, this would not have the desired effects in the absence of thorough and effective systemic reform. Eastern Europe's inability to substantially expand hard currency exports is the principal constraint on future growth in IW-EE trade. Without systemic reforms in Eastern Europe, the level and composition of IW-EE trade are likely to remain stagnant.

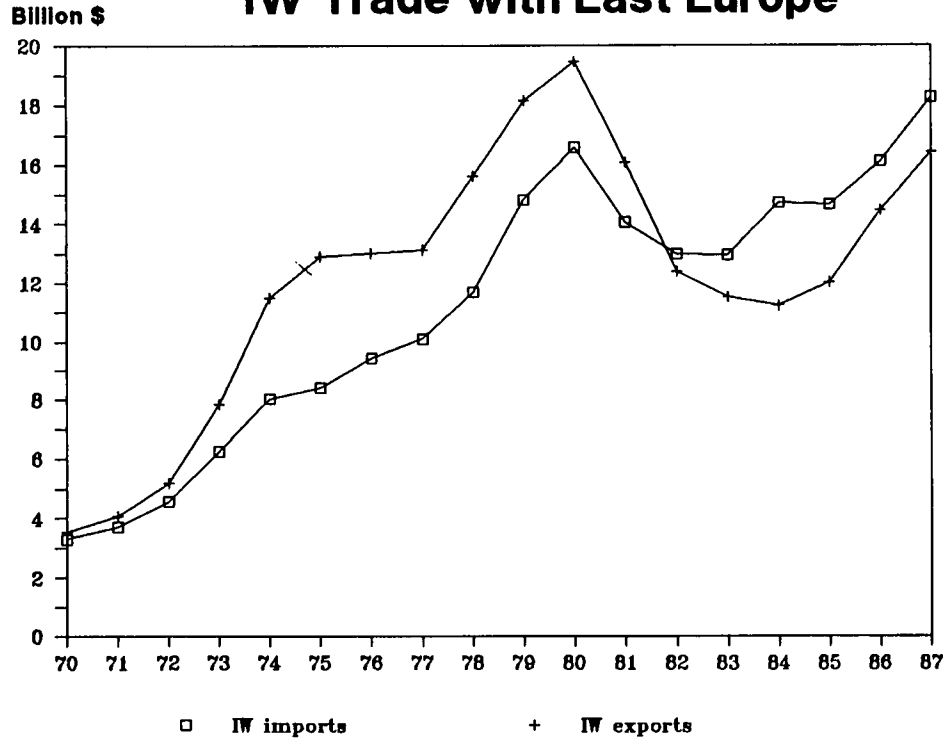
II. INTRODUCTION

After growing strongly during the 1970's, East European² trade with the Industrial West³ fell off sharply after 1980 as the East European countries reduced their hard currency imports in response to debt problems caused by rapid accumulation of hard currency debt in the second half of the 1970's to finance substantial investments as well as consumption increases. (See figure 1.) At the same time, East European exports to the Industrial West fell as a sharp recession led to declines in total Industrial West trade.

² In this report, Eastern Europe denotes the European CMEA countries: Bulgaria, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Poland, and Romania. Yugoslavia is not considered part of Eastern Europe in this paper, but some data for Yugoslavia are provided in the tables for comparison.

³ The IW group comprises the following 17 countries of the Industrial West: Austria, Belgium-Luxembourg, Canada, Denmark, Finland, France, the Federal Republic of Germany (FRG), Ireland, Italy, Japan, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

Figure 1
IW Trade with East Europe



With the resumption of more rapid economic growth throughout the Industrial West in 1983 and the moderation in austerity measures and renewed access to Western credit in Eastern Europe, IW trade with the world and with Eastern Europe and other trade partners resumed in 1984 and accelerated in 1986-87, although IW trade with Eastern Europe grew more slowly than trade with the East Asian NICs (Newly Industrialized Countries), other IW countries, and the world as a whole.

This paper will survey the changes in the level and composition of trade between the countries of the Industrial West and Eastern Europe, with some additional attention to U.S. trade with Eastern Europe. The report will also note comparable trade flows in intra-IW trade and between the Industrial West and other country groups. The data for this study are drawn from United Nations (U.N.) Series D Trade Data on tape. Since Bulgaria, the GDR, and Romania do not report trade in this data series, the data used in this paper are trade flows reported by the Industrial Western countries.⁴ The U.N. data are reported on an SITC Rev. 1 (Standard International Trade Classification, Revised) basis; imports are recorded c.i.f. (including cost, insurance, and freight) and exports f.o.b. (free on board). (Hence, intra-IW imports exceed intra-IW exports as reported in the tables.) The U.N. trade data is reported in current dollars, so changes in the nominal shares and growth rates of trade may diverge from real changes due to changes in exchange rates and relative price levels. The U.N. data excludes trade between the FRG and the GDR.

III. RELATIVE IMPORTANCE OF IW-EE TRADE

The East European countries account for a very small proportion of total IW trade: in the 1980's, Eastern Europe has provided only 1 percent of IW exports and imports, down from about 2 percent in the 1970's (from Table 1).⁵ Less Developed Countries (LDC's), excluding the four East Asian NIC's, accounted for about 20 percent of IW trade during 1970-83.⁶ The Other LDC share of IW trade then declined to about 13 percent of IW trade as falling oil prices reduced some LDC's export earnings and heavily indebted LDC's were forced to cut imports. (See Figure 2.) Extremely rapid growth in IW trade with the East Asian NIC's, especially during the 1980's, resulted in a rise in the East Asian NIC share of IW trade to 5 percent of total IW exports and 7 percent of IW imports in 1987. Intra-IW trade dominates IW trade flows, as one would expect given the proximity and similar development levels of most of the IW countries. Intra-IW trade provided 65 percent of IW ex-

⁴ See James Ellis, "Eastern Europe: Changing Trade Patterns and Perspectives," in *East European Economies: Slow Growth in the 1980's*, vol. 2, Washington: Joint Economic Committee, 1986, pp. 7-8, for a brief discussion and other references on the use of mirror statistics to measure East European trade flows.

⁵ Inclusion of inter-German trade does not increase Eastern Europe's share of IW trade.

⁶ This group of Other LDC's comprises 158 countries: all the developing countries—except the East Asian NIC's—as defined by the U.S. Bureau of the Census following the U.N. assignment of countries. Basically, this definition of developing countries includes all countries except the developed countries and the European and Asian Communist countries. Further information on the U.S. Census definition of developing countries can be found in "Highlights of U.S. Export and Import Trade," Report FY 1990, Washington, DC: U.S. Bureau of the Census, pp. 1-9.

ports and imports during 1970-83, rising to about 70 percent thereafter as IW-LDC trade declined.

TABLE 1.—INDUSTRIAL WEST TRADE WITH EASTERN EUROPE IN COMPARATIVE PERSPECTIVE

(In billions of dollars)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
East Europe: ¹										
IW exports	3.523	12.873	19.461	16.088	12.378	11.514	11.212	12.006	14.457	16.411
IW imports	3.287	8.413	16.602	14.033	12.962	12.936	14.704	14.666	16.110	18.263
IW trade balance	235	4.460	2.859	2.055	-0.583	-1.422	-3.492	-2.660	-1.653	-1.852
East Asian NIC's:										
IW exports	5.813	15.651	43.498	45.488	43.509	47.297	53.021	51.245	63.140	83.005
IW imports	3.842	13.188	41.743	45.527	45.739	52.458	65.221	67.246	83.247	111.464
IW trade balance	1.971	2.463	1.755	-.040	-2.230	-5.161	-12.199	-16.001	-20.107	-28.460
Other LDC's:										
IW exports	33.288	114.061	228.799	250.803	227.013	199.469	191.947	179.462	184.553	196.498
IW imports	38.230	134.535	342.237	322.314	273.088	245.160	254.951	241.624	207.363	234.787
IW trade balance	-4.942	-20.474	-113.438	-71.512	-46.075	-45.691	-63.005	-62.162	-22.810	-38.288
Yugoslavia:										
IW exports	1.872	4.673	7.931	6.680	5.540	5.384	5.136	5.837	7.287	7.763
IW imports .....	.896	1.768	3.821	3.275	3.394	3.916	4.306	4.630	5.901	7.345
IW trade balance .....	.976	2.905	4.111	3.405	2.146	1.468	.830	1.207	1.386	.418
Soviet Union:										
IW exports	2.491	11.874	19.837	20.564	21.513	21.282	20.555	19.432	19.269	19.344
IW imports	2.453	8.405	23.619	22.455	24.039	23.613	24.531	21.533	19.250	20.629
IW trade balance .....	.038	3.470	-3.782	-1.891	-2.526	-2.331	-3.976	-2.101	.020	-1.285

TABLE 1.—INDUSTRIAL WEST TRADE WITH EASTERN EUROPE IN COMPARATIVE PERSPECTIVE—Continued

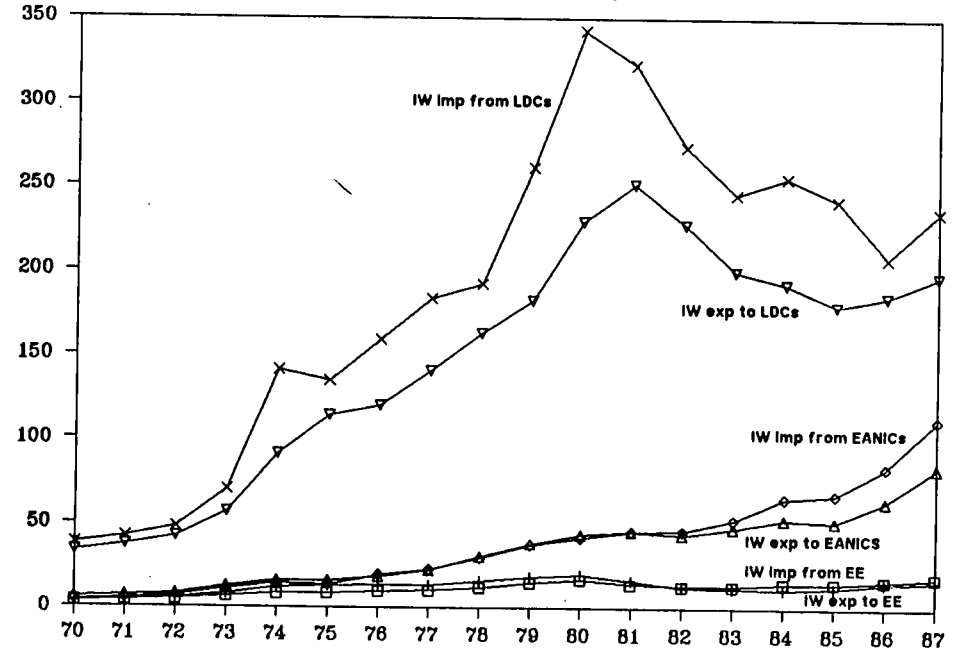
[In billions of dollars]

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Intra-IW:										
IW exports	145.500	338.363	765.975	718.481	691.659	709.802	771.877	816.375	980.663	1164.228
IW imports	150.379	350.096	796.066	746.230	720.758	731.407	801.957	856.711	1020.400	1196.181
IW trade balance	-4.879	-11.733	-30.091	-27.749	-29.099	-21.605	-30.080	-40.336	-39.736	-31.952
World:¹										
IW exports	209.762	540.507	1,173.142	1,150.371	1,089.304	1,078.048	1,142.449	1,183.266	1,378.145	1,624.945
IW imports	211.653	544.367	1,289.251	1,216.499	1,141.062	1,129.673	1,234.449	1,281.331	1,437.130	1,695.838
IW trade balance	-18.914	-3.859	-116.109	-66.127	-51.758	-51.625	-92.000	-98.065	-58.984	-70.893

¹ Excluding inter-German trade because the FRG does not report trade with the GDR in the U.N. data series used for this table.

Source: U.N. Series D Trade Data, SITC Rev. 1 basis (on tape).

Figure 2
IW Trade with
East Europe, E.A. NICs, and Other LDCs



Eastern Europe accounts for larger shares of Austrian and FRG trade than of IW trade as a whole, but these shares, too, have been in decline. Eastern Europe's share of Austrian trade was 9-10 percent of Austria's total exports (5-7 percent of imports) in the 1970's, decreasing to 6-8 percent of Austrian exports (4-6 percent of imports) in 1987 as Austria's total trade expanded faster than its trade with Eastern Europe during 1983-87. Even for the FRG, Eastern Europe's predominant Western trade partner, trade with Eastern Europe accounts for only 2 percent of exports and imports.⁷ Eastern Europe accounts for between one-half and 1 percent of U.S. total trade.

IW-EE trade is significantly more important to the East European countries than to the IW countries: the Industrial West accounted for 25-30 percent of East European total foreign trade during the 1980's.⁸ In this period, IW shares of EE trade ranged from 30-40 percent of Romanian exports and GDR, Hungarian, and Polish imports and exports, to 15-20 percent of Romanian and Bulgarian imports and Czechoslovakian exports and imports, down to 5-10 percent of Bulgarian exports. During the 1980's, the Soviet Union continued to be Eastern Europe's leading trade partner, with 35-40 percent of East European imports and exports, followed by other East European countries (20-23 percent), LDC's (6-11 percent) and non-CMEA socialist countries (5 percent).

The FRG is Eastern Europe's leading Western trade partner, absorbing about one-fourth of total IW imports from Eastern Europe in the 1980's. The FRG's share of IW exports to Eastern Europe rose from one-fourth in 1980-81 to one-third in 1986-87. This increase in the FRG share of IW exports to Eastern Europe was significantly greater than the rise in the FRG share of IW exports to the world (from 15-16 percent in 1980-85 to 18 percent in 1986-87), which largely reflects the appreciation of the Deutsche mark against the dollar during 1985-87. The substantial increase in the FRG's share of total IW exports to Eastern Europe is mainly traceable to larger absolute increases during 1985-87 in East European imports of those commodities—machinery, chemicals, and intermediate manufactures—for which the FRG share of IW exports to Eastern Europe is larger than the FRG share in total IW exports to Eastern Europe.

Other significant IW trade partners of Eastern Europe are Austria, France, and Italy with 7-14 percent of EE exports and imports, followed by the United Kingdom with 6-8 percent of IW-EE trade.

The U.S. share of IW imports from Eastern Europe doubled from 6 percent in 1980 to a peak of 12 percent in 1984, then declined

⁷ Adding in available data on FRG trade with the GDR in 1985-87 increases Eastern Europe's share of FRG trade to 3-4 percent. Estimates of the dollar value of inter-German trade for 1985-87 from "East Germany Country Profile 1988-89," London: The Economist Intelligence Unit, July 1988, p. 35.

⁸ Figures cited in this paragraph are from *Economic Survey of Europe in 1987*, New York: U.N. Economic Commission for Europe, 1988, p. 135. These trade shares are from the ECE Secretariat Common Data Base, based on national statistics and ECE Secretariat estimates. The shares should be regarded as approximate, because relative prices and exchange rates set by the CMEA countries often differ substantially from world market prices and exchange rates. See Steven Popper, "East European Reliance on Technology Imports from the West," Santa Monica, CA: Rand Corp., August 1988, pp. 48-50, for a useful caution about using U.N. trade data.

steadily to 9 percent in 1987 (from Tables 1 and 2). The U.S. share of IW imports from the world over 1980-87 followed a similar pattern, reflecting successive appreciation and depreciation of the dollar and a more rapid increase in U.S. than in other IW country import volumes. Underlying the 1980-84 rise in the U.S. share of IW imports from Eastern Europe were a near tripling in U.S. imports from Romania—the largest EE exporter to the United States after overtaking Poland in 1981—and a doubling in U.S. imports from Hungary which offset the halving of U.S. imports from Poland. (See Figure 3.)⁹ The 1984-87 decline in the U.S. share of IW imports from Eastern Europe was mainly due to a significant drop in U.S. imports from Romania.

⁹ The October 1982 suspension of Poland's MFN status in response to the banning of Solidarity doubtless contributed to the falloff in U.S. imports from Poland. In 1983, U.S. imports from Poland fell more than did imports by other IW countries (declines of 9 percent and 2 percent, respectively). For the 1982-86 period during which Poland lacked MFN status, U.S. imports from Poland grew only 14 percent, compared to 28 percent growth in non-U.S. IW imports. Restoration of MFN status for Poland in February 1987 contributed to a strong upswing in U.S. imports that year: U.S. imports rose 26 percent, compared to a 17 percent increase in non-U.S. IW imports. U.S. imports from Poland are continuing to rise rapidly: for 1988, U.S. imports were up 26 percent over their 1987 level. A differential shift in the commodity composition of Polish exports to the United States and those to other Western countries in 1982-84 supports this argument. See Bartłomiej Kaminski, "Poland's Foreign Trade in the 1980's: Complex Challenges and Simple Responses?" in Philip Joseph (ed.), *The Economies of Eastern Europe and their Foreign Economic Relations*, Brussels: NATO, 1986, pp. 172-176.

TABLE 2.—U.S. TRADE WITH EAST EUROPEAN COUNTRIES

(In millions of dollars)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Bulgaria:										
U.S. exports	15.279	29.299	160.701	258.104	106.453	65.389	44.087	103.489	95.865	88.344
U.S. imports	2.431	20.217	27.317	37.093	30.624	30.138	31.019	38.960	61.008	46.963
U.S. trade balance	12.848	9.082	133.384	221.011	75.829	35.251	13.068	64.529	34.857	41.381
Czechoslovakia:										
U.S. exports	21.883	52.904	185.145	82.420	43.598	57.079	58.098	62.623	67.535	46.942
U.S. imports	23.892	31.309	72.079	73.035	67.744	68.034	95.933	85.099	92.786	86.082
U.S. trade balance	-2.009	21.595	113.066	9.385	-24.146	-10.955	-37.835	-22.476	-25.251	-39.140
East Germany:										
U.S. exports	32.532	17.294	477.389	295.557	222.557	138.915	135.830	72.253	67.624	53.695
U.S. imports	9.394	11.250	48.446	52.360	58.882	63.864	167.163	102.133	96.144	96.181
U.S. trade balance	23.138	6.044	428.943	243.197	163.675	75.051	-31.333	-29.880	-28.520	-42.486
Hungary:										
U.S. exports	28.137	76.054	79.020	77.508	67.834	109.778	85.174	92.094	88.213	94.103
U.S. imports	6.224	34.652	117.879	140.342	145.359	172.048	241.793	241.063	247.319	305.507
U.S. trade balance	21.913	41.402	-38.859	-62.834	-77.525	-62.270	-156.619	-148.969	-159.106	-211.404
Poland:										
U.S. exports	69.838	580.090	710.446	680.547	292.606	319.872	314.825	232.805	144.808	237.395
U.S. imports	97.946	243.079	459.312	400.905	229.188	208.727	244.426	248.496	261.479	329.665
U.S. trade balance	-28.108	337.011	251.134	279.642	63.418	111.145	70.399	-15.691	-116.671	-92.270

Romania:

U.S. exports	66.274	189.300	720.231	503.890	223.231	185.658	246.181	206.420	249.226	192.107
U.S. imports	13.425	132.956	341.245	612.423	380.171	553.037	969.001	951.022	838.824	781.591
U.S. trade balance	52.849	56.344	378.986	-108.533	-156.940	-367.379	-722.820	-744.602	-589.598	-589.484

East Europe:

U.S. exports	233.943	944.940	2,332.933	1,898.026	996.279	876.691	884.195	769.684	713.270	712.585
U.S. imports	153.313	643.497	1,066.277	1,316.157	911.969	1,095.848	1,749.336	1,666.773	1,597.560	1,645.990
U.S. trade balance	80.630	471.478	1,266.656	581.869	84.310	-219.157	-865.141	-897.089	-884.290	-933.405

Source: U.N. Series D Trade Data, SITC Rev. 1 basis (on tape).

Figure 3

US Imports from Eastern Europe

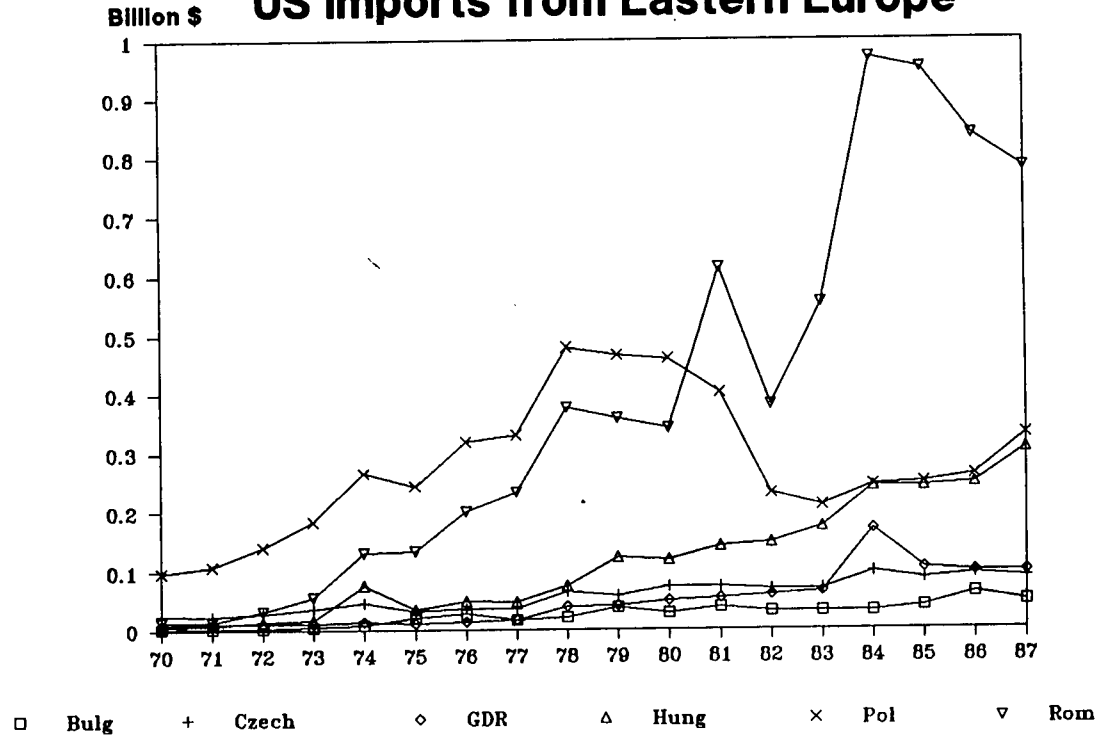
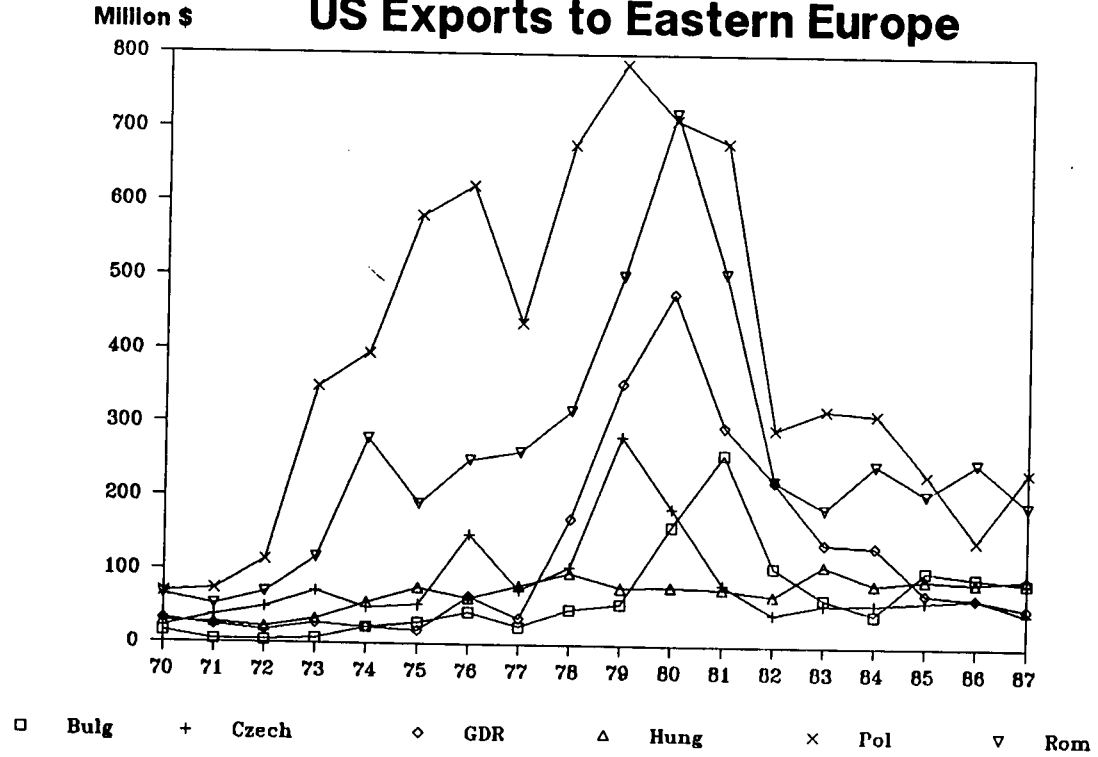


Figure 4

US Exports to Eastern Europe



Over the 1980-87 period, the U.S. share of IW exports to EE declined steadily, from 12 percent in 1980-81 to 4 percent in 1987 as U.S. exports to Romania, Poland, and the GDR fell substantially. (See Figure 4.) In comparison, the U.S. share of IW exports to the world declined moderately after 1984 as dollar depreciation inflated the nominal shares of the other major IW exporting countries.

The U.S. share of IW trade with Eastern Europe is notable only for Romania. Throughout the 1980's, the U.S. was second to the FRG among IW exporters to Romania, supplying 15-20 percent of IW exports. Despite substantial reductions in U.S. imports from Romania after 1985, the U.S. maintained its position as one of the most important Western markets for Romanian products: the U.S., the FRG and Italy each absorbed 20-30 percent of total IW imports from Romania during 1985-87.

While the Industrial West provides a sizable proportion of Eastern Europe's foreign trade, Eastern Europe accounts for an extremely small share of total IW trade, although IW exports to Eastern Europe are a significant share of exports for some industries in a few of the West European countries. The FRG dominates IW trade with Eastern Europe. On the East European side, Poland's prominence has ebbed as its debt crisis and internal political and economic problems led to substantial cuts in its trade with the Industrial West. Never large, the U.S. share of IW trade with Eastern Europe has dwindled further in the 1980's under the impact of dollar depreciation and sharp drops in trade with Poland and Romania, its leading EE trade partners. Romania's recent loss of Most Favored Nation status may lead to further reductions in the U.S. share of IW trade with Eastern Europe.

IV. GROWTH AND COMPOSITION OF IW-EE TRADE: 1970-80

IW-EE trade expanded rapidly between 1970 and 1980 as IW exports and imports grew at an average annual rate of 18 percent, about the same pace as intra-IW trade. However, IW trade with the East Asian NIC's and with Other LDC's rose even more rapidly, most notably in IW imports from the East Asian NIC's, which rose 27 percent on average per year.

In 1970, the broad commodity composition of IW exports to Eastern Europe was remarkably similar to the composition of IW exports to East Asian NIC's and to other IW countries. (See Tables 3 and 4.) Between 1970 and 1980, East European imports of machinery and transportation equipment (SITC 7) increased substantially more in absolute terms than did EE imports in other commodity groups (from Table 3) as the East European countries embarked on programs to modernize their industries and improve productivity. EE imports of intermediate manufactured goods (SITC 6)¹⁰ and chemicals (SITC 5) also increased significantly, in part because newly installed Western machinery often required higher quality production inputs than were available domestically or from other CMEA countries. EE imports of food (SITC 0) increased, too, to provide incentives for workers and to allow improvements in East Eu-

¹⁰ The intermediate manufactures commodity group includes iron and steel products, nonferrous metals, leather, wood, and other semimanufactures.

ropean living standards. EE machinery imports actually increased more—in both absolute and percentage terms—in the first half of the period (1970-74) than during the latter half (1974-79). The slowing pace of EE machinery imports combined with more rapid increases in other import categories led to a decline in the machinery share of EE imports from the Industrial West over the 1970-80 period (from Table 4).

TABLE 3.—INDUSTRIAL WEST EXPORTS TO EASTERN EUROPE IN COMPARATIVE PERSPECTIVE

	[In millions of dollars]							
	1970	1974	1979	1980	1983	1985	1986	1987
East Europe: ¹								
SITC 0—Food.....	335	899	2,360	3,162	1,320	1,010	1,011	904
SITC 1—Bev., tobac.....	15	49	104	116	90	89	106	137
SITC 2—Crude mat.....	284	732	1,259	1,314	775	742	818	955
SITC 3—Fuels.....	74	127	345	463	220	479	342	357
SITC 4—Veg. oils.....	31	81	104	89	69	81	72	68
SITC 5—Chem.....	483	1,947	2,986	3,351	2,265	2,381	2,840	3,315
SITC 6—Intermed mfr.....	933	3,424	4,418	4,346	2,483	2,509	2,851	3,229
SITC 7—Machinery.....	1,187	3,664	5,682	5,641	3,446	3,780	5,236	6,084
SITC 8—Consumer mfr.....	155	453	716	801	588	706	933	1,098
SITC 9—Other.....	24	95	176	174	257	229	247	265
Total.....	3,523	11,471	18,150	19,456	11,514	12,006	14,456	16,146
East Asian NIC's:								
SITC 0—Food.....	448	1,043	1,982	2,457	2,807	2,215	2,292	2,802
SITC 1—Bev., tobac.....	71	134	450	448	477	605	655	1,022
SITC 2—Crude mat.....	411	1,194	2,740	3,114	3,137	3,366	4,092	5,339
SITC 3—Fuels.....	32	149	363	563	1,290	1,283	1,123	1,380
SITC 4—Veg. oils.....	30	93	132	139	122	138	106	146
SITC 5—Chem.....	526	1,655	4,673	4,898	5,690	5,987	8,202	10,725
SITC 6—Intermed mfr.....	1,492	3,742	7,535	8,927	8,703	8,497	10,852	13,638
SITC 7—Machinery.....	1,958	6,099	15,988	18,376	19,794	23,003	28,385	38,472
SITC 8—Consumer mfr.....	459	1,130	3,137	4,001	4,706	5,336	6,517	8,284
SITC 9—Other.....	66	246	478	574	570	814	913	1,195
Total.....	5,492	15,485	37,479	43,498	47,297	51,245	63,137	83,004
Latin American NIC's:								
SITC 0—Food.....	244	1,208	1,558	3,390	2,400	1,576	1,673	1,307
SITC 1—Bev., tobac.....	17	51	80	114	20	29	55	59
SITC 2—Crude mat.....	249	755	1,079	1,524	1,080	1,394	1,387	1,676
SITC 3—Fuels.....	146	377	717	813	634	1,026	844	1,029
SITC 4—Veg. oils.....	22	121	110	115	99	132	173	108
SITC 5—Chem.....	794	2,936	4,295	4,963	3,063	3,441	4,059	4,182
SITC 6—Intermed mfr.....	929	3,678	3,727	5,424	2,119	2,426	2,694	3,134
SITC 7—Machinery.....	2,778	7,089	13,294	18,122	9,509	12,816	14,352	16,827
SITC 8—Consumer mfr.....	383	866	1,601	2,268	1,059	1,533	1,796	2,108
SITC 9—Other.....	108	304	493	595	896	751	740	1,080
Total.....	5,669	17,386	26,955	37,328	20,880	25,122	27,771	31,509
South Europe:								
SITC 0—Food.....	308	1,411	1,974	2,590	2,605	2,514	3,672	4,582
SITC 1—Bev., tobac.....	51	107	265	363	440	427	554	755
SITC 2—Crude mat.....	545	1,516	2,484	2,870	2,508	2,582	2,801	3,436
SITC 3—Fuels.....	196	536	1,418	1,757	2,156	1,999	1,514	1,539
SITC 4—Veg. oils.....	24	74	104	142	63	114	140	206
SITC 5—Chem.....	807	2,357	4,086	4,552	4,042	4,434	5,936	7,713
SITC 6—Intermed mfr.....	1,290	3,592	4,856	5,904	4,521	5,083	7,480	9,973
SITC 7—Machinery.....	2,925	7,295	11,175	12,982	12,670	13,634	19,433	28,406
SITC 8—Consumer mfr.....	341	983	1,686	2,058	2,103	2,308	3,432	4,662
SITC 9—Other.....	88	187	542	468	616	570	767	1,156

**TABLE 3.—INDUSTRIAL WEST EXPORTS TO EASTERN EUROPE IN COMPARATIVE PERSPECTIVE—
Continued**

	(In millions of dollars)							
	1970	1974	1979	1980	1983	1985	1986	1987
Total.....	6,576	18,059	28,591	33,684	31,724	33,666	45,728	62,427
Intra-IW:								
SITC 0—Food.....	12,496	28,968	53,681	59,344	53,820	52,823	66,929	78,796
SITC 1—Bev., tobac.....	2,160	4,106	9,211	9,726	9,203	10,072	12,199	14,759
SITC 2—Crude mat.....	12,543	26,816	45,131	48,743	38,704	39,124	43,492	52,777
SITC 3—Fuels.....	5,824	20,825	49,644	68,707	73,214	77,674	55,970	57,456
SITC 4—Veg. oils.....	586	2,045	2,552	2,555	2,260	2,851	2,307	2,555
SITC 5—Chem.....	11,512	32,866	67,903	76,179	72,958	81,658	99,169	119,693
SITC 6—Intermed mfr.....	34,001	76,489	135,544	157,179	119,863	131,476	162,630	193,810
SITC 7—Machinery.....	49,920	105,570	223,551	252,290	254,183	317,109	402,211	476,401
SITC 8—Consumer mfr.....	14,715	31,261	70,677	82,030	76,677	90,561	120,145	141,767
SITC 9—Other.....	1,427	3,607	8,911	10,211	8,921	13,026	15,552	26,201
Total.....	145,184	332,553	666,804	766,963	709,802	816,374	980,604	1,164,215
World:¹								
SITC 0—Food.....	17,099	43,914	80,107	96,540	86,819	81,000	93,391	108,247
SITC 1—Bev., tobac.....	2,813	5,401	12,484	13,443	12,599	13,385	15,913	19,259
SITC 2—Crude mat.....	15,290	34,565	58,801	65,815	53,156	54,297	59,651	71,716
SITC 3—Fuels.....	7,054	24,653	58,666	81,619	85,206	89,183	65,177	67,094
SITC 4—Veg. oils.....	1,047	3,571	5,009	5,222	4,249	5,292	4,201	4,445
SITC 5—Chem.....	18,675	54,201	105,769	120,336	112,744	124,112	147,371	178,367
SITC 6—Intermed mfr.....	48,163	117,422	201,948	236,031	186,041	195,108	230,692	269,775
SITC 7—Machinery.....	77,216	175,327	368,399	427,072	415,076	479,911	584,332	689,308
SITC 8—Consumer mfr.....	18,890	40,435	91,871	108,884	103,299	118,252	151,530	177,668
SITC 9—Other.....	3,514	7,072	16,114	18,181	18,861	22,714	25,872	39,034
Total.....	209,762	506,561	999,168	1,173,142	1,078,048	1,183,255	1,378,129	1,624,913

¹ Excluding inter-German trade because the FRG does not report trade with the GDR in the U.N. data series used for this table. Source: U.N. Series D Trade Data, SITC Rev. 1 basis (on tape).

TABLE 4.—INDUSTRIAL WEST EXPORTS TO EASTERN EUROPE IN COMPARATIVE PERSPECTIVE

	(As percent of total exports)							
	1970	1974	1979	1980	1983	1985	1986	1987
East Europe:								
SITC 0—Food.....	10	8	13	16	11	8	7	6
SITC 1—Bev., tobac.....	0	0	1	1	1	1	1	1
SITC 2—Crude mat.....	8	6	7	7	7	6	6	6
SITC 3—Fuels.....	2	1	2	2	2	4	2	2
SITC 4—Veg. oils.....	1	1	1	0	1	1	0	0
SITC 5—Chem.....	14	17	16	17	20	20	20	21
SITC 6—Intermed mfr.....	26	30	24	22	22	21	20	20
SITC 7—Machinery.....	34	32	31	29	30	31	36	38
SITC 8—Consumer mfr.....	4	4	4	4	5	6	6	7
SITC 9—Other.....	1	1	1	1	2	2	2	2
Total.....	100	100	100	100	100	100	100	100
East Asian NIC's:								
SITC 0—Food.....	8	7	5	6	6	4	4	3
SITC 1—Bev., tobac.....	1	1	1	1	1	1	1	1
SITC 2—Crude mat.....	7	8	7	7	7	7	6	6
SITC 3—Fuels.....	1	1	1	1	3	3	2	2
SITC 4—Veg. oils.....	1	1	0	0	0	0	0	0
SITC 5—Chem.....	10	11	12	11	12	12	13	13
SITC 6—Intermed mfr.....	27	24	20	21	18	17	17	16
SITC 7—Machinery.....	36	39	43	42	42	45	45	46

TABLE 4.—INDUSTRIAL WEST EXPORTS TO EASTERN EUROPE IN COMPARATIVE PERSPECTIVE—
Continued

	[As percent of total exports]							
	1970	1974	1979	1980	1983	1985	1986	1987
SITC 8—Consumer mfr	8	7	8	9	0	10	10	10
SITC 9—Other	1	2	1	1	1	2	1	1
Total	100	100	100	100	100	100	100	100
Latin American NIC's:								
SITC 0—Food	4	7	6	9	11	6	6	4
SITC 1—Bev., tobac	0	0	0	0	0	0	0	0
SITC 2—Crude mat	4	4	4	4	5	6	5	5
SITC 3—Fuels	3	2	3	2	3	4	3	3
SITC 4—Veg. oils	0	1	0	0	0	1	1	0
SITC 5—Chem	14	17	16	13	15	14	15	13
SITC 6—Intermed mfr	16	21	14	15	10	10	10	10
SITC 7—Machinery	49	41	49	49	46	51	52	53
SITC 8—Consumer mfr	7	5	6	6	5	6	6	7
SITC 9—Other	2	2	2	2	4	3	3	3
Total	100	100	100	100	100	100	100	100
South Europe:								
SITC 0—Food	5	8	7	8	8	7	8	7
SITC 1—Bev., tobac	1	1	1	1	1	1	1	1
SITC 2—Crude mat	8	8	9	9	8	8	6	6
SITC 3—Fuels	3	3	5	5	7	6	3	2
SITC 4—Veg. oils	0	0	0	0	0	0	0	0
SITC 5—Chem	12	13	14	14	13	13	13	12
SITC 6—Intermed mfr	20	20	17	18	14	15	16	16
SITC 7—Machinery	44	40	39	39	40	40	42	46
SITC 8—Consumer mfr	5	5	6	6	7	7	8	7
SITC 9—Other	1	1	2	1	2	2	2	2
Total	100	100	100	100	100	100	100	100
Intra-W:								
SITC 0—Food	9	9	8	8	8	6	7	7
SITC 1—Bev., tobac	1	1	1	1	1	1	1	1
SITC 2—Crude mat	9	8	7	6	5	5	4	5
SITC 3—Fuels	4	6	7	9	10	10	6	5
SITC 4—Veg. oils	0	1	0	0	0	0	0	0
SITC 5—Chem	8	10	10	10	10	10	10	10
SITC 6—Intermed mfr	23	23	20	20	17	16	17	17
SITC 7—Machinery	34	32	34	33	36	39	41	41
SITC 8—Consumer mfr	10	9	11	11	11	11	12	12
SITC 9—Other	1	1	1	1	1	2	2	2
Total	100	100	100	100	100	100	100	100
World:								
SITC 0—Food	8	9	8	8	8	7	7	7
SITC 1—Bev., tobac	1	1	1	1	1	1	1	1
SITC 2—Crude mat	7	7	6	6	5	5	4	4
SITC 3—Fuels	3	5	6	7	8	8	5	4
SITC 4—Veg. oils	0	1	1	0	0	0	0	0
SITC 5—Chem	9	11	11	10	10	10	11	11
SITC 6—Intermed mfr	23	23	20	20	17	16	17	17
SITC 7—Machinery	37	35	37	36	39	41	42	42
SITC 8—Consumer mfr	9	8	9	9	10	10	11	11
SITC 9—Other	2	1	2	2	2	2	2	2
Total	100	100	100	100	100	100	100	100

Source: Table 3.

East Asian and Latin American NIC and intra-IW imports of machinery increased significantly more rapidly than EE imports in this commodity group, contributing to a growing disparity between Eastern Europe and other country groups in the commodity composition of their imports from the Industrial West. By 1980 machinery accounted for a noticeably smaller share of IW exports to Eastern Europe than of IW exports to other groups, particularly the industrializing countries of East Asia, Latin America, and Southern Europe.¹¹

This commodity composition of IW imports from Eastern Europe in 1970 closely resembled the commodity structure of overall IW imports from the world, except for a higher share of food, and a lower share of machinery in IW imports from Eastern Europe. (See Tables 5 and 6.) IW imports from the East Asian NIC's in 1970 were concentrated in the category of manufactured consumer goods (SITC 8)—comprising industrial consumer goods such as clothing, furniture, footwear, watches, and cameras—while food, crude materials, and intermediate manufactures were important in IW imports from the Latin American NIC's and Southern Europe. By 1980, the share of machinery in IW imports had grown remarkably for Southern Europe and the East Asian and Latin American NIC's and increased slightly for Eastern Europe. The consumer manufactures share had expanded for Eastern Europe, Latin American NIC's, and Southern Europe and begun to decline for the East Asian NIC's.

TABLE 5.—INDUSTRIAL WEST IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE

(In millions of dollars)

	1970	1974	1979	1980	1983	1985	1986	1987
East Europe: ¹								
SITC 0—Food.....	838	1,394	1,907	1,900	1,428	1,596	1,882	2,304
SITC 1—Bev., tobac.....	37	70	155	147	121	104	122	134
SITC 2—Crude mat.....	438	813	1,272	1,419	1,089	1,308	1,395	1,505
SITC 3—Fuels.....	359	1,386	2,982	3,714	3,380	3,838	3,140	3,210
SITC 4—Veg. oils.....	47	127	98	70	57	78	60	60
SITC 5—Chem.....	221	606	948	1,246	1,234	1,515	1,616	1,671
SITC 6—Intermed mfr.....	700	1,660	3,160	3,433	2,407	2,696	3,387	3,821
SITC 7—Machinery.....	293	762	1,731	1,904	1,160	1,278	1,586	1,965
SITC 8—Consumer mfr.....	325	1,142	2,439	2,647	1,974	2,149	2,787	3,426
SITC 9—Other.....	28	72	121	123	86	103	135	166
Total.....	3,287	8,031	14,814	16,602	12,936	14,666	16,109	18,262

¹¹The East Asian NIC's are South Korea, Taiwan, Singapore, and Hong Kong. The Latin American NIC country group comprises Argentina, Brazil, and Mexico; the Southern Europe group is composed of Portugal, Spain, Greece, and Turkey. These groups were chosen to provide perspective on Eastern Europe's trade performance because they are Eastern Europe's main competitors on Industrial Western markets. The East Asian NIC's have achieved the success that has eluded Eastern Europe by applying strategies of export-led growth and trade promotion. The Latin American NIC's and the South European countries might provide a more reasonable standard of comparison for Eastern Europe because they have been less successful. And like much of Eastern Europe, most of these countries are struggling with external debt. Of course, the systemic and "environmental" differences between Eastern Europe and these country groups overwhelm any similarities. For example, Southern Europe's competitiveness benefits from the accession to the EC of Greece (in 1981), and Spain and Portugal (in 1986). For a thorough comparison of East European and NIC trade performance, see Kazimierz Poznanski, "Competition Between Eastern Europe and Developing Countries in the Western Market for Manufactured Goods," in *East European Economies: Slow Growth in the 1980's*, vol. 2, op. cit., pp. 62-90.

TABLE 5.—INDUSTRIAL WEST IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE—
Continued

[In millions of dollars]

	1970	1974	1979	1980	1983	1985	1986	1987
East Asian NIC's:								
SITC 0—Food.....	345	1,005	2,330	2,316	2,545	2,965	4,219	5,432
SITC 1—Bev., tobac.....	18	48	96	135	125	113	131	153
SITC 2—Crude mat.....	266	521	1,094	1,099	911	891	883	1,245
SITC 3—Fuels.....	83	679	1,420	1,331	1,602	2,300	1,461	1,820
SITC 4—Veg. oils.....	22	40	23	19	8	50	26	21
SITC 5—Chem.....	27	190	564	706	914	1,140	1,603	1,966
SITC 6—Intermed mfr.....	577	2,350	6,222	6,538	7,286	8,983	10,521	13,661
SITC 7—Machinery.....	483	2,570	7,393	8,832	14,467	19,023	24,635	35,380
SITC 8—Consumer mfr.....	1,913	5,792	17,586	20,102	23,781	30,664	38,499	50,434
SITC 9—Other.....	108	198	524	666	819	1,118	1,270	1,351
Total.....	3,842	13,393	37,252	41,743	52,458	67,246	83,247	111,463
Latin American NIC's								
SITC 0—Food.....	3,039	5,048	8,996	9,268	9,416	10,238	10,322	10,382
SITC 1—Bev., tobac.....	50	150	446	501	589	647	682	792
SITC 2—Crude mat.....	1,021	2,354	3,907	4,214	3,401	4,637	4,236	4,252
SITC 3—Fuels.....	72	95	3,215	10,867	13,567	12,966	6,331	7,172
SITC 4—Veg. oils.....	138	344	353	254	188	327	188	174
SITC 5—Chem.....	112	373	632	979	1,178	1,771	1,424	1,439
SITC 6—Intermed mfr.....	339	1,323	2,919	2,925	3,889	4,612	5,294	6,458
SITC 7—Machinery.....	201	1,267	3,062	4,059	5,444	8,533	9,800	12,957
SITC 8—Consumer mfr.....	124	905	1,388	1,942	1,697	2,709	2,864	3,562
SITC 9—Other.....	86	196	380	544	587	725	742	951
Total.....	5,180	12,055	25,298	35,552	39,955	47,165	41,882	48,140
South Europe								
SITC 0—Food.....	1,031	2,110	3,746	3,840	3,772	4,206	5,399	7,150
SITC 1—Bev., tabac.....	305	653	1,033	1,089	1,015	1,018	1,247	1,580
SITC 2—Crude mat.....	459	882	1,344	1,533	1,451	1,733	2,048	2,615
SITC 3—Fuels.....	123	558	879	1,524	1,812	3,047	2,155	2,259
SITC 4—Veg. oils.....	110	213	176	96	345	307	502	661
SITC 5—Chem.....	137	451	952	1,072	1,255	1,660	1,889	2,404
SITC 6—Intermed mfr.....	617	2,053	5,217	5,325	5,221	6,174	7,734	9,650
SITC 7—Machinery.....	269	1,110	3,502	3,812	4,291	6,203	8,033	9,962
SITC 8—Consumer mfr.....	357	1,493	3,515	3,351	3,690	5,072	7,320	9,959
SITC 9—Other.....	44	61	117	163	200	291	306	481
Total.....	3,451	9,584	20,480	21,804	23,052	29,712	36,631	46,721
Intra-IW:								
SITC 0—Food.....	13,122	30,417	55,466	62,200	55,477	55,898	69,605	82,001
SITC 1—Bev., tobac.....	2,149	3,998	9,055	9,653	9,369	10,298	12,103	14,344
SITC 2—Crude mat.....	13,656	29,105	49,432	54,595	42,408	43,421	47,509	57,146
SITC 3—Fuels.....	6,099	22,324	53,962	71,104	74,842	79,530	57,832	60,035
SITC 4—Veg. oils.....	621	2,073	2,633	2,659	2,357	3,042	2,454	2,682
SITC 5—Chem.....	12,368	34,165	70,833	78,318	74,971	85,907	103,930	125,234
SITC 6—Intermed mfr.....	34,598	76,380	139,722	162,239	123,556	139,973	171,767	201,969
SITC 7—Machinery.....	50,335	105,742	228,835	257,987	257,077	327,896	413,200	486,387
SITC 8—Consumer mfr.....	15,117	32,272	73,715	84,572	78,769	94,761	123,644	145,398
SITC 9—Other.....	2,315	4,215	9,099	12,739	12,580	15,968	18,324	20,954
Total.....	150,379	340,691	692,752	796,066	731,407	856,694	1,020,368	1,196,150
World:¹								
SITC 0—Food.....	27,687	57,098	105,546	113,849	100,491	105,464	129,869	145,864
SITC 1—Bev., tobac.....	2,974	5,547	11,784	12,539	12,273	13,154	15,361	18,310
SITC 2—Crude mat.....	26,317	54,748	87,456	96,102	73,184	76,118	80,094	95,005
SITC 3—Fuels.....	22,068	121,060	242,264	340,218	262,261	252,482	175,694	188,394
SITC 4—Veg. oils.....	1,471	4,509	5,665	5,237	4,565	5,863	4,700	5,066

TABLE 5.—INDUSTRIAL WEST IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE—
Continued

[In millions of dollars]

	1970	1974	1979	1980	1983	1985	1986	1987
SITC 5—Chem.....	13,726	38,010	79,444	89,049	86,008	99,275	118,476	142,651
SITC 6—Intermed mfr.....	44,024	98,561	181,263	209,592	164,062	186,193	226,134	270,025
SITC 7—Machinery.....	51,970	112,818	249,994	283,630	290,104	372,661	468,506	563,553
SITC 8—Consumer mfr.....	18,379	43,712	106,170	122,114	120,275	149,346	193,832	239,258
SITC 9—Other.....	3,038	5,446	12,906	16,922	16,450	20,755	24,433	27,681
Total.....	211,653	541,510	1,082,492	1,298,251	1,129,673	1,281,312	1,437,100	1,695,807

¹ Excluding inter-German trade because the FRG does not report trade with the GDR in the U.N. data series used for this table.
Source: U.N. Series D Trade Data, SITC Rev. 1 basis (on tape).

TABLE 6.—INDUSTRIAL WEST IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE

[as percent of total imports]

	1970	1974	1979	1980	1983	1985	1986	1987
East Europe:								
SITC 0—Food.....	26	17	13	11	11	11	12	13
SITC 1—Bev., tobac.....	1	1	1	1	1	1	1	1
SITC 2—Crude mat.....	13	10	9	9	8	9	9	8
SITC 3—Fuels.....	11	17	20	22	26	26	19	18
SITC 4—Veg. oils.....	1	2	1	0	0	1	0	0
SITC 5—Chem.....	7	8	6	8	10	10	10	9
SITC 6—Intermed mfr.....	21	21	21	21	19	18	21	21
SITC 7—Machinery.....	9	9	12	11	9	9	10	11
SITC 8—Consumer mfr.....	10	14	16	16	15	15	17	19
SITC 9—Other.....	1	1	1	1	1	1	1	1
Total.....	100	100	100	100	100	100	100	100
East Asian NIC's:								
SITC 0—Food.....	9	8	6	6	5	4	5	5
SITC 1—Bev., tobac.....	0	0	0	0	0	0	0	0
SITC 2—Crude mat.....	7	.4	3	3	2	1	1	1
SITC 3—Fuels.....	2	5	4	3	3	3	2	2
SITC 4—Veg. oils.....	1	0	0	0	0	0	0	0
SITC 5—Chem.....	1	1	2	2	2	2	2	2
SITC 6—Intermed mfr.....	15	18	17	16	14	13	13	12
SITC 7—Machinery.....	13	19	20	21	28	28	30	32
SITC 8—Consumer mfr.....	50	43	47	48	45	46	46	45
SITC 9—Other.....	3	1	1	2	2	2	2	1
Total.....	100	100	100	100	100	100	100	100
Latin American NIC's:								
SITC 0—Food.....	59	42	36	26	24	22	25	22
SITC 1—Bev., tobac.....	1	1	2	1	1	1	2	2
SITC 2—Crude mat.....	20	20	15	12	9	10	10	9
SITC 3—Fuels.....	1	1	13	31	34	27	15	15
SITC 4—Veg. oils.....	3	3	1	1	0	1	0	0
SITC 5—Chem.....	2	3	2	3	3	4	3	3
SITC 6—Intermed mfr.....	7	11	12	8	10	10	13	13
SITC 7—Machinery.....	4	11	12	11	14	18	23	27
SITC 8—Consumer mfr.....	2	8	5	5	4	6	7	7
SITC 9—Other.....	2	2	2	2	1	2	2	2
Total.....	100	100	100	100	100	100	100	100
South Europe:								
SITC 0—Food.....	30	22	18	18	16	14	15	15
SITC 1—Bev., tobac.....	9	7	5	5	4	3	3	3

TABLE 6.—INDUSTRIAL WEST IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE—
Continued

(as percent of total imports)

	1970	1974	1979	1980	1983	1985	1986	1987
SITC 2—Crude mat.....	13	9	7	7	6	6	6	6
SITC 3—Fuels.....	4	6	4	7	8	10	6	5
SITC 4—Veg. oils.....	3	2	1	0	1	1	1	1
SITC 5—Chem.....	4	5	5	5	5	6	5	5
SITC 6—Intermed mfr.....	18	21	25	24	23	21	21	21
SITC 7—Machinery.....	8	12	17	17	19	21	22	21
SITC 8—Consumer mfr.....	10	16	17	15	16	17	20	21
SITC 9—Other.....	1	1	1	1	1	1	1	1
Total.....	100	100	100	100	100	100	100	100
Intra-IW:								
SITC 0—Food.....	9	9	8	8	8	7	7	7
SITC 1—Bev., tobac.....	1	1	1	1	1	1	1	1
SITC 2—Crude mat.....	9	9	7	7	6	5	5	5
SITC 3—Fuels.....	4	7	8	9	10	9	6	5
SITC 4—Veg. oils.....	0	1	0	0	0	0	0	0
SITC 5—Chem.....	8	10	10	10	10	10	10	10
SITC 6—Intermed mfr.....	23	22	20	20	17	16	17	17
SITC 7—Machinery.....	33	31	33	32	35	38	40	41
SITC 8—Consumer mfr.....	10	9	11	11	11	11	12	12
SITC 9—Other.....	2	1	1	2	2	2	2	2
Total.....	100	100	100	100	100	100	100	100
World:								
SITC 0—Food.....	13	11	10	9	9	8	9	9
SITC 1—Bev., tobac.....	1	1	1	1	1	1	1	1
SITC 2—Crude mat.....	12	10	8	7	6	6	6	6
SITC 3—Fuels.....	10	22	22	26	23	20	12	11
SITC 4—Veg. oils.....	1	1	1	0	0	0	0	0
SITC 5—Chem.....	6	7	7	7	8	8	8	8
SITC 6—Intermed mfr.....	21	18	17	16	15	15	16	16
SITC 7—Machinery.....	25	21	23	22	26	29	33	33
SITC 8—Consumer mfr.....	9	8	10	9	11	12	13	14
SITC 9—Other.....	1	1	1	1	1	2	2	2
Total.....	100	100	100	100	100	100	100	100

Source: Table 5.

Poland's share of EE imports from the Industrial West grew markedly during the 1970's—from 23 percent in 1970 to 32 percent in 1980 (and up to 40 percent in intervening years)—as the Gierek regime launched its "new development strategy," which involved substantial increases in imports of Western capital goods for industrial modernization and restructuring and increases in food imports to provide incentives for workers. (See Table 7 and Figure 6.)¹² Meanwhile, Poland's share of EE exports to the Industrial West remained at about 31 percent.

¹² For a concise description of Poland's "new development strategy," see Zbigniew Fallenburg, "The Economic Crisis in Poland and Prospects for Recovery," in *East European Economies: Slow Growth in the 1980's*, vol. 3, op. cit., pp. 362-370.

TABLE 7.—INDUSTRIAL WEST TRADE WITH EAST EUROPEAN COUNTRIES

[In millions of dollars]

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Bulgaria:										
IW exports	300.818	1,046.160	1,489.620	1,739.600	1,454.977	1,455.364	1,328.520	1,726.255	2,076.980	2,176.402
IW imports	214.655	324.945	725.600	731.960	637.007	518.793	530.424	522.676	615.737	628.298
IW trade balance	86.163	721.215	764.020	1,007.640	817.970	936.571	798.096	1,203.579	1,461.243	1,548.104
Czechoslovakia:										
IW exports	736.720	1,790.013	2,729.806	2,194.471	2,013.075	1,846.634	1,800.573	2,036.310	2,593.641	3,160.687
IW imports	673.934	1,526.563	2,988.730	2,547.678	2,519.800	2,460.005	2,465.767	2,481.692	2,898.758	3,288.242
IW trade balance	62.786	263.450	-248.924	-353.207	-506.725	-613.371	-665.194	-445.382	-305.117	-127.555
East Germany: ¹										
IW exports	401.452	1,075.496	2,373.215	2,170.864	1,586.288	1,876.968	1,686.641	1,318.313	1,774.866	2,434.859
IW imports	381.591	950.037	1,936.770	1,995.188	2,202.714	2,215.007	2,123.922	2,149.928	2,317.047	2,414.301
IW trade balance	19.861	125.459	436.445	175.676	-616.426	-338.039	-437.281	-831.615	-542.181	20.558
Hungary:										
IW exports	584.352	1,785.757	3,117.238	3,120.560	2,787.316	2,494.432	2,427.708	2,731.584	3,363.385	3,794.256
IW imports	507.196	1,202.513	2,656.451	2,374.346	2,183.707	2,243.543	2,450.472	2,503.059	2,904.518	3,543.578
IW trade balance	77.156	583.244	460.787	746.214	603.609	250.889	-22.764	228.525	458.867	250.678
Poland:										
IW exports	827.010	5,277.907	6,131.576	4,073.788	3,054.030	2,720.352	2,761.749	2,922.372	3,188.179	3,749.743
IW imports	996.229	2,958.597	5,220.860	3,402.556	3,094.957	3,024.141	3,590.056	3,674.093	3,938.801	4,641.167
IW trade balance	-169.219	2,319.310	910.716	671.232	-40.927	-303.789	-828.307	-751.721	-750.622	-891.424

Romania:										
IW exports	672.300	1,897.853	3,619.472	2,788.599	1,482.707	1,120.282	1,206.937	1,270.859	1,459.663	1,094.720
IW imports	513.845	1,450.688	3,083.711	2,981.224	2,323.652	2,474.626	3,543.785	3,334.565	3,435.060	3,747.051
IW trade balance.....	158.455	447.165	535.761	-192.625	-840.945	-1,354.344	-2,336.848	-2,063.706	-1,975.397	-2,652.331
East Europe: ¹										
IW exports	3,522.652	12,873.187	19,460.928	16,087.882	12,378.391	11,514.031	11,212.128	12,005.692	14,456.715	16,410.666
IW imports	3,287.450	8,413.342	16,602.121	14,032.953	12,961.836	12,936.116	14,704.427	14,666.013	16,109.920	18,262.638
IW trade balance.....	235.202	4,459.845	2,858.807	2,054.929	-583.445	-1,422.085	-3,492.299	-2,660.321	-1,653.205	1,851.972

¹ Excluding inter-German trade because the FRG does not report trade with the GDR in the U.N. data series used for this table.

Source: U.N. Series D Trade Data, SITC Rev. 1 basis (on tape).

V. GROWTH AND COMPOSITION OF IW-EE TRADE: 1980-87

IW-EE trade peaked in 1980; EE exports to the Industrial West finally surpassed their 1980 level in 1987, but EE imports in 1987 were still 16 percent below their 1980 level. The debt crisis of 1981-82 induced the East European countries to slash their imports from the Industrial West by 41 percent between 1980 and 1983. Meanwhile, EE exports to the Industrial West dropped by 22 percent as a severe recession led to declines in Industrial Western country growth rates and trade levels. The severity of the import cuts varied among the East European countries, depending on each country's degree of indebtedness and access to continued—albeit more limited—Western credits. Among the East European countries, heavily indebted Poland and Romania reduced their imports most sharply during 1980-83, by 56 percent and 69 percent, respectively. The GDR was the only EE country to succeed in increasing its exports to the IW during this period.

IW-EE trade bottomed out in 1983. Having achieved substantial improvements in their hard currency trade balances, the East European countries eased austerity measures in 1983-84 and most countries (except Hungary and Bulgaria) experienced increases in economic growth rates. EE imports from the Industrial West in nominal terms increased strongly, except for Romania which maintained severe restraints on imports in line with Ceausescu's aim of eliminating Romania's hard currency debt as rapidly as possible.¹³ In real terms, however, overall EE imports from and exports to the Industrial West virtually stagnated after 1983 (except for a healthy increase in EE exports in 1984).¹⁴

Substantial reductions in Poland's two-way trade with the Industrial West and in Romania's imports from the Industrial West contributed to a noticeable rearrangement in EE country shares of IW-EE trade. (See figures 5 and 6.) Romania is now the smallest East European market for IW exports, with only 7 percent of EE imports from the Industrial West in 1987 (down from second place with 20 percent in 1980). Poland's share of IW-EE trade has fallen from one-third in 1980 to one-fourth in 1987. Hungary's and Czechoslovakia's shares have grown to about 20 percent each of IW-EE exports and imports. Romania's determined export drive has maintained its 20 percent share of EE exports to the Industrial West.

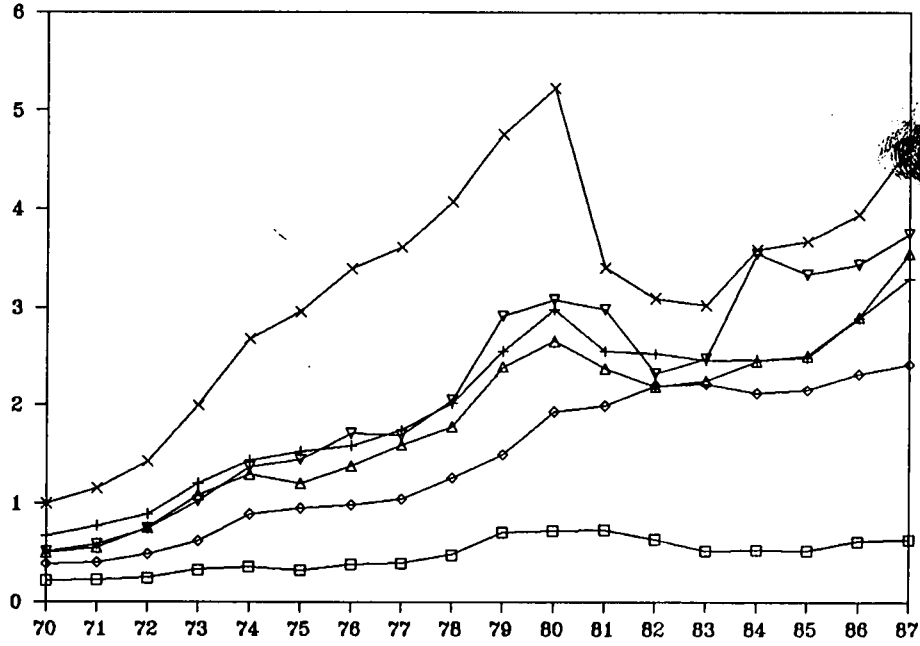
¹³ In April 1989, Ceausescu announced that all Romania's foreign debts had been completely repaid. (Western sources indicate that Romania still owes up to \$400 million to official and commercial creditors.) Romania recently passed a law forbidding any future foreign borrowing other than normal trade financing.

¹⁴ Dollar depreciation greatly inflated the nominal values of both East European and Industrial Western trade in 1986 and 1987. See *Economic Survey of Europe in 1987*, op. cit., pp. 287-291.

Figure 5

IW Imports from Eastern Europe

Billion \$

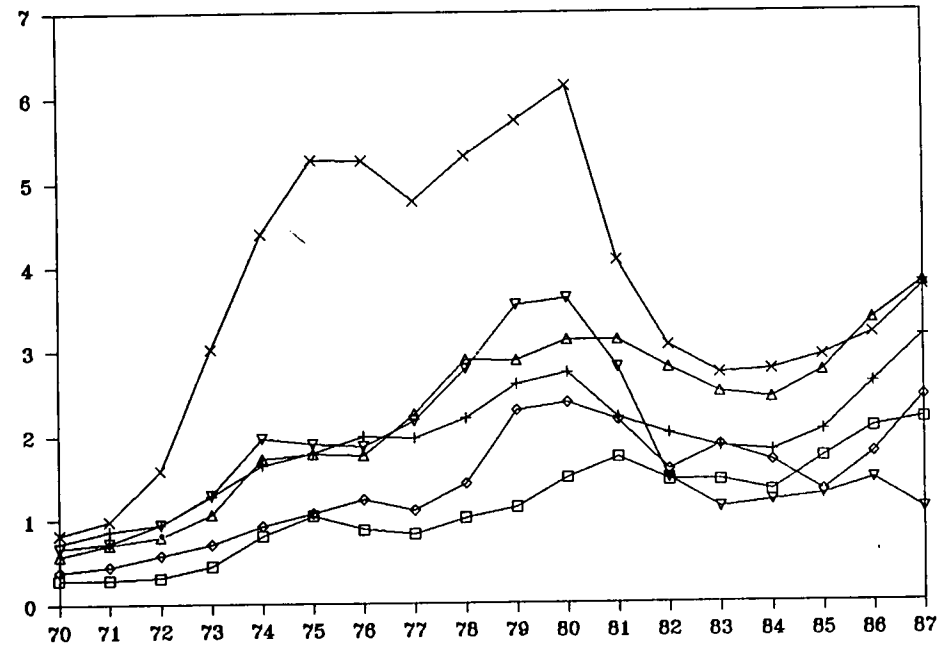


□ Bulg + Czech ◇ GDR Δ Hung × Pol ▽ Rom

Figure 6

IW Exports to Eastern Europe

Billion \$



□ Bulg + Czech ◇ GDR △ Hung × Pol ▽ Rom

While Eastern Europe, the Latin American NIC's, and Southern Europe all cut back on their imports from the Industrial West during the 1980-83 recession period, the Latin American NIC's and Southern Europe were able to increase their exports to the Industrial West. The East Asian NIC's were the only country group to achieve increases in both exports to and imports from the Industrial West over 1980-83.

Since the East European countries reduced imports from the Industrial West across the board rather than selectively, the composition of IW exports to Eastern Europe remained virtually unchanged between 1980 and 1983. The composition of IW exports to other country groups also remained quite stable. Since 1983, the proportion of machinery in IW exports has increased for all country groups. However, the changes in the composition of IW exports to different country groups over the whole 1970-87 period has resulted in noticeably higher shares of machinery in IW exports to the other country groups than in IW exports to Eastern Europe while chemicals and intermediate manufactures account for larger shares of IW exports to Eastern Europe than to other country groups. (See Table 4.)

The gap between Eastern Europe and other country groups in the share of machinery also widened on the IW import side during 1980-87. The machinery share of IW imports from Eastern Europe remained at 11 percent between 1980 and 1987 (with some variation in intervening years). Meanwhile, the machinery share IW imports rose steadily for all the other country groups. (See Table 6.) The lack of development in the composition of EE trade with the Industrial West leaves the gap between the share of machinery in EE imports from the Industrial West and in EE exports to the Industrial West virtually unchanged at about 25 points. By contrast, the other country groups have substantially reduced the disparity between the machinery proportion of their imports and that of their exports.

The stagnation in the structure of EE trade with the Industrial West leaves Eastern Europe with a markedly "less advanced" and more resource-intensive composition of exports to the Industrial West than most other country groups.¹⁵ Eastern Europe has been comparatively unsuccessful in achieving its long-standing aim of significantly increasing the manufactures share of its exports to the Industrial West. In 1987, manufactured goods (SITC 5-8) composed only 60 percent of EE exports to the Industrial West, compared to 68 percent of South European exports, 80 percent of intra-IW exports, and 91 percent of East Asian NIC exports. (Manufactures constituted 50 percent of Latin America NIC exports in 1987, but this represents a notable advance over 1970, when manufactures accounted for only 15 percent of Latin American NIC exports to the Industrial West.)

¹⁵ This observation is only suggestive, because the share of "advanced" or high-technology products in a country's total exports or imports cannot be equated with the share of machinery or manufactures in external trade. Many types of machinery are not high-tech goods, while other commodity groups include significant high-tech products, e.g., certain chemicals in SITC 5 and scientific instruments in SITC 8.

VI. PROSPECTS FOR IW-EE TRADE

With the notable exception of Romanian relations with the West, the political framework for IW-EE trade continues to be very favorable as Gorbachev's economic reforms and diplomatic initiatives have further warmed the East-West atmosphere, the CMEA has concluded an initial agreement with the EC, and Hungary has led the East European countries in signing a trade liberalization accord with the EC while pushing ahead with its economic reforms. However, IW-EE trade is expected to grow slowly, at best, in the near term.¹⁶ East European countries' inability to substantially expand their hard currency exports is the primary constraint on growth in IW-EE trade.

A principal impediment to significant increases in EE exports is their commodity composition: compared to East Asian NIC and IW export structures, EE exports are more heavily weighted toward products—agricultural goods and other nonmanufactures and traditional manufactured products such as iron and steel, textiles, and apparel—in which IW imports have been growing comparatively slowly (from Table 8). In addition, EE exports of these products must contend with strong competition on Western markets from East Asian and Latin American NIC's and Southern Europe, and with trade barriers, erected against these commodities precisely because these are "sunset products" which are protected in order to cushion the impact of their declining competitiveness on domestic industry and employment. Implementation by the European Community (EC) member countries of scheduled measures to achieve a unified EC market by 1992 may further hamper East European countries' ability to compete against the South European EC members in Industrial Western markets. Increases in EE exports are also hampered by deficiencies in the quality, marketing, styling, and aftersales service of East European products.

TABLE 8.—INDUSTRIAL WEST MANUFACTURES IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE ¹

[As percent of total manufactures]

	1970	1974	1979	1980	1983	1985	1986	1987
East Europe: ²								
Iron and steel	21	16	15	13	12	12	12	11
Chemicals	16	16	13	15	20	21	18	16
Other semi-mfrs	6	5	6	6	7	7	8	8
Total semi-mfrs	43	37	33	34	39	40	38	35
Specialized mach.....	11	8	8	9	6	6	7	7
ADP and telecom	1	1	1	1	1	1	1	1
Vehicles	2	2	4	4	3	4	3	3
Other mach.....	9	11	11	11	9	8	9	10
Total engineering	23	22	24	24	19	19	19	20
House appliance	2	2	2	2	3	2	3	3

¹⁶ See *Economic Survey of Europe in 1987*, op. cit., pp. 287-303, and Jan Stankovsky, "East-West Trade 1987-1989: Slight Improvement in Sight (Developments in 1987 and Prospects for 1988/89)," *Forschungsberichte*, No. 150, Vienna: Wiener Institut Fuer Internationale Wirtschaftsvergleiche, October 1988.

TABLE 8.—INDUSTRIAL WEST MANUFACTURES IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE ¹—Continued

[As percent of total manufactures]

	1970	1974	1979	1980	1983	1985	1986	1987
Clothing.....	8	13	16	14	15	14	15	16
Textiles.....	7	8	7	7	6	6	6	6
Other consumer.....	16	17	17	18	18	18	18	19
Total consumer.....	33	40	42	42	42	41	43	45
Total mfrs.....	100	100	100	100	100	100	100	100
East Asian NIC's:								
Iron and steel.....	0	3	2	3	3	3	2	2
Chemicals.....	1	2	2	2	2	2	2	2
Other semi-mfrs.....	8	7	7	6	4	4	4	4
Total semi-mfrs.....	9	12	11	10	9	8	8	7
Specialized mach.....	0	1	2	2	3	3	3	3
ADP and telecom.....	6	10	9	10	14	15	15	16
Vehicles.....	0	0	0	0	0	0	2	3
Other mach.....	5	6	7	7	11	11	10	10
Total engineering.....	11	17	18	19	28	29	30	32
House appliance.....	8	13	14	15	12	11	11	12
Clothing.....	34	31	28	27	24	23	22	21
Textiles.....	9	8	6	5	4	3	3	3
Other consumer.....	29	19	23	24	23	24	25	24
Total consumer.....	80	71	71	70	63	62	62	60
Total mfrs.....	100	100	100	100	100	100	100	100
Intra-IW:								
Iron and steel.....	9	9	6	6	5	5	4	4
Chemicals.....	12	15	15	15	16	15	14	14
Other semi-mfrs.....	8	9	10	10	8	8	8	8
Total semi-mfrs.....	29	33	31	31	28	27	26	26
Specialized mach.....	14	12	12	12	10	11	11	11
ADP and telecom.....	5	5	5	6	8	9	9	9
Vehicles.....	14	14	16	15	18	19	19	19
Other mach.....	17	16	15	16	17	16	16	16
Total engineering.....	50	47	49	49	53	55	55	55
House appliance.....	5	5	4	4	5	5	5	5
Clothing.....	3	3	3	3	2	2	3	3
Textiles.....	6	5	5	4	4	3	4	3
Other consumer.....	7	7	8	8	8	8	8	8
Total consumer.....	21	20	20	20	19	18	19	19
Total mfrs.....	100	100	100	100	100	100	100	100
World: ²								
Iron and steel.....	9	9	6	6	5	5	4	4
Chemicals.....	12	15	14	14	14	13	13	13
Other semi-mfrs.....	10	10	10	10	9	8	8	8
Total semi-mfrs.....	31	33	31	31	28	26	25	25

TABLE 8.—INDUSTRIAL WEST MANUFACTURES IMPORTS FROM EASTERN EUROPE IN COMPARATIVE PERSPECTIVE ¹—Continued

[As percent of total manufactures]

	1970	1974	1979	1980	1983	1985	1986	1987
Specialized mach.....	12	11	10	10	9	9	9	9
ADP and telecom.....	5	5	6	6	8	9	9	9
Vehicles.....	13	12	14	14	15	16	17	16
Other mach.....	16	15	15	15	16	15	15	15
Total engineering.....	46	43	45	45	48	50	50	50
House appliance.....	5	5	5	5	5	5	5	5
Clothing.....	4	5	5	5	5	5	6	6
Textiles.....	6	6	5	5	4	4	4	4
Other consumer.....	8	8	9	9	9	9	9	10
Total consumer.....	23	24	24	24	24	24	24	25
Total mfrs.....	100	100	100	100	100	100	100	100

¹ This more detailed breakdown of IW manufactures imports is based on a more representative allocation of SITC commodities to different commodity groups; this allocation of commodities is given in Economic Survey of Europe in 1987, op. cit., p. 304.

² Excluding inter-German trade because the FRG does not report trade with the GDR in the U.N. data series used for this table.

Source: U.N. Series D Trade Data, SITC Rev. 1 basis (on tape).

The proportion of chemicals and intermediate manufactures in imports from the Industrial West—41 percent for Eastern Europe in 1987, compared to 23–29 percent of imports from the Industrial West for the other country groups (from Table 4)—has remained stubbornly high for Eastern Europe while it has declined for the other country groups. This high share is consistent with the observation that the East European countries have not been able to carry out significant economic restructuring and hence remain comparatively resource intensive. EE imports of chemicals and intermediate manufactures absorb a large share of the hard currency available to East European countries for imports, constraining Eastern Europe's ability to increase machinery imports from the Industrial West.

The relatively low shares of machinery in EE imports from the Industrial West compared to other country group import compositions will impede East European efforts to modernize their export structures and enhance product competitiveness and will contribute to increasing Eastern Europe's technological lag behind the Industrial Western countries. However, even significant increases in EE imports of technology and capital goods from the Industrial West are unlikely to lead to notable improvements in East European export performance in the absence of thorough and effective systemic reforms in Eastern Europe.¹⁷ Without such reforms, additional machinery imports probably would only lead to reproduction of the present East European industrial structures, rather than to the restructuring of output and exports that is urgently needed.

Romania's export efforts may be hampered by its decision not to seek renewal of its U.S. Most Favored Nation (MFN) status, which expired in July 1988. At worst, the loss of MFN status could lead to

¹⁷ For a review of the factors that have stymied East European efforts to assimilate Western technology, see George Holliday, "East European Trade: Overview," in *East European Economies: Slow Growth in the 1980's*, vol. 2, op. cit., p. 3.

a fall of up to \$200 million annually in Romanian exports to the United States ¹⁸ (equivalent to 25 percent of 1987 U.S. imports from Romania and 5 percent of 1987 total IW imports). While suspension of MFN will not affect U.S. imports of petroleum products, which compose 50 percent or more of total U.S. imports from Romania, other important Romanian exports to the United States—such as apparel, furniture, and iron and steel products—will encounter sharply higher tariffs. Diversion of these products to other Industrial Western countries will be problematic, since these goods face trade barriers and strong competition in other Industrial Western markets.

¹⁸ Karen Ware and Jay Burgess, "Policy Developments Affect Prospects for East Europe Trade," *Business America*, Washington, DC: U.S. Department of Commerce, Apr. 25, 1988, p. 15.

EASTERN EUROPE'S RELIANCE ON WESTERN TECHNOLOGY

By Steven W. Popper*

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I. SUMMARY

This report provides an assessment of East European reliance on high-technology imports from the West.¹ In section II, a measure to provide a relative scale of reliance on Western imports for a sample of commodities is calculated for each of the six East European members of CMEA as well as for the Soviet Union and Yugoslavia over the period 1980-84.

Section III provides a measure of overall reliance for each country by aggregating over the group of commodities discussed. This measure is then compared with a similar measure for all machinery to determine if reliance on these commodities is greater than on the general category of machinery imports. The section dis-

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¹ This article summarizes research presented more fully in *East European Reliance on Technology Imports from the West*, by Steven W. Popper, RAND Report R-3632-USDP, August 1988.

cusses the relative importance of these commodities to Western countries as exports.

Section IV presents a brief case study, the importation of machine tools by Hungary. This use of additional data sources provides a check on the relation between the import reliance measures and the actual flow of imports to Eastern Europe.

Section V offers the study's conclusions.

II. EAST EUROPEAN RELIANCE ON INDIVIDUAL COMMODITIES

It is difficult to frame an operational definition of import dependence that permits unequivocal statements about the relationships that actually exist between trading nations. Colloquial use of the term *dependence* often goes beyond its narrow economic sense; the meaning it conveys is also inherently a political one. Even if it can be shown unequivocally that a specific policy of denial will lead to costs being imposed upon an erstwhile trading partner, at what level can such costs be said to be unacceptable? Clearly, the answer depends on the choices made by the target's political leadership. If the response is to bear the costs and alter relations in the domestic economy rather than modify other behavior in the face of an embargo, it is difficult to say that a nation is dependent on the severed trade tie in the simplest sense of the word.

This study does not confront the complexities of the larger question of dependence on the West for higher-technology goods. It is limited to a determination of the revealed reliance on Western imports by individual East European countries for specific categories of high-technology goods.

The import reliance measure is calculated by aggregating the total imports from developed Western countries² for each disaggregate commodity group and dividing this value by the total for all imports in this category from both the West and the CMEA. The measure is stated as a ratio, with 1.00 the theoretical maximum, i.e., all imports in the category come from the West, and 0.00 the minimum. All data are derived from statistics compiled annually by the United Nations Economic Commission for Europe (UNECE) for the years 1980 to 1984. Since Soviet data are available only for 1980 and 1983, the basic import reliance measure has been calculated for each year excluding Soviet exports in the denominators. For those 2 years, a second measure, including Soviet data, is reported in brackets.

The measure was constructed by aggregating mirror export statistics rather than by relying on each CMEA country's import data. This provides more continuity to the reporting across time. It also reduces somewhat the possible effects of idiosyncratic reporting practices on comparisons across countries. This method also allows import reliance measures to be constructed for the GDR and Rumania, which is not possible using only the official publications of those countries.

The method is intended to provide a means for comparison. It should not be interpreted as a precise measure of the *absolute* levels of import reliance since the denominator cannot include im-

² This procedure is detailed in the Appendix, and the commodity groups are also discussed.

ports from all sources.³ However, these figures do constitute relative measures that can be used to compare different degrees of reliance across countries and over time.

The statistic measures reliance on the West as a source of imports. It says nothing about reliance upon imports in general. A high relative import reliance implies that much of what is imported in a given category comes from the West, not necessarily that there is a great absolute dependence on imports of that commodity. By the same token, even when absolute levels are not great and reductions in Western imports may not appear large in terms of total consumption by domestic industry, bottlenecks may cause greatly magnified effects.

SELECTED FINDINGS BY COMMODITY GROUP ⁴

Centrifuges, Filtration Apparatus, Pumps for Nonliquids, Compressors

The data for this group of goods are reported in Table 1. These goods show generally high import reliance measures relative to other goods in the sample. These commodities often require careful machining to precise tolerance, yet are not subject to severe export controls. Yugoslav reliance on Western deliveries in total imports is almost 1.00. The measure for Hungary is also high and increases from 1980 to 1984, while that for Bulgaria shows the greatest increase. The measure for the GDR rose over the period, while Czechoslovakia's showed little change. Among the six East European CMEA countries, only Poland and Rumania showed a decline during the period, and the overall Polish decline was nominal, with a dip in 1981. Rumania's 1984 import reliance measure for these goods is still higher than its reliance measure for any other commodity group in the technology sample.

TABLE 1.—WESTERN IMPORT RELIANCE MEASURES FOR CENTRIFUGES, PURIFICATION AND FILTRATION APPARATUS, NONLIQUID PUMPS, AND COMPRESSORS (SITC 743) ¹

Country	1980	1980 ^a	1981	1982	1983	1983 ^a	1984
Yugoslavia.....	0.99	[0.99]	0.99	0.93	0.98	[0.95]	0.99
Bulgaria.....	.50	[.41]	.55	.78	.83	[.71]	.75
Czechoslovakia.....	.60	[.60]	.61	.64	.62	[.55]	.64
GDR.....	.35	[.35]	.32	.75	.64	[.61]	.49
Hungary.....	.77	[.74]	.80	.87	.88	[.84]	.89
Poland.....	.76	[.72]	.49	.64	.63	[.60]	.72
Rumania.....	.74	[.68]	.64	.38	.38	[.28]	.39
U.S.S.R.....	.63	[.63]	.46	.66	.73	[.73]	.45

¹ Does not include Rumanian or Soviet exports, or exports from the FRG to the GDR.

² Includes Soviet exports.

Source: UNECE, various years.

The evidence suggests that this category contains high-technology goods that either are not produced in sufficient variety in the CMEA or are of higher quality in the West. In the absence of export controls, current reliance on this technology is comparative-

³ See the note on country data in the Appendix.

⁴ See Popper (1988) for a fuller treatment of all commodities included in the sample.

ly high. The difference between the import reliance measure for Yugoslavia and that for the CMEA in general (ranging from 0.10 to 0.45) may in this case be attributable more to the ongoing trade patterns dictated by CMEA institutions (and a concomitant orientation by Yugoslavia toward Western markets) than to export differentiation by Western nations.

Metal-Working Machine Tools

This category includes traditional, manually controlled varieties as well as higher technology numerically controlled (NC), machine tools. Many NC machine tools are on the export control lists of the West. The trade data do not distinguish between these categories, even at the five-digit SITC level. The simplest hypothesis is that for most of Eastern Europe the tendency would be to import the less-complex machines from CMEA partners rather than the West because of the difference in cost. Only more-advanced, higher quality tools that are not readily available from CMEA partners are worth the expenditure of hard currency necessary to import them from the West.

Machine tools are the archetypal producers' good. They are the machines that make other machines and are an essential engine for driving economic growth. The ability to produce high-technology machine tools has been a prime desideratum of the CMEA, and a great deal has been invested in attempting to achieve this ability. NC machine tools integrated into flexible manufacturing systems with the addition of robotics are a major thrust of CMEA's Comprehensive Program in Science and Technology and the subject of its first multilateral joint venture, INTERROBOT. Investments to increase the capacity of the Soviet Union to produce higher quality machine tools in greater quantities have been made the cornerstone of the Gorbachev investment program. The Soviets are also eager to receive machine tools from East European manufacturers that come closer to world standards of technical quality.

Machine tools are also of interest because they form the single largest category of Western high-technology exports to the CMEA. In 1983, they accounted for 2.3 percent of total Western exports to Socialist countries and 20 percent of all high-technology exports, as defined by the U.S. Department of Commerce (Lenz and Stiltner, 1985).

The data for machine tools are shown in Table 2. The import reliance measures for machine tools are relatively high, but unlike those for centrifuges and filtration apparatus, they declined between 1980 and 1984. During this period, the measure for Yugoslavia, again the country with the largest import reliance, declined only slightly. Like most of the East European CMEA, Yugoslavia suffered from balance-of-payments difficulties during this period, more severely than most. Although they are not affected by COCOM restrictions, given their trading relationship with the CMEA, the Yugoslavs would probably prefer to be able to import from the CMEA the goods that are not available domestically. Therefore, many of the Western machine tools Yugoslavia imports may be advanced types that are not available from the CMEA.

TABLE 2.—WESTERN IMPORT RELIANCE MEASURES FOR METAL-WORKING MACHINE TOOLS (SITC 736) ¹

Country	1980	1980 *	1981	1982	1983	1983 *	1984
Yugoslavia.....	0.79	[0.75]	0.75	0.73	0.70	[0.63]	0.73
Bulgaria.....	.25	[.18]	.41	.42	.54	[.43]	.49
Czechoslovakia.....	.50	[.38]	.39	.40	.39	[.31]	.42
GDR.....	.39	[.30]	.43	.39	.39	[.30]	.19
Hungary.....	.52	[.45]	.45	.35	.42	[.36]	.40
Poland.....	.64	[.46]	.67	.57	.32	[.24]	.31
Rumania.....	.50	[.42]	.30	.10	.22	[.15]	.10
U.S.S.R.....	.55	[.55]	.47	.40	.41	[.41]	.32

¹ Does not include Rumanian or Soviet exports, or exports from the FRG to the GDR.

* Includes Soviet exports.

Source: UNECE, various years.

However, it cannot be assumed that the observed import reliance stems solely from a difference in technological level. There are practical difficulties in guaranteeing regular shipments from CMEA countries of goods that are subject to chronic excess domestic demand.⁵ The mechanism of trade within the CMEA also compounds this with problems of timely delivery, quality control, and service support. These might lead to some purchases of Western machine tools even though satisfactory substitutes are theoretically available from CMEA countries. Nevertheless, the fact remains that the Yugoslav reliance measures in this category are considerably higher than those for any of the other countries under discussion. A portion of the difference between the Yugoslav import reliance measure and that of the CMEA countries must be ascribed to Yugoslavia's ability to import machine tools of a technologically quality that would also be attractive to East European importers in the absence of export controls by the West.

Of the eight countries in the sample, only Bulgaria showed a marked increase in the import reliance measure for machine tools, starting from the lowest level in the CMEA in 1980 and achieving the highest in 1984. The apogee was reached in 1983, due, in part, to a strategy emphasizing greater growth in machinery and equipment investment than in total investment, and the absence of the balance-of-payments problem that affected other CMEA countries.

These figures suggest that there may be a relatively high level of fundamental reliance on Western machine-tool imports necessary to maintain reasonable and prudent levels of basic growth in CMEA economies. While this is by no means certain, only two countries fell below the level of 0.30 during the period studied, the GDR and Rumania. The GDR's 1984 measure is suspect because of the exclusion of imports from West Germany and because it represents a sharp dip from the steady 0.39 [0.30] registered in 1980 through 1983. The downturn might be explained by East Germany's hard currency liquidity squeeze, which led to greater use of the special bilateral clearing arrangement with West Germany than of conventional commercial relations with the rest of the West. Rumania's decline can be explained by the fact that Rumanian-

⁵ It is not clear, however, that all types of machine tools would necessarily fall into this category.

an economic and trade policy at the time resembled less a case of trimming the sails than of scuttling the ship.

A result of some interest in the case of Czechoslovakia and several of the more technically advanced East European countries is the relatively lower attractiveness of Soviet machine tools inferred from these data. The availability of Soviet export data for 1980 and 1983 makes possible the calculation of two import reliance measures, the standard as well as one incorporating Soviet deliveries. The difference between the import reliance measures calculated both with and without these data may be seen in Table 2 above. Table 3 shows the percentage by which Soviet deliveries reduced the standard import reliance measures in 1980 and 1983. In 1983, when matters of hard currency cost and relative price would presumably be most dominant, Western import reliance measures generally fell, but the relative differences between these measures with and without Soviet exports actually narrowed for several countries when compared to the figures for 1980. In other words, Czechoslovakia, Bulgaria, and even Poland concentrated on filling the machine-tool import gap with deliveries from the non-Soviet CMEA in preference to increasing Soviet deliveries. The ratios of the two import reliance measures for 1980 and 1983 remained more or less unchanged for the GDR and Hungary; only Yugoslavia, marginally, and Rumania, significantly, relied on more Soviet imports relative to the total. The implication is that the rest of the CMEA countries view Soviet machine-tool deliveries less favorably, or rely upon them less fully, than those from other CMEA states.

TABLE 3.—CHANGE IN STANDARD IMPORT RELIANCE MEASURES FOR METAL-WORKING MACHINE TOOLS RESULTING FROM SOVIET DELIVERIES

[Percentage]

Country	1980	1983	Change
Yugoslavia.....	5.0	10.0	5.0
Bulgaria.....	28.8	20.8	-8.0
Czechoslovakia.....	24.2	18.4	-5.8
GDR.....	23.4	23.3	-.1
Hungary.....	13.9	15.4	1.5
Poland.....	27.9	23.0	-4.9
Rumania.....	16.5	33.6	17.1

Source: UNECE, various years

Automatic Data Processing Equipment

This category can reasonably be said to include high-technology commodities. The current version of the SITC separates less-advanced equipment into other categories. SITC 752 goods are among the most stringently controlled by COCOM and other export control authorities, as is clear from the import reliance measures given in Table 4.

TABLE 4.—WESTERN IMPORT RELIANCE MEASURES FOR AUTOMATIC DATA PROCESSING EQUIPMENT (SITC 752) ¹

Country	1980	1981	1982	1983	1983 *	1984
Yugoslavia.....	0.99	0.92	0.90	0.78	[0.78]	0.81
Bulgaria.....	.17	.15	.17	.14	[.11]	.25
Czechoslovakia.....	.21	.13	.10	.08	[.06]	.06
GDR.....	.12	.11	.04	.13	[.09]	.03
Hungary.....	.36	.13	.22	.15	[.12]	.20
Poland.....	.46	.14	.10	.10	[.08]	.08
Rumania.....	.55	.19	.15	.04	[.04]	.10
U.S.S.R.....	.12	.07	.04	.04	[.04]	.05

¹ Does not include Rumanian or Soviet exports, or exports from the FRG to the GDR.

* Includes Soviet exports.

Source: UNECE, various years

Yugoslavia, not on the COCOM list, had high but falling import reliance measures.⁶ The nadir occurred in 1983. Again, the clearest explanation for the decline is severe hard currency balance-of-payments problems. The highest import reliance measure among the other countries was Rumania's in 1980, which fell drastically by 1984. Rumania was not an active participant in the cooperative CMEA computer program and relied as much as possible on Western contracts, including, but not limited to, imports. Rumania also has joint ventures with Western microelectronics manufacturers. It has received preferential treatment in many areas of export control, but many of its requests for exception in microelectronics have been denied. The other CMEA nations that received generally favorable treatment from the West also had the highest import reliance measures. Poland fell from 0.46 to 0.10 [0.08] in 1983 and 0.08 in 1984. Hungary declined from 0.36 to 0.20 during the period, with a dip to 0.15 [0.12] in 1983. None approached the uncontrolled Yugoslav level. Czechoslovakia, a less-favored but nonetheless technologically advanced nation, also declined steadily.

In addition to balance-of-payments problems, there are several alternative explanations for the general decline in imports reliance measures for this category. The three most likely alternatives would be increased reluctance on the part of Western exporters to transfer the specific technology desired by Eastern Europe, success in developing dependable substitutes within the CEMA, and importation from outside the developed West.

The first hypothesis carries some weight if the gap between Western and CMEA computer technology is growing. A greater CMEA ability to provide for less-advanced types of computers would lead to a decreasing share of imports from the West in the presence of controls on advanced technologies. The second hypothesis, voluntary substitution of increasingly adequate CMEA alternatives, cannot be rejected by the import reliance data. It receives some substantiation from data on the change in the absolute volume of trade. For all countries except Yugoslavia, the total value of imports of computer equipment from both the West and the CMEA increased between 1980 and 1984. If the totals received from the West and from the CMEA are considered separately, they

⁶ The Soviet Union did not report its exports in this category in 1980.

show a sharp increase (100 to 300 percent) in the value of total CMEA imports for all countries except Bulgaria. However, this result must not be taken as definitive, because there are serious problems of valuation, and more needs to be known about the pricing of data processing machinery within the CMEA. A comparison of trade figures for 1984 with those for 1980 shows mixed results: a gradual decline in total value imported from the West for some countries, and increases for others. Hungary showed an increase of 18.5 percent, and the Soviet Union, 33.6 percent. Bulgaria's import reliance increased by 85.7 percent. Given that little of this traffic originated in the United States and that the dollar appreciated considerably during this period, it is difficult to say with certainty that the general flatness of the slope for the value of Western computer deliveries means that the physical volume of imports from the West was in decline and substitution was occurring.

Bulgaria, a country without serious balance-of-payments problems in the early 1980's, well integrated into the CMEA computer program, and making a strong effort to automate production in several industrial sectors, showed no great difference between the increase in its imports of computers from the CMEA and the increase in its imports from the West. There is no evidence of a substitution away from Western computers to more CMEA deliveries. In fact, Bulgaria was the only country in the sample that showed an increased Western import reliance measure. The strongest statement that can be supported by the data is that it is not yet clear that a CMEA country seeking modernization of production can forgo imports of microelectronic equipment from the West and rely solely on CMEA sources.

III. OVERALL RELIANCE ON TECHNOLOGY IMPORTS FROM THE WEST

This section summarizes the findings for the commodity groups by extending the method employed in the previous discussion to illustrate overall reliance by individual CMEA countries on technology imports from the West.⁷

SHARE OF TECHNOLOGY-SAMPLE GOODS IN TOTAL IMPORTS

Assessment of the economic impact of the technology-sample commodities on each East European country is beyond the scope of this study. Nevertheless, it is useful to indicate roughly the volume that these goods represent in the aggregate. Table 5 shows the annual share of the technology-sample commodities in the aggregate amount of machinery imports (SITC 7) from the West. The technology-sample commodities constitute an average of approximately 15 percent of the total. Their share has grown during the period for all countries except the GDR (whose figures are problematic in the absence of FRG export data), Rumania, and the U.S.S.R.

⁷ The figures for 1980, are biased in the direction of greater reliance on imports from the West, since export data were not available for all commodities for all the CMEA countries.

TABLE 5.—SHARE OF TECHNOLOGY-SAMPLE IMPORTS IN TOTAL MACHINERY IMPORTS FROM THE WEST

[Percentage]					
Country	1980	1981	1982	1983	1984
Yugoslavia.....	12.3	11.2	13.8	14.7	15.2
Bulgaria.....	10.2	11.9	17.4	22.8	19.4
Czechoslovakia.....	14.2	13.9	14.5	15.4	15.3
GDR ¹	14.6	15.1	15.8	14.9	10.7
Hungary.....	12.4	11.7	10.8	12.3	14.1
Poland.....	5.1	18.9	21.2	15.1	13.6
Rumania.....	22.0	17.3	9.4	17.5	10.2
U.S.S.R.....	20.7	16.2	13.9	16.6	16.1

¹ Does not include exports from the FRG to the GDR.

Source: UNECE, various years.

TRADE-WEIGHTED IMPORT RELIANCE MEASURES

The import reliance measures for the individual technology-sample commodities were aggregated into a single, trade-weighted import reliance measure for each country. Table 6 lists the trade-weighted Western import reliance measures by year. Yugoslavia's overall measure of import reliance, not surprisingly, is the highest. It remained relatively steady, actually increasing somewhat by 1984. The 1983 measure indicates a slight increase in reliance upon Soviet deliveries. Poland, Rumania, and Hungary began the period with approximately equal overall measures but declined at varying rates. Hungary's measures declined gradually, whereas Poland's decline was a bit more exaggerated. The falloff in Rumania was drastic.

TABLE 6.—TRADE-WEIGHTED WESTERN IMPORT RELIANCE MEASURES FOR ALL TECHNOLOGY-SAMPLE COMMODITIES ¹

Country	1980	1980 ^a	1981	1982	1983	1983 ^a	1984
Yugoslavia.....	0.77	[0.76]	0.84	0.84	0.78	[0.73]	0.82
Bulgaria.....	.21	[.17]	.31	.39	.49	[.39]	.40
Czechoslovakia.....	.35	[.30]	.28	.28	.24	[.19]	.23
GDR ¹.....	.27	[.23]	.25	.24	.26	[.20]	.12
Hungary.....	.46	[.43]	.42	.41	.38	[.31]	.37
Poland.....	.49	[.41]	.45	.47	.31	[.25]	.31
Rumania.....	.47	[.41]	.30	.13	.19	[.14]	.12
U.S.S.R.....	.38	NA	.23	.23	.25	NA	.19

¹ Does not include Rumanian or Soviet exports, or exports from the FRG to the GDR.

^a Includes Soviet exports.

Source: UNECE, various years.

The figures for Czechoslovakia also show a decline during this period; those for the GDR are, again, problematic due to the omission of export data from the FRG, but they also indicate a gradual decline, although most of the loss appears in the measure for 1984.

Bulgaria is the odd man out. From the lowest overall reliance level in 1980, it moved to the highest in 1983 and 1984.

The general decline might be attributable to hard currency current-account problems coupled with the overall decline in Western lending to Eastern Europe in the wake of the Polish events and the

world debt crisis. The relative freedom of Bulgaria from these problems and its ability to maintain access to Western credits could partly explain its increasing import reliance measures during this period.

A second hypothesis is that the CMEA was becoming more self-reliant, better able to substitute domestically produced goods for Western technology imports. A third is that after the instructive experience of Poland and Rumania,⁸ the nature of technology transfer from West to East changed, with the East Europeans placing more emphasis on mechanism other than direct purchase, such as disembodied technology transfers and coproduction schemes with Western partners.

It is certain that both of the latter developments were occurring to some degree. The case of Bulgaria, however, suggests that these phenomena were not preponderant. Bulgaria has been striving to develop its industrial base, particularly in machine building, electronics, and communications, and the intersection of these sectors, robotics. The data indicate that in spite of any material assistance Bulgaria might have been able to draw upon from CMEA sources or from other avenues of technology transfer, a necessary component of its drive to upgrade industry has been increased reliance upon Western imports.

TECHNOLOGY IMPORTS AND GENERAL RELIANCE ON WESTERN IMPORTS

Do individual East European states rely more heavily on high-technology deliveries from the developed West than they do on Western imports in other areas of machine trade? A measure of reliance on high-technology imports will be devised by a measure of general Western machinery import reliance to yield a new measure, the ratio of import reliance, RIR. That is,

Equation 1:

$$RIR_j = TIR_j / MIR_j$$

where

RIR_j = the ratio of import reliance measures for CMEA country j

TIR_j = the Western technology import reliance measure of CMEA country j

MIR_j = measure of reliance by CMEA country j on imports of other Western machinery in SITC 7

The general machinery reliance measure (MIR) is simply the ratio of the value of imports from the West of all machinery and transport equipment (SITC 7), minus the commodity groups previously identified as constituting the high-technology sample, to the value of total imports from both the West and the CMEA of SITC 7 goods each year:

⁸ While it is not clear that the strategy of increased technology imports *per se* actually played much of a role in the economic collapse of these countries, this nevertheless remains a common perception in the CMEA.

Equation 2:

$$MIR_j = \frac{\sum_{n=1}^p (W_{m_n} - \sum_{t=1}^v W_{tn})}{\left[\sum_{n=1}^p (W_{m_n} - \sum_{t=1}^v W_{tn}) + \sum_{\substack{i=1 \\ \text{where } i \neq j}}^k (C_{m_i} - \sum_{t=1}^v C_{ti}) \right]}$$

where

MIR_j = reliance by CMEA country j on imports of all other Western machinery included in SITC 7

W_{m_n} = country j 's imports of SITC 7 machinery from Western country n

W_{tn} = country j 's imports of technology good t from Western country n

C_{m_i} = country j 's imports of SITC 7 machinery from CMEA country i

C_{ti} = country j 's imports of technology good t from CMEA country i

This general reliance measure is similar to the previous aggregate technology import reliance measures, deriving from the same sources and presumably subject to the same biases. However, in this case, the aggregation is a simple average, since resources were inadequate to provide a trade weighting of reliance measures for all the categories of SITC 7.

To provide uniformity, the measure for aggregate high-technology import reliance (TIR) serving as the numerator in the ratio will not be the trade-weighted number used previously, but rather a simple ratio of the values of imports from the West of all commodities in the technology sample to the total sample commodities imported from both East and West:

Equation 3:

$$TIR_j = \frac{\sum_{n=1}^p \sum_{t=1}^v W_{tn}}{\left(\sum_{n=1}^p \sum_{t=1}^v W_{tn} + \sum_{\substack{i=1 \\ \text{where } i \neq j}}^k \sum_{t=1}^v C_{ti} \right)}$$

where

TIR_j = the Western technology import reliance measure of CMEA country j

W_{tn} = country j 's imports of technology good t from Western country n

C_{ti} = country j 's imports of good t from CMEA country i

If the ratio of the high technology to the general machinery import reliance measure is 1.00, it would indicate, at this level of refinement, that the import reliance for high technology was not more pronounced than the general reliance on engineering product imports. A ratio greater than 1.00 would suggest that there is greater reliance on the developed West for imports of the high-technology commodities considered in this study than for the gen-

eral pattern of the visible trade in machinery. Alternatively, a measure of less than 1.00 would mean that there is a relatively less reliance on the West in the technology commodity groups than in the other commodities in SITC 7.

The data in Table 7 indicate that Eastern Europe is generally more reliant on the developed West for higher technology goods than for other types of machinery and equipment. Yugoslavia and Czechoslovakia show the least difference between patterns of trade in low- and middle-technology goods and imports of Western high technology. The figures for Czechoslovakia are just below, and those for Yugoslavia just above, the 1.00 mark for the entire period. In the Yugoslav case, the proximity to 1.00 is most likely due to a greater tendency to rely on the West for machinery imports generally, while for Czechoslovakia, it is due to a Western technology reliance measure that is comparatively low by CMEA standards.

TABLE 7.—RATIO OF AVERAGE WESTERN IMPORT RELIANCE MEASURES FOR ALL TECHNOLOGY-SAMPLE COMMODITIES TO AVERAGE WESTERN IMPORT RELIANCE MEASURES FOR ALL OTHER SITC 7 COMMODITIES ¹

Country	1980	1980 ^a	1981	1982	1983	1983 ^a	1984
Yugoslavia.....	1.11	[1.08]	1.02	1.08	1.02	[1.08]	1.08
Bulgaria.....	1.42	[1.12]	.81	1.15	1.49	[2.38]	1.25
Czechoslovakia.....	1.54	[1.30]	.98	.91	.96	[1.03]	.99
GDR.....	2.07	[1.76]	1.06	1.04	1.02	[1.14]	.74
Hungary.....	2.05	[1.88]	1.06	1.10	1.25	[1.49]	1.35
Poland.....	.98	[.79]	1.28	1.79	1.26	[1.39]	1.20
Rumania.....	1.45	[1.21]	.84	.48	.90	[1.01]	.055
U.S.S.R.....	1.54	NA	.94	.74	.85	NA	.80

¹ Does not include Rumanian or Soviet exports, or exports from the FRG to the GDR.

^a Includes Soviet exports.

Source: UNECE, various years.

The large discontinuity between the measures for 1980 and 1981 is partly due to incomplete data. It may also reflect the sharp change in East-West commercial relations following the Polish events of 1980 and the rescheduling of the Polish, Yugoslav, and Rumanian debts. For most countries, after 1980, the ratio holds relatively constant or increases over time.⁹ In other words, beginning in 1981, the ratios of technology-sample commodities to the general pattern of machinery imports show an increasing differentiation in reliance. Trade with Western countries during the years of interest here was becoming more focused on the high-technology goods.

Two inferences may be drawn. They are not mutually exclusive, but both are inconclusive in the absence of further information. The first is that in the presence of hard currency constraints, the import strategies of Eastern Europe emphasized the priority of essential goods necessary for sustaining future growth that could not be obtained within CMEA. The available data are not in themselves sufficient to sustain this hypothesis, but they provide corroboration for work by Crane and Kohler (1985) that refutes the

⁹ The GDR shows a large dip in 1984, but this is difficult to interpret due to the lack of data on inter-German trade.

supposition that East European hard currency resource elasticities for machinery are high. These imports are not the first to be cut by the Soviet bloc countries when hard currency is scarce. With this interpretation, the data suggest that the higher the technological level of the machinery, the less elastic is the relative demand with respect to a hard currency budget constraint.

The second inference is that to the extent that indigenous CMEA substitutes for Western machinery imports have been developed, they have tended to be at the lower end of the technology continuum. The technology-sample commodities include items that have been the objects of major CMEA R&D efforts: machine tools, computers, communications technology, and microelectronics. It cannot be said that the sample misses areas of primary focus for Soviet bloc development projects. The nondecreasing trend of the ratio of high technology to general machinery import reliance could thus be ascribed to an increased ability in the CMEA to satisfy the lower end of the bloc's technology requirements, while not affecting a continuing reliance on the West for higher end commodities.

The case of Poland is instructive. During the course of Poland's economic woes, the ratio of high technology to general machinery import reliance changed from 0.98 [0.79] in 1980 to 1.28, 1.79, 1.26 [1.39], and 1.20 in 1981-84. In other words, in a time of crisis, trade in most machinery categories was reoriented to the CMEA, but relatively less so in the technology-sample categories. As the immediate crisis passed, this difference became less pronounced. The figures suggest more prudent control over import priorities, assuming the efficient assimilation of technology inputs, than is usually ascribed to the Polish authorities. In Rumania, the opposite strategy was employed. The higher technology commodities showed a relatively greater decline in reliance on imports from the West than did machinery in general.

The trends for Hungary and Bulgaria are similar to Poland's increasing in differentiation, although the Bulgarian increase is more dramatic. Based on the earlier discussion, the similar trends may stem from different proximate causes. In Bulgaria, the increase in the ratio is contemporaneous with an investment strategy emphasizing modernization of the machine-building and electronics (including telecommunications) sectors. If the data are accurate, they suggest that even after the examples of Poland and Rumania in the 1970's, large-scale programs of this type lead to increased reliance on technology imports from the West. This finding is striking in view of the differences in the level of development between Bulgaria and such countries as Czechoslovakia and East Germany, to whom, it might be expected, the Bulgarians would turn if the necessary advanced equipment were available within the CMEA. Western technology imports may be necessary to fill gaps in the CMEA supply or to provide crucial components necessary to increase the effectiveness of less-advanced CMEA equipment. As an extreme example, there are reports that the GDR now sells some industrial machinery with empty slots for electronic components that buyers must acquire elsewhere (Diehl, 1986). Less-dramatic specific dependencies must also exist.

The Bulgarian data reflect a period of increased deliveries from both the West and the CMEA of machinery and transport equip-

ment, with a relative increase in reliance on the West for high technology. The Hungarian ratio, on the other hand, increased during a period of slow growth and import cutbacks, affecting even machinery and transport equipment deliveries from the CMEA. The decrease in the latter might also have been due to pressure on Hungary to reduce its rubble current-account deficits. The results appear similar to the Bulgarian experience during a time of general import expansion. Such cuts or import controls as did exist appear to have favored relatively the import of Western technology goods. To the extent that there was substitution by CMEA sources for SITC 7 goods formerly imported from the West, this was disproportionately high in categories other than the high-technology sample group.

The data for 1983 allow the construction not only of the same ratios as for other years, but also of analogs in which Soviet exports to Eastern Europe are factored in. In each case, the addition of Soviet export data causes the ratio indicating a difference in trade patterns between the technological and general engineering goods to increase. In other words, for each country, the addition of Soviet machine deliveries to the CMEA totals accentuates the difference in import reliance on the West for this sample of high-technology goods, compared with the general trade in machinery. Soviet deliveries to Eastern Europe are not weighted in the direction of goods included in the technology sample. The inference from this measure is that Eastern Europe tends to rely more on the West for the higher technology goods included in the sample than for machinery imports in general, and more on the European CMEA than on the Soviet Union.

THE ROLE OF THE WEST

A major obstacle to developing a unified Western approach to technology transfer is the difference in the consequences of reduced trade for exporting states. In particular, the role played by the United States differs significantly from that played by several of its major allies.

In 1984 U.S. exports of high-technology goods to the CMEA were negligible compared with total U.S. exports. Deliveries of pumps, centrifuges, and filtration apparatus to the CMEA made up only 0.4 percent of total U.S. exports of these goods. Similarly, only 0.6 percent of all machine tools exported by the United States were shipped to Eastern Europe. These were the highest percentages for the United States among the technology-sample commodities.

In contrast, West German sales of machine tools to the CMEA, not including deliveries to the GDR, accounted for 17.9 percent of over \$2 billion in total machine-tool exports. Machine-tool sales to the East are not much less important in percentage terms (at least 10 percent of the total) for France, Italy, Switzerland, and Sweden, all major world suppliers. Austria and Finland each ship half of their exported machine tools to the CMEA.

These differences are less profound for other commodities, although there is still a potential for conflicting policy in some areas. For example, virtually none of the U.S. exports of automatic data processing equipment (0.07 percent) goes to the CMEA. France, on

the other hand, shipped 6.0 percent of over \$1 billion in total foreign sales to the CMEA.

If the values of all the commodities in the technology sample are totaled, for no CMEA country was the U.S. share of such imports from the West greater than 5 percent in 1984. The average was about half that. The same generally holds true for the individual categories of high-technology goods, with the exception of some communications equipment on categories. Even so, the U.S. share of total Western exports to the CMEA in these categories was 1.5 percent and 3.6 percent.

These figures suggest that the current low level of U.S. participation in high-technology exports to Eastern Europe place limits on the ability of the United States to use direct technology exports in pursuit of policy goals. It is possible that the goods actually delivered by the United States are of such a high-technological level that the effect of cutbacks would be amplified to some extent. But no matter what the amplification factor, the small proportion of U.S. exports of these commodities means that Eastern Europe dependence on them has to be fairly low. Unilateral influence can be obtained only by increasing sales of high-technology commodities to the CMEA as a *quid pro quo*, clearly a policy choice requiring the most careful consideration on relation to other policies touching the CMEA countries and to the national interest. Any U.S. action can be effective only as part of a multilateral effort. Policies suggesting the use of technology export restriction or expansion must clearly be coordinated with the other members of COCOM. Coordination is also needed with developed Western states that lie outside the COCOM apparatus, such as Sweden, Switzerland, Austria, and Finland. Attempts by the United States to expand the list of controlled commodities for the goods that are currently traded are almost certain to raise a reaction from Western allies who are more likely to be adversely affected than the United States. Policy choices directly affecting technology trade will most likely be focused on commodities that represent new technologies or new embodiments of older technologies that are not currently traded.

IV. THE ROLE OF MACHINE-TOOL IMPORTS IN HUNGARY: A CASE STUDY

This section illustrates the concept of import reliance with the specific experience of one CMEA country and one commodity. The findings help explore the connection between import reliance as measured and a fuller sense of import dependence.

The case is that of machine tools in Hungary. Hungary was chosen because of the high quality and accessibility of data routinely published in its official statistical series. Machines tools are useful because the difference in level of sophistication between traditional and numerical control (NC) machine tools is clear; technological taxonomy is certain at least to this level. The year analyzed is 1983, the latest year for which Soviet exports are reported in the U.N. data.

THE ROLE OF IMPORTS

In 1983, Hungary's Western import reliance measure for metal-working machine tools was 0.42 [0.36]. Published Hungarian data were used to calculate a similar ratio corresponding to this measure for the same year. The ratio analogous to the import reliance measure for these machine-tool types is 0.34 [0.28].¹⁰ The two sets of figures are not strictly comparable, since the five categories available for computation from Hungarian data do not represent the full range of machine-tool types falling under SITC 736. Many of these are specialized machines that adhere to higher technical specifications and therefore, presumably, are more readily obtainable in the West, barring export controls.

Domestic sales of "metal-working machine tools" amounted to Ft 2,952 million, while imports of "machine tools and other metal-working machines" amounted to Ft 2,602 million.¹¹ If the two categories are congruent, imports accounted for 47 percent of domestic investment. In value terms, one of every eight machine tools placed in Hungary in 1983 was imported from the developed West.

The Western machines are more expensive on a per-unit basis than the imported CMEA machines. It is presumed that a portion of these machines embody higher technology than their CMEA counterparts. Reliance on Western machine tools also varies with type. Machine tools with more sophisticated functions, such as grinders and milling machines that operate on multiple axes, tend to be overrepresented by Western imports relative to the average.

RELATIVE TECHNOLOGICAL LEVELS OF IMPORTS

The trade in NC machine tools provides a better sense of the qualitative difference between CMEA and Western machine-tool imports to Hungary. NC machines represent a higher technological standard, since they incorporate some type of digitalized, programmable control system, usually in the form of integrated micro-processors.

According to information obtained from a voluntary association of most of the NC machine-tool-using enterprises in Hungary,¹² a total of FT 406.3 million worth of imported NC machines was employed by their members in 1983. Of this total, FT 357.5 million—88 percent by value—came from the West (SPE, various years). These figures for imports from both the CMEA (including the Soviet Union) and the West can be used to construct ratios in which the numerators are the value of NC machine tool imports from the appropriate area, the CMEA or the West, and the denominators are the respective total import values from each area of the five machine-tool types, both NC and traditional, discussed above. This yields a proportion of 0.05 for Hungarian machine-tool imports from the rest of the CMEA and 0.96 for machine-tool imports from the West. This is not to say that only 5 percent of machine-tool imports from the CMEA and 96 percent from the West are the

¹⁰ All data in this section, unless otherwise stated, are from *Statisztikai Évkönyv, I parstatistikai Évkönyv*, and *Külkereskedelmi Évkönyv*, 1983.

¹¹ Since exports were reported as Ft 3,905 million in 1983, the figure for domestic sales must apply only to domestically produced machines.

¹² The Machine Tool Programming Association (or SPE in its Hungarian acronym).

NC variety; in the absence of more concrete data, it must be assumed that the denominator is more narrowly defined in this case than the numerator. However, it can be inferred that the preponderance of machine-tool imports from the West are of the NC type, while CMEA machines at this end of the technology spectrum are a small fraction of total CMEA deliveries.

The flows for 1983 are corroborated by the data on the stocks of Hungarian NC machine tools reflected in the SPE listings through the first quarter of 1984. Western NC machines accounted for 41 percent of the value of the stock of NC lathes (19 percent of the total number of such units), 56 percent (31 percent of NC milling machines, 74 percent (56 percent of NC drilling machines, and 79 percent (57 percent of all other NC types listed by the SPE. Available data shed some light on the role played by these machines. The calculated per unit costs of Western NC machines is generally more than double the weighted average of domestic and other CMEA costs of each type. A calculation on the coefficient of variation¹³ of implied prices for each of these NC machine types is presented in Table 8. The data show a uniformly greater dispersion of prices for Western NC machine tools. Since these statistics are derived from stock rather than flow data, part of the difference in coefficients of variation may be attributable to a greater tendency for inflation to affect Western machinery prices over time than is true for CMEA machines.¹⁴ However, the coefficients may imply that Western imports play a different role in Hungarian development schemes than do either domestic or other CMEA equipment. The greater dispersion of prices could be caused by a wider variation in the characteristics of the machines imported. While Hungary and the CMEA may concentrate on producing relatively few machine types that take care of the bulk of machining jobs, Western machines may be acquired along a wider range to fill the gaps left by the absence of particular machine types of CMEA output. In this sense, the addition of a few Western NC machines not otherwise available within the CMEA may be required to complete an enterprise's complement of machine tools and render the whole, including the CMEA machines, more effective. Further, it may be supposed that machines acquired to occupy the niche at the higher end of the technological sophistication and performance spectrum may be disproportionately Western and therefore considerably more expensive than even the Western mean. This too would lead to a greater dispersion, as well as greater skewedness, in the prices of Western machine tools. If these suppositions are true, reliance in this sense may bespeak some degree of dependence: substitutes may not presently exist within the CMEA for some fraction of the NC machine tools imported from the West.

¹³ The standard deviation divided by the mean, a measure of central tendency.

¹⁴ The official price index on total machinery investment indicates the prices for domestic machinery increased 19 percent between 1975 and 1983, while imported-machinery prices increased by 27 percent (*Statisztikai Evkonyv*, 1983).

TABLE 8.—COEFFICIENTS OF VARIATION OF NC MACHINE-TOOL PRICES BY TYPE AND ORIGIN

Origin	Lathes	Drilling machines	Milling machines	Other
Hungary	0.39	0.53	0.39	0.34
Other CMEA .....	.40	.22	.40	.09
West	1.37	1.14	1.67	.57

Source: SPE data.

THE DECISION TO IMPORT FROM THE WEST

As noted earlier, the importing of Western technology by an East European country does not *ipso facto* imply dependence. In part, a concept of dependence must be concerned with the available recourse if existing East-West commodity flows were to be halted. In the case of Hungary, enterprises themselves are responsible for investment decision, and, more than elsewhere in the CMEA, managers are conscious of and motivated by costs. It may be, therefore, that the actual flow of Western NC machinery is determined by the relative cost of equipment. Given the choice between comparable Western and CMEA NC machine tools a prudent manager might consider the technical characteristics of the equipment in relation to price and decide to import from the West. If prices changed in favor of the CMEA machine, or if faced with export controls or other barriers to Western imports, the manager may shrug his shoulders and purchase the CMEA equipment; the decision is made for him. This raises the question of whether NC machines are purchased from the West because such imports have a very low elasticity of substitution with respect to their CMEA alternatives, or because the relative costs of the alternatives make importing from the West expedient and efficient.

Equation 4 serves as a simple model of the import decision faced by Hungarian enterprise managers. Expenditures on Western NC equipment depend on a budget constrain and a ratio of Western to CMEA machine prices. Price data from 1972 to 1983 were used to run the regression detailed in Equation 4.

Equation 4:

$$\text{LNWEST} = -3.2831 + 1.2253 \text{LNTOTAL} + 0.6219 \text{LNPRAT} - 0.1287 \text{T}$$

(0.1516) (0.2320) (0.0484)

$$\text{R squared} = 0.97 \quad \text{DF} = 8 \quad n = 12$$

The logarithm of the total expenditure on Western NC machine-tool imports by year (LNWEST) for 1972 to 1983 was regressed on the logarithm of total expenditure for NC machine-tool acquisitions from all sources (LNTOTAL), the logarithm of the annual ratio of average Western NC prices to a weighted average of Hungarian and other CMEA NC machinery prices (LNPRAT) and a linear time trend (T).¹⁵ The numbers in parentheses are standard errors; all coefficients are significant to the 0.98 level.

¹⁵ The current values for LNWEST and LNTOTAL were deflated by the official indices of non-Socialist imported machinery investment prices and of total machinery investment prices, respectively (*Statisztikai Evkonyo*, various years).

The estimated coefficient of the LNTOTAL term, expenditure on all NC machine tools acquired in a given year, has the expected sign if the variable is interpreted as a measure of available investment resources. The size of the coefficient indicates that the demand for Western NC imports is elastic with respect to a budget constraint. This interpretation is not fully satisfactory, since the assumption of independence for LNTOTAL in this functional form is problematic and no account is taken of hard currency constraints nor of notional demand left unexpressed due to import and export controls of various kinds, but the result accords with intuition.

The coefficient of the price ratio appears perverse: It suggests that the greater the price ratio, the greater is the desire for Western imports.¹⁶ It should be remembered that the Hungarian enterprise manager, more than managers in any other East European country, makes the acquisition decision based on domestic prices that reflect accurately the unsubsidized import cost of Western capital, pays import duties on top of the basic price, and is supposed to work within an enterprise budget.¹⁷ Two interpretations can be offered in explanation. There may, in fact, be dependence on the West for machine types not available in CMEA. The higher price may reflect a higher technical standard. A certain number of the machines are vital to the proper performance of individual Hungarian machine shops, i.e., are relatively noncompressible, so their higher price would naturally be reflected in higher expenditures.

A second explanation focuses upon qualitative differences. Prices of Western machines may be increasing in real terms relative to those of CMEA machines but actually *decreasing* if weighted by qualitative differences. The relative index of quality may be changing more rapidly in favor of the West. The decade of the 1970's was precisely the period when the earlier form of NC technology using relatively simple digital decoders and punched-paper programs was giving way to the more sophisticated forms of internal microelectronic circuitry embodied in computer NC (CNC) equipment. These qualitative changes were incorporated much more rapidly in Western equipment than in CMEA equipment, even equipment constructed on the basis of license purchases from the West. This leads to the hypothesis that much of the imported Western equipment was of an altogether different technologies type than that produced and available for trade within the CMEA. If so, considering the central role of NC machine tools in East European development schemes, this would strengthen the case for interpreting reliance as an indication that Western imports are fulfilling a need not easily met by CMEA sources.

¹⁶ If the regression is run without inclusion of the time trend (T), the coefficient on the relative price variable is still positive, although no longer significant. The time trend was included to provide a proxy for changes during the period that would otherwise call the assumption of *ceteris paribus* into question. The linear time trend in the model is a simple specification, although it probably reflects well the accumulating experience with NC technology and a growing intra- and extra-enterprise infrastructure that would tend to alter the demand for Western NC technology.

¹⁷ This oversimplifies the case. An actual allocation of hard currency must be made by central authorities, and import permits must be obtained. Further, the enterprise budget constraint has been subject to some manipulation throughout the period discussed.

V. CONCLUSIONS AND IMPLICATIONS FOR POLICY

The calculation of Western import reliance measures for each country by discrete technology commodity groups is a useful, if inconclusive, exercise in establishing the degree of potential dependence on Western technology imports. It indicates that there is a good deal of variation in the degree of import reliance between the countries of Eastern Europe and among technology groups. To think of the phenomenon of technology transfer only in terms of the more aggregate categories of "Eastern Europe" and "high technology" is to miss most of this variation.

Variability in the volume of technology imports from the West stems from differences in domestic economic cycles, the status of international trade and payments relations with the West, and fundamental political choices. The last of these is strongly subject to influence by the policy choices made by the West, on the one hand, and the Soviet Union, on the other.

The data used in this study are not adequate to answer conclusively the questions of whether the technological level of Eastern Europe as a whole is rising or whether an individual country's degree of import reliance changes with rising technological level. The import reliance measures of technologically advanced East Germany and Czechoslovakia are relatively low, but these results may be anomalous. The East German measures are calculated without data on the massive flow of technology from the FRG, which goes unreported. Czechoslovakia's case seems dominated by political choices that have also contributed to a decline in the country's technology base.

The Bulgarian experience is that of a less-developed country attempting to rapidly change its technology base. Bulgarian reliance on Western technology imports is thus relatively heavy. Coupled with the findings on the role played by Western machine-tool imports in Hungary. The Bulgarian case suggests that it is not yet possible for an East European nation to forgo imports of technology from the West when modernizing the base of its industry.

The ability of the United States to form meaningful policy independent of other developed Western exporters is limited by the fact that the United States accounts for only a small share of Western sales to the CMEA. This also complicates the fashioning of collective policies on denial of specific dual-use technologies, since the domestic consequences of such policies usually have a greater effect on other members of COCOM than on the United States.

The rapidity of technological change in the developed West and the diffusion to the developing nations of the ability to manufacture high-technology components will undermine the power of the United States and other developed Western nations to monitor and control technology flows to the CMEA. While much of this diffusion takes place under the auspices of Western multinational corporations which theoretically can be made to conform to guidelines on technology export, the enforcement problem becomes more difficult as the number of players in the game increases.

This is certainly not to suggest that the policy of control should be abandoned nor that a policy of deliberately increasing high-technology commodity trade with the CMEA should replace it as a

means for increasing Western influence. For one thing, the countries of the region are becoming increasingly sophisticated about their ability to sustain sizable imports of technology based upon the ability to earn hard currency. This has led to policy changes in Eastern Europe that will naturally have an effect on demand. In the future, there will be increased emphasis on alternative means for obtaining Western technology, such as cooperation agreements, licensing, joint production, and other forms of disembodied transfer. Moreover, there is continuing legitimate concern for collective Western security with regard to the transfer of militarily useful technology.

On the other hand, policies of denial should not be predicated on the simple syllogism that the transfer of technology necessarily means handing over to the existing regimes a panacea for all problems of development. While the term *technology* must be decomposed by commodity, if one is to speak accurately, the experience of the 1970's and 1980's is that technology has flowed, yet profound economic problems remain. A distinction should be made between gaps in the technological levels of East and West that are due to differential access to leading-edge technologies and gaps caused by a relative inability or lag in applying those technologies that are made available to all. Acquisition and implementation are two different issues.

Technology transfer itself is disruptive. It rarely resembles the simplified process portrayed in economic theory. In many instances, when technology developed in one country is transferred to another, even another at the same technological level—the results are not immediately satisfactory, and the transfer reveals unsuspected problems of organization and management.

Although the original intent of importing Western technology was to provide quick fixes for the economies of Eastern Europe in lieu of systemic reform, specific and general instances of problems with absorption and effective utilization may lead to a widening perception in the importing nations that reform is imperative. In other words, when advanced machinery of a known productive capacity fails to live up to expectations in its new environment, the rigidities within the enterprise, the sector, and the surrounding economic milieu are called into question.¹⁸ It may well be that by acquiring the technology from the West rather than developing it domestically, the East Europeans are multiplying this effect. The imported technology tends to be more revolutionary, not evolved from familiar expertise and industrial relationships, and is thus more jarring. If decentralization of the economic systems in Eastern Europe is viewed as a desirable object of policy by the West, a more sophisticated view of technology transfer as a means to that end might be warranted.

A search for a more active rule for technology in serving Western policy ends need not necessarily require any change in current policies on export controls. East Europeans at the level of enter-

¹⁸ The new technology need not, in fact, be very highly advanced to elicit this effect. Simply being "foreign," that is, of a type different from what has previously been used in a given enterprise setting, may be quite sufficient for the technology to induce reappraisals of existing management systems (see Popper, 1985).

prise and industrial-sector management generally believe that COCOM is more broadly focused and active than it actually is. Much Western technology that is of great use to East European industry is continuously flowing from West to East. Western policy should explicitly emphasize at various levels of East-West contracts the true porousness of the technology embargo bogey that has been raised by the Soviet Union. To the extent that there is a general policy purpose to be served in demonstrating a commonality of interests between the West and Eastern Europe, the current flow of high-technology commodities is a highly tangible manifestation of that connection.

APPENDIX

DATA ON IMPORT RELIANCE

COMMODITIES IN THE TECHNOLOGY SAMPLE

Three criteria were employed in choosing the categories for calculating Western import reliance measures: availability and comparability of data, judgment that the commodity group represents a set of goods that might be considered to possess higher technological characteristics than those in other SITC categories,¹⁹ and that the category be sufficiently disaggregated to provide reasonable assurance that the bulk of the commodities were truly the types of interest.²⁰

COUNTRY DATA

All measures of reliance on Western imports were constructed by aggregating mirror export data for 17 developed Western countries and dividing by total imports from those countries and from the European CMEA countries.²¹

The denominator included all imports from the developed Western countries listed above,²² plus imports from those CMEA countries that were reported in the UNECE listing, i.e., Bulgaria, Czechoslovakia, the GDR, Hungary, and Poland. Imports from the Soviet Union were reported only in 1980 and 1983. No Rumanian figures were reported from 1980-84. In 1976, the last year Rumanian data were reported in the UNECE reports, Rumanian exports were 4.2 percent of the total of intra-CMEA trade in the commodities of SITC 7, machinery and transportation equipment, and 8.2 percent of trade within the Eastern Six. It may be presumed that Rumania's share in high-technology trade was somewhat less.

¹⁹ All the goods constituting the technology sample for this study appear on the list of high-technology commodities developed by the U.S. Department of Commerce (Lenz and Stiltner, 1985).

²⁰ In addition to the commodity groups presented in this paper, the full study also examined metal-working machine tools disaggregated into metal-cutting and metal-forming machine tools (SITC's 736, 736.1, 736.2); telephonic and telegraphic communications equipment (SITC 764.1); television, radio, and radiotelegraphic transmitters (SITC 764.3); other telecommunication equipment (SITC 764.8); and microcircuits (SITC 776.4). A heterogeneous category of scientific and controlling apparatus (SITC 87), photographic apparatus (SITC 881), optical equipment (SITC 884), and watches and clocks (SITC 885) was studied but was not included in the technology sample.

²¹ The Western countries included in the sample were Austria, Belgium-Luxembourg, Canada, Denmark, Finland, France, West Germany (the FRG), Ireland, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The sample originally included Brazil, Australia, Greece, and Portugal, but these countries were dropped due to the virtual absence of exports from them to Eastern Europe in the categories of interest.

²² In theory, we would want the denominator to include imports from all sources. The problems of including all of them are practical rather than theoretical. Based on the data available in the UNECE database, this exclusion has little effect on the findings. The direction of any resulting bias to the import reliance measures should be downward. A second problem is that only major exporting countries are included in the UNECE data. To include such sources as Taiwan, South Korea, and Singapore would require going to other sources and thereby raising problems of nonisomorphic data. Again, the inclusion of this subject of potential exporters would suggest a different relative importance for exports that originated outside COCOM.

THE DATA SOURCE

Shortcomings stemming from the use of the UNECE data are of two types. The first is in the nature of the reporting. Western data are reported directly to the U.N. Statistical Office, and the UNECE data derive from that source. A major problem is caused by the omission of West German deliveries to the GDR.

The UNECE secretariat receives data directly from the countries of the CMEA. These data are originally submitted either directly in U.S. dollars or in national currencies that are then converted into dollars at the official rate. For some countries, the original data must be restated in terms of the commodity groupings of SITC revision 2 to be comparable. Therefore, a series of judgments, not explicitly treated, is made to include the CMEA data in the unified listings.

The greater problem is that of valuation. All data are reported in millions of current U.S. dollars, f.o.b. One difficulty is the volatility of dollar exchange rates. This problem, while perplexing, is not as great as it might have been. Only the last 2 years of the 1980-84 period experienced dramatic changes. Further, direct exports of technology goods by the United States to the countries of Eastern Europe constitute only a small fraction of total Western exports. Therefore, most of the Western exports were originally stated in currencies that moved roughly in the same direction with respect to the dollar.

The problem is more serious in the case of CMEA data. Some currencies, such as the Hungarian forint and the Polish zloty, also moved at approximately the same rate as Western currencies in relation to the dollar. For others, official exchange rates were relatively fixed and, as is well known, unresponsive to real influences and even divorced from a need for internal or cross-national consistency. Further, while policies in the CMEA mean that the prices for homogeneous goods and raw materials approximate (with a lag) world market prices, machinery prices within the CMEA are notoriously subject to manipulation, making assessments of true relative worth problematic. The main shortcoming in using the UNECE data is that the assumptions made in aggregation by UNECE are necessarily unobservable.

SYSTEMATIC BIASES IN THE IMPORT RELIANCE MEASURES

The import reliance measures would be affected if there were significant exclusions in the reporting of exports by CMEA countries. The implicit assumption of the measure is that if exports are reported for a category of goods, they represent the total of all such exports. It is further assumed that export totals represent goods actually exported, not those scheduled for delivery, and that deliveries of military or other goods are not masked by inflating the totals of some commodity groups.

Systematic downward biases in the import reliance measures would stem from rigidities in foreign exchange adjustments by CMEA countries in a period when the dollar numeraire was appreciating. This would tend to overvalue CMEA exports in dollar terms. Further, it is generally accepted that due to the institutions of CMEA trade, the prices of East European machinery are inflated somewhat in comparison with world prices for machine types with similar characteristics. The size and scope of this overstatement is subject to debate. The net effect would be a downward bias in import reliance measures. This could be offset by a compensating bias if inflation in the prices of Western machinery proceeded more rapidly than price increases in their CMEA counterparts. It is not clear that this happened, however, during the period in question.

Finally, it should be noted that the data used to calculate import reliance do not reflect exports by countries not enumerated above, such as the industrializing nations of Asia; covert or illegal acquisition of high-technology capital goods; or the reexport of goods from the original destination to another country.

REFERENCES

- Crane, Keith, and Daniel F. Kohler, "Removing Export-Credit Subsidies to the Soviet Bloc: Who Gets Hurt and by How Much," *Journal of Comparative Economics*, 9 (4), December 1985, pp. 371-390.
- Diehl, Jackson, "East Europeans Scramble To Catch Up With West," *Washington Post*, October 19, 1986.
- Iparstatistikai Evkonyv*, Budapest: Kozponti Statisztikai Hivatal, various years.
- Kulkereskedelmi Evkonyv*, Budapest: Kozponti Statisztikai Hivatal, various years.
- Lenz, Allen, and Ken Stiltner, *Quantification of Western Exports of High-Technology Products to Communist Countries Through 1983*, International Trade Administration, U.S. Department of Commerce, May 1985.

- Popper, Steven W., *The Diffusion of Process Innovations in Hungary*, Ph.D. Dissertation, University of California, Berkeley, 1985.
- Popper, Steven W., *East European Reliance on Technology Imports From the West*, The RAND Corp., R-3632-USDP, August 1988.
- Statisztikai Evkonyv*, Budapest: Kozponti Statisztikai Hivatal, various years.
- Szerszamgep Programazasi Egyesules (SPE)*, NC-Gep Nyilvantartas, Budapest: SPE, 1982, 1983, 1984.
- U.N. Economic Commission for Europe, *Bulletin of Statistics on World Trade in Engineering Products [1980-1984]*, Geneva: UNECE, 1982, 1983, 1984, 1985, 1986.

CMEA RELATIONS WITH THE THIRD WORLD

By Marie Lavigne*

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SUMMARY

We have reviewed Eastern European economic relations with the Third World in an earlier JEC volume (Lavigne, 1986). The developments analyzed there covered the period 1970-82. This article expands the study up to 1987, following a comparable scheme. We shall examine the overall trends, the geographical structure of trade, its regional distribution among broad areas of the world, the main partners. We shall then move to the commodity composition of trade and its changes. The balances in trade and the gains or losses resulting thereof will be reviewed, as well as the assistance policy of the East. In conclusion, we shall discuss the prospects for a new dynamism in East-South trade.

The statistical appendix is devised so as to establish a continuity with the tables given in the 1986 volume.

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The general conclusion is that the Eastern European countries are disengaging themselves from the developing world, for economic reasons, while political and strategic arguments are not enough to maintain their involvement in trade with and assistance to the non-Communist South.

I. THE EASTERN EUROPEAN ATTITUDE TOWARD RELATIONS WITH LDC'S

In the end of our previous article (Lavigne, 1986) we expressed the feeling that at the time of completion of the study, "the trade of Eastern Europe with LDC's had probably reached its highest point" (p. 61). This was true indeed. Not only did the trade of the "Six" (Bulgaria, Czechoslovakia, GDR, Hungary, Poland, and Romania) with the Third World decline, by 22 percent on the export side and 6 percent on the import side over the years 1983-87, but this decline contrasted with a moderate to strong growth in trade with other regions of the world. As a result, the share of the Third World in the total trade of the Six sharply declined. It fell from 13 percent of the exports of the Six in 1982 to 8 percent in 1987, and from 9 to 6 percent of the imports.

The reasons for such an evolution are numerous. The indebtedness crisis of the Third World has led many developing countries to cut back their imports, to begin with purchases to the socialist countries, especially as Eastern Europe was not prepared to offer more advantageous terms than the West (North). The fall in oil prices had a double consequence. First, it reduced the incomes of the oil exporters who were the most significant importers from the Six. Second, it also reduced the value of the oil imports by the Six. This did not mean, as was the case for the developed market economies, an overall increase in the volume of imports as energy has a lower share in Eastern Europe's imports from the South than is the case for Western developed countries. Finally, some developments within the Eastern European economies have to be taken into account. The growing indebtedness of these countries might have prompted them to try and secure, as before 1983, hard currency gains from the Third World. But as the developing countries themselves were experiencing similar (or worse) difficulties, the Six could not afford to expand a trade for which they were asked to provide financing on preferential terms. The reform movement also brought about, as in the Soviet Union, a deterioration in the mechanics of foreign trade, which affected first and foremost the weakest links in this trade.

In view of these recent developments, the Eastern European approach to trade with the South, as compared with the Soviet one, looks remarkably stable. Let us recall these features:

(1) While for all the CMEA Seven (U.S.S.R. included) trade with the Third World represents a diminishing share of total trade, this share remains the biggest for the U.S.S.R., again with the exception of Romania as in the seventies.

(2) Eastern Europe's trade does not follow the same geographical pattern. The area remains very little involved in trade with the "socialist-orientated countries," with the exception of GDR, while the Soviet Union, for political reasons,

maintains its commercial and aid involvement in these countries.

(3) The commodity pattern remains different from the Soviet one, although it tends to come somewhat nearer, in particular on the import side, Eastern Europe buying more manufactures from the Third World than during the past decade. The trend, however, is much less pronounced than in the case of the U.S.S.R. It concerns exclusively the relations with Asian (Middle East excluded) countries.

(4) As in the beginning of the eighties a major aim in trade with the Third World is to derive hard currency. But here the developing countries are increasingly resisting this policy, by asking for credits or for compensation deals.

(5) The U.S.S.R. increasingly supports the burden of assistance, only followed by the GDR.

(6) There is less than ever a common development policy of the Seven. At the 44th session of the CMEA, the U.S.S.R. has only achieved to secure a joint commitment for aid to developing countries of the socialist commonwealth, Cuba, Vietnam, and Mongolia. Even the modest commitments reached at earlier sessions, for instance at the 1984 CMEA Summit, now seem obsolete.

II. TRENDS AND GEOGRAPHICAL PATTERN OF EAST EUROPEAN-LDC'S TRADE

Overall in 1983-87, East-South trade diminished both the U.S.S.R. and the Six (table 1), but in the case of the U.S.S.R. exports continued to grow, especially in 1986 and 1987 through arms sales, while imports fell dramatically in 1986. On the import side, this is due to the fall in oil prices in 1986 reducing the value of the oil imported by the U.S.S.R. (mainly for reexport), while in 1987 we witness a moderate increase in the value of the Soviet imports due to greater quantities purchased along with a stability of prices, for the Six, the fall in exports has been much more pronounced, while imports decreased less than for the U.S.S.R. (except for Bulgaria in 1987, and Romania in 1986). Exports of the Six are less essential to the main purchasers—the Middle East countries—than the arms exports of the Soviet Union, and imports are more diversified than those of the U.S.S.R. As a result, the share of the U.S.S.R. in the total sales to the Third World strongly increased, while it decreased in the total purchases.

As for the shares of the individual East European countries in East-South trade, they remained fairly stable, except for Hungary whose trade with the Third World collapsed, and for Romania which share was strongly reduced on the export side.

For all the Eastern European countries except for Poland, the share of the Third World in total trade has shrunk markedly. There is now a qualitative difference between Romania and all the other East European countries. For Romania trade with the Third World still accounts for over 20 percent of total trade while for all the others it becomes a marginal component, the ratios being between 4 and 8 percent of total trade. For GDR and Czechoslovakia the disengagement in Third World trade seems a lasting phenome-

non, and probably too for Hungary, while for Bulgaria there might be a recovery.

Considering the main groups of partners, for which we follow the typology of our previous study (also see methodological appendix), their shares in Eastern Europe's Third World trade displayed a great stability, with two major exceptions. As could be expected the shares of OPEC collapsed on the export side and still more on the import side; the shares of the NIC's increased. As for the NIC's this means at the same time a proportionally greater involvement in trade with Latin American NIC's (especially Brazil), and an increased interest for the Asian NIC's. In fact, as the official trade figures of the Eastern European countries understate trade movements with these countries, this last trend might well be more pronounced. The Olympic Games focussed interest on South Korea, and this country itself seems to be willing to upgrade its relations with Eastern Europe, as is demonstrated by the fact that Hungary and South Korea mutually agreed to open trade representations in both capitals, GDR and Czechoslovakia are prepared to do the same.

Table 4 shows the main trading partners of the Eastern European countries in 1983 and 1986. It comprises 30 countries which have been among the 10 top partners in export or export trade over the period. We did not have countries which appeared only once on the import or the export side for one country, such as Togo (Poland, import, rank 10 in 1983), Ecuador (Hungary, import, 1983, rank 10), Peru (Bulgaria, import, 1983, rank 10), Tunisia (Romania, import, 1983, rank 9), Sudan (Romania, export, 1983, rank 10). As in the former period, the concentration of trade is great, especially on the import side where the share of the 10 top percent partners averages 80 percent, while that of the 10 top percent partners on the export side averages 75 percent (the percentages are calculated on trade with identified Third World partners).

The ranking of the first five partners has not undergone significant changes. Iraq, Iran, and Libya remain major partners, which shows that neither the "reverse oil shock" nor the raging Iraq-Iran did alter the traditional links with these countries. Egypt is gradually regaining its rank of major partner while it had receded in the beginning of the eighties. India, which remains the No. 1 partner for the U.S.S.R., has significantly lost ground with the Eastern European countries, especially as importer. Instead, Brazil has improved its ranking, and its trade with the "Five" (Eastern Europe minus GDR) was balanced in 1986, with Hungary still having a large deficit, and Poland a large surplus (in the last case, it is probably the result of a debt-repaying policy, Poland owing Brazil some \$2 billion at the end of 1985).

The following group also includes traditional partners: three Middle East and Mediterranean countries, Turkey, Syria, Algeria; India; and Argentina as a food supplier.

In the last group of 15 countries rankings are of course much more scattered. As for the period covered by the previous study, most of the countries belong to the Middle East and to Latin America. The Ivory Coast has disappeared from the list, and Angola, apart from the U.S.S.R., appears as a significant partner only for GDR; thus Nigeria is the only important exporter in Tropical

Africa. Pakistan has become after India the main supplier in non-Middle-East Asia.

All these patterns and shifts are related to the commodity composition of trade and its fluctuations.

III. COMMODITY COMPOSITION OF TRADE

Table 5 illustrates the commodity pattern of trade between Eastern Europe and the developing countries (total, and by geographical areas: OPEC; Asia minus Middle East; Latin America (for members of Latin American Integration Association, which account for 90 percent of Latin American trade); Africa.

The pattern of trade remains largely traditional. Almost 90 percent of imports are primary goods in 1986; slightly over 70 percent of exports are manufactures goods.

Let us first examine the *exports*.

Machinery sales to the Third World accounted in 1986 for slightly over 6 percent of total equipment sales of the Six, a proportion however higher than the share of their machinery sales to the West (5 percent). For the developing countries, the CMEA suppliers account for less than 5 percent of their total purchases. A part of it is exported under cooperation agreements. Such exports are made on concessionary terms and repaid in traditional export goods of the recipient. The Eastern European countries try to reduce this share, but they have to face the demands of their partners for commercial credits, which though on harder terms identically result in depriving the sellers from immediate returns. This is why the share of such sales in total exports to the Third World has been reduced from almost 40 percent in 1983 to 33 percent in 1986.

The outlet provided by the Third World is small in quantitative terms, but remains significant. Let us quote Polish authors: "Apart from Comecon countries, the Third World is more and more truly the only area in which Poland can hope to market its machines in the future" (Konieczny, 1984, p. 19); "the developing nations represent a good opportunity for our electromachinery industry, which output is difficult to market in the industrial West" (Kapuczinski, 1985, p. 57).

The format of machinery exports is undergoing changes. The reduction in the import potential of many East European clients, especially oil exporters, leads to a decrease of turnkey plants sales, and to a parallel increase in machinery exports designed for modernisation, revamping of objects built with East European participation, often with a larger recourse to the technology of the partner.

Sales of *other manufactured goods* (SITC classes 5, 6, and 8) are significant for the Six (their share was of 36 percent of total sales in 1983, 38 percent in 1986). These are mostly intermediate goods (chemicals, metals, and paper) and some finished goods such as pharmaceuticals mainly sold in Latin America.

The share of the primary product group has remained very stable, around a quarter of total trade. Within this group, the share of food slightly increased, the main purchasers being the Middle East oil exporters.

Exports to the Third World display a *residual* in the commodity composition, which amounts to 3 to 4 percent, and is highest with the OPEC group and with Africa (some countries as Libya belonging to both groups). This suggests as in the Soviet case a trade in arms, on which there is little information. In any case Czechoslovakia (with declining sales) and Poland (with increasing sales) are the only significant suppliers (see Després, 1988). Let us quote a SIPRI expert: "Not only is it very difficult to get information about the quantity of arms exported /by Eastern Europe/, it is even more difficult to assess how decisions are made about them. A question constantly discussed is whether they are coordinated with the Soviet Union or whether decisions are made by the individual governments. Cases can be found to support both propositions, as well as the hypothesis that arms are exported without any political oversight. When the Soviet Union cut back its deliveries to Iraq after the beginning of the Iraq-Iran war in 1980, exports from the East European suppliers increased dramatically. This was a case of substituting for direct Soviet deliveries" (Brzoska and Ohlson, 1987, p. 104-105).

On the side of *imports*, the stability of the pattern denotes that Eastern European countries are not yet ready to accept the demands of the developing countries for a diversification of this trade.

The main exporters of manufactured goods to the Six are Latin America (Brazil and Argentina) and Asia (India, Pakistan, Syria, and Turkey). The share of manufactures in exports of Asian nonoil exporters countries grew from 33 percent in 1983 to 40 percent in 1986.

The goods concerned are mainly items belonging to SITC classes 6 and 8. The share of machinery and chemicals is low, most of the imports are made of textiles, metals, and industrial consumer goods (clothing and footwear).

Is such a situation the result of restrictive practices of the East? The Eastern European countries usually point to the preferences schemes which they consistently introduce. For instance, in 1986-87 Hungary and Czechoslovakia extended the list of products benefiting from preferences; Hungary increased the preferential margin and Czechoslovakia added several beneficiaries to the list (UNCTAD 1988).

However, the main issue remains the following: what is the real significance of the systems of preferences introduced by the socialist countries in favor of the South? This is a very sensitive question because it is related to the operation of tariff systems in centrally planned economies. Hungary, for instance, has based its negotiation with GATT, at the time of its access (1973) on the assumption that its tariff system was comparable to that of a market economy. If this is correct, then a preference scheme is indeed an advantage to the country which goods do not have to face the tariff barrier. But a tariff is operational only when two conditions are simultaneously met: (a) when the import decision is decentralized and linked not with plan orders but with a comparison between prices of import goods offered by different sellers; (b) when the domestic prices are linked with external prices, so that the domestic price is reduced when the external tariff is lifted or reduced. These condi-

tions are not met in any of the socialist countries, with the (partial) exception of Hungary.

If imports are decided by central authorities, or under their control, an increase in imports of manufactured goods appears problematical, especially in a situation of balance-of-payment difficulties when imports have to be concentrated on priority goods. In such a situation which characterizes the Six in the eighties, the potentially most favorable case is the existence of a clearing account (or barter arrangements) between a centrally planned and a developing country, the latter being in deficit.

But in most cases of clearing agreements still in force, the developing country has a surplus, and this is true in particular for Latin American NIC's. One example of a favorable case is Pakistan, and it may explain the high share of manufactured goods exports to the socialist countries.

The difficulties are even greater for the less industrialized developing countries. Let us quote a Czechoslovak author: "A growing number of developing countries seeks a balanced trade with their socialist partners, including Czechoslovakia. But taking into account the export structure of the developing countries it is not easy to find goods corresponding to the quality, the technology and the price level suitable for the domestic Czechoslovak market. Most problematic in this sense is the increase of the trade relations with the Arab countries, with account for 63 percent of Czechoslovak exports to the developing countries and only 19 percent of our imports" (J.K., 1987).

Let us now turn to the imports of *primary goods* which make the bulk of East European purchases.

Fuels account for the larger share (56 percent in 1983, 51 percent in 1986, with only a drop of 1 point in percentage and of 2 percent in dollars terms). For the U.S.S.R. the share of oil imports is more than two times smaller. It is remarkable that the socialist countries did not adjust in the same manner as the developed market economies to the drop in oil prices. The share of fuels, for the countries of the "North," declined in their purchases from the South from 54 percent to about 30 percent between 1985 and 1986. For all the socialist countries, on the contrary, oil purchases increased in quantities since the beginning of the decline in world oil prices in 1983, and the trend accelerated in 1986. Between 1985 and 1986 the increase totaled almost 2 million tons of crude (from 12.8 to 14.6 million tons¹).

Most of these imports are made for reexport, in crude or refined form. Is this pattern "import for reexport" to last? Carl McMillan (1985, p. 380) considers it as quite temporary because "it is dictated by special circumstances, in particular the severe hard-currency balance-of-payments difficulties faced by most of the CMEA countries." The fall of the oil prices in 1986 may affect the future oil trade of the Six in several ways. Starting from the fact that all the Eastern European countries (except Romania) have strived for and achieved surpluses in their trade with Middle East oil exporters, they may find it more difficult to maintain such surpluses as the

¹ Personal estimates through subtracting imports from the U.S.S.R. from total imports.

OPEC countries are bound to decrease their imports from the East in a general policy of curbing nonpriority imports.

They are also confronted with shrinking gains in reexports to the West, which may prompt them to concentrate on refined oil products rather than on reexport of oil in a crude form. For some countries such as Romania, the reexport of refined products is the only way to utilize very large domestic refining capacities which could not rely on domestic or Soviet oil. In any cases, oil imports have overall decreased in value but increased in quantities during the year 1986; compensation deals have developed here as was generally the case in worldwide oil trade. But whereas some countries (Bulgaria and Romania) sharply increased their oil imports, other stabilized them (Poland) or even decreased them (Hungary).

Of all the CMEA countries, Romania is the only one interested in the oil industry of pro-Western nations, such as Kuwait, the United Arab Emirates, or of geographically distant ones, such as Gabon or Ecuador.

For *mineral raw materials*, the Six are highly import dependent, but their major supplier remains the Soviet Union. The Third World is a residual supplier insofar as the Soviet Union has been reducing its sales since the midseventies, or is not able itself to export such goods (tin, bauxite, and phosphate rock).

In the field trade often takes the form of compensatory arrangements. Many cases relate to phosphate rock, which is a raw material in short supply on the CMEA market and such needed for the extension of the fertilizer industry in Eastern Europe. Romania assists Tunisia for the exploitation of the Gafsa fields and the transport of the phosphate. Czechoslovakia, Bulgaria, Romania, and Poland have taken part in the development of the Egyptian phosphate rock fields. Bulgaria has a buy-back deal with Angola. Romania, Poland, and Bulgaria assist Syria in the same conditions. Apart from phosphate rock, other minerals are concerned. Romania helps Algeria in geological exploration of ferrous and nonferrous metal ores. GDR has agreements with Mozambique relative to coal and tantalum fields.

The socialist countries regard as cooperation long-term supply contracts as soon as these contracts provide for reciprocal flows of goods (counterpurchase). These contracts allow them to secure stable suppliers while saving hard currency. Poland and Romania have particularly used this format. Poland and Brazil swap Polish coal against Brazilian iron ore. Poland delivers sulphur acid to Marocco against phosphate rock (half a million tons per year). It has contracted with Tunisia for 300,000 tons of phosphate rock per year against various equipment. These agreements are not properly cooperation agreements. When, on the Eastern side, they provide for supplies of equipment, these are commercial sales, with usual commercial export credits (middle or long-term) on less favorable terms than the cooperation credits. This is the case for contracts between Czechoslovakia and Morocco, or Bulgaria and Tunisia, on phosphate rock.

For *agricultural* products and especially food, the Six are much less import dependent than the U.S.S.R. One group of imported items consists on "nonpriority" goods (rice, tea, coffee, cocoa, tropical foodstuffs, or citrus). The policy of the Six has been to curb

these imports, or to shift them to Western traders so as to get better terms. The other important item is fodder. It is a critical item for the husbandry of the Six, and particularly for the meat exporters (Hungary, Romania, and Bulgaria). There is still a long way to self-sufficiency in this field, although the strategy of the concerned countries is to increase the crops of such cereals as soya or maize. According to a study of the USDA, the total grain imports of the Six should shrink from 17 million tons in 1980 to about 6 million tons in 1990 (Cook et al., 1984)

IV. TRADE BALANCES AND GAINS FROM TRADE

The East European countries has based their strategy in the Third World since the end of the eighties upon the desire of earning hard currency. How was this strategy affected by the developments in the mideighties?

The data of table 6 allow us to compare the trends in the balances with the Third World and the West, including, for the two countries for which we have the relevant data, the balances in hard currency achieved with CMEA countries (mainly with the U.S.S.R. For Hungary, nonruble trade with the U.S.S.R. has provided significant amounts of hard currency up to 1985; from 1986 on, new arrangements with the U.S.S.R. caused this surplus to dwindle.

The general trend is clear: the surpluses with the Third World, which have been growing up to 1985 inclusively, were curtailed in 1986, still remaining positive except for Romania. In 1987 the trend was again on the increase, while the trade balance deteriorated with the West. However, by country, the picture is different. In 1987, Romania increased its deficit with the Third World, and Poland decreased its surplus, while both countries increased their surpluses on the West. Bulgaria and GDR increased their surpluses with the developing countries while remaining or becoming in deficit with the West. Hungary marginally improved its balance on both fronts, the reverse being true for Czechoslovakia. This is to say that all countries seem to have sought an overall improvement or, if not possible, at least a minimum deterioration of their trade balance in hard currencies, and trade with the Third World compensated for the effects of trade with the West.

We have still to estimate the corrections to be introduced due to the fact that some settlements are made in clearing.

This question has been discussed at length in Lavigne (1988). Let us briefly recall the difficulties of a precise answer to the question: Which share of the balances is in convertible currencies? First, even when there is a clearing agreement between a centrally planned country and a developing country, this does not mean that all settlements are cleared in that way; there may well be some transactions settled in hard currency. Second, one cannot know when the clearing balances are finally settled, as they should be, in hard currency, and even not whether they are actually settled at all. Third, even between countries which have not concluded a clearing agreement, some settlements may be made on barter or compensation terms. For example, Peru has no longer clearing agreements with the Eastern European countries, but it has signed

in 1987 debt deals with GDR, Hungary, and Czechoslovakia, according to which for \$1 of Peruvian debt reimbursed (in kind) to these countries, the creditors would have to buy at least \$2 of products in hard currency (*Financial Times*, November 13, 1987). Such an arrangement is indeed a compromise between clearing and hard-currency exchange as a device ensuring debt service without too large disbursements in hard currency. Finally, while the commercial statistics give the total amount of the recorded flows, both those occurring on commercial terms and those realized on account of cooperation agreements, the latter are not subject to settlements in hard currency but must be treated as credits or reimbursements in kind.

Keeping in mind these difficulties, we have tried to identify the convertible currency gains achieved by the "Five" (the Six minus the GDR, which does not separate exports and imports on a country-by-country basis) with the developing countries in 1983 (table 8). The following calculations have been made:

On the basis of the publicized clearing agreements (table 7), we have calculated the shares of exports or imports settled through clearing in the total exports to the South or imports from the South, for each Eastern partner;

Then we have calculated the balances, adding separately the positive balances (for each Eastern country) and the negative balances; and

Finally we derived the net apparent gain in hard currency (total balance minus balance in clearing).

The conclusions are the following:

First, the share of trade conducted under the regime of clearing agreements is still high but decreasing: it amounted to 24 percent of the total exports of Eastern Europe to the South in 1983, 20 percent in 1986, and the corresponding figures for imports were 37 and 30 percent.

The net balances in clearing are generally negative, except for Poland (and Czechoslovakia, in 1983 only). Poland has also strongly increased the share of its settlements in clearing in its total trade. One may interpret this as the consequence of the financial situation of the country. Trading in form of clearing is a convenient format for a country engaged in a rescheduling process (especially when trading with other countries in the same situation as is the case for Brazil). Indeed, the shift toward a positive balance is recent, and mostly due to curbs in Poland's imports from Brazil—Poland is indebted toward Brazil in hard currency, as was mentioned, for imports not covered by clearing accounts.

For all the other East European countries, the sign of the clearing balances amounts to a gain: a negative balance in clearing has to be "cleared" in hard currency only after a grace period, which may be rather long.

For the years 1983 and 1986, to obtain the *net* gain in hard currency, we have subtracted the positive clearing balances from the total balance, and added the negative balances to the latter (as a positive balance does not entail, *for that given year*, revenues in convertible currency, and reversely a negative balance does not entail disbursements in convertible currency). The outcome of such calculations is given in table 8.

But to get a more exact view, one has to look separately at the positive and the negative balances. The negative balances have generally originated from trade with a very small number of countries: first Brazil and Colombia, then Iran (Hungary, Romania), and far behind Pakistan (with Bulgaria).

Is such a situation always unfavorable to the creditors? Not necessarily. To Brazil, Colombia, and Ecuador, the clearing agreements have allowed to export food surpluses which they could not have been able to sell to the East under different conditions. In the case of Colombia for instance, only the clearing agreements have allowed for the expansion of coffee sales to the Eastern European countries. The lobby of the (private) coffee exporters has most strongly supported these agreements. The same is true for Iran. In a period of depressed oil sales, the clearing agreements have entailed a strong recovery of sales to the Eastern European countries. One should however add that, in principle, the countries with a clearing debt have, sooner or later, to repay their debt, and that some countries are hardening the conditions of repayment (Brazil for instance).

V. AID

There is not much new under this heading. The Western estimates remain much lower than the erratic claims from the Eastern European countries and the U.S.S.R. However, the OECD Development Assistance Committee tends to slightly upgrade its estimates especially for the U.S.S.R., correcting the estimates for the previous years. Table 9 shows the most recent data published, which in the usual OECD approach also include aid to Communist developing countries. The major part of aid is extended to Cuba, Vietnam, and Mongolia, which are CMEA countries, and to the countries with a socialist orientation (Afghanistan, Ethiopia, Mozambique, and Nicaragua); India also benefited from cooperation credits in the recent years.

From the table one also may see that the GDR, which was the major donor following the U.S.S.R., is accounting for a diminishing share of total CMEA aid, which goes in line with its disengagement from this trade.

As an international organization, the CMEA has signed a new wave of cooperation agreements since 1983 with the socialist-oriented country observers in the CMEA, so as to give content to the category of "observer country"; with Nicaragua (1983), Mozambique (1985), Angola, Ethiopia, South Yemen (1986), Afghanistan (January 1987). In those last cases, some steps have been taken to impulse multilateral cooperation through proposals of the joint committees established within each agreement. No concrete outcomes are to be known up to now.

The socialist countries are globally reluctant to enter multilateral schemes for financing the needs of the Third World. A sensational exception was the Soviet move, in July 1987, to join the UNCTAD Common Fund for stabilizing raw material prices. Although always being on the side of the "Group of the 77" on the issue of the stabilization of world commodity prices, the socialist countries had been as reluctant as many developed countries in

joining the Fund once its creation was decided in 1980. It may well be that the Soviet move will indeed enable the activation of the Fund, as it should be followed by the membership of other socialist countries—in 1987, only Bulgaria made the same move. This will then be a rare case of concrete multilateral East-West interaction in favor of the South.

VI. CONCLUSIONS

Eastern Europe seems very reluctant to develop its relations with the Third World, with the exception of Romania (and as seen from section IV and table 8, Romania seeks also through its Third World trade to reduce its outlays in hard currency). Such trivial facts as the closing of embassies in developing countries, as Hungary has decided in 1988 for several countries for reasons of economy, exemplify this tendency. The reforms going on in some East European countries should bring about an openness to foreign economic relations, but this is felt as a necessity only with the West. The East European countries are increasingly conscious of the fact that the Third World is no less capitalist than the West, and that in some cases it is even no less developed—the case of South Korea is an example.

The developing countries with which the relations have most intensively pursued (the Middle East countries) no longer offer a potential for further expansion beyond the level already reached; a lasting reduction in oil prices may even entail a lowering of this level.

In fact, East-South relations are even more difficult to manage than East-West relations:

Both sets of relations suffer from the same obstacles, be they systemic (the rigidities in foreign trade planning, in state trading), technological (the lack of adjustment of the technologies supplied by the East to the demand of the market economies, bearing in mind that the demand of the South tends to be increasingly of the same type as that of the West), economic (protectionist barriers);

The access to the South is still more difficult in some respects. The South is historically linked to the ex-colonial North: what is denounced by the socialist countries as the original sin is also a strength of the North. The same is true for the links originating from the "imperialist" development of multinationals: the East puts them into accusation, without succeeding in "emerging as major multinational actors" (McMillan, 1987, p. 197), but is however enough involved in foreign investment abroad to lay itself open to the criticism of inconsistency.

The very features which in some respect facilitate East-West relations turn against East-South ones. The financial issue is one case in point. While the inconvertibility of the socialist currencies does not preclude the access of the East to Western financing, it prevents the socialist countries from offering a specific financing to the developing countries, and the failure of the inclusion of the South in settlements and credits in transferable rubles is a good example.

METHODOLOGICAL APPENDIX

The tables in the text (1 to 5) give two sets of data:

The figures of trade between the U.S.S.R. and Eastern Europe, on one side, and the developing countries, on the other (exports, balance, shares, and growth of trade); and

The commodity composition of trade between these two groups.

The period covered is 1983–1986, extended for most global data to 1987.

I. TRADE BETWEEN THE EAST AND THE SOUTH (TABLES 1, 2, 3, 4)

These tables have been built on the basis of the data bank *CRIES* (French acronym, *Calculs sur les Relations Internationales des Economies Socialistes*), constituted in the CEIPS.

The data are taken from the statistical yearbooks of 7 countries:

Bulgaria (*Vunshna Turgoviia na Narodna Respublika Bulgaria*);
Czechoslovakia (*Czechoslovak Foreign Trade*, in English);
GDR (*Statistisches Jahrbuch der DDR*);
Hungary (*Kulkereskedelmi Statisztikai Evkonyv, Export-Import*);
Poland (*Rocznik Statystyczny Handlu Zagranicznego*);
Romania (*Anuarul Statistic al Republicii Socialiste Romania*); and
U.S.S.R. (*Vneshniaia Torgovlia SSSR v . . . godu*).

The figures in national currencies have been translated into dollars using the average annual conversion factors published by the *Monthly Bulletin of Statistics* of the United Nations.

The groupings retained are the following: Asia, Latin America, Africa (total), Tropical Africa, the countries with a "socialist orientation" (groups 1 and 2), OPEC, the Newly Industrializing Countries, and the Middle East.

The *definition of the Third World* follows the rules accepted by the socialist countries, and for this reason excludes the developing socialist countries (members of the CMEA: Cuba, Mongolia, and Vietnam; other socialist: Laos, Korea, and China).

The countries with a socialist orientation are divided in two groups. Group 1 includes the countries which are observers in the CMEA, that is Afghanistan, Angola, Ethiopia, Mozambique, and South Yemen. Group 2 includes all countries which are supposed to have a "declared" socialist orientation and are considered as such by the socialist countries. We have retained Algeria, Benin, Congo, Guinea, Madagascar, Tanzania in Africa, Irak, Syria, and Burma in Asia. Nicaragua should be included in group 1 since 1984 as the agreement with CMEA has been signed in 1983; it has not been included to keep a consistency with the previous years. This list should have included the Guinea-Bissau, the Capo Verde Islands, Sao Tome and Principe, the Seychelles, in group 2; we did not include them on account of the very few data on trade with these countries.

For OPEC we consider the present membership: Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Tropical Africa is taken as all the countries south of Mauritania, Algeria, Libya, and Egypt.

NIC's taken in their narrow definition: South Korea, Hong Kong, Taiwan, and Singapore in Asia; Argentine, Brazil, and Mexico in America.

As GDR does not separate exports and imports by identified countries, for this country in table 3 the shares of the different groups in total Third World trade is shown as the ratio of the sum X+M for the identified countries to X+M for the Third World, total. For this reason, the section for the "Six" in table 2 only relates to the Five (the Six minus GDR) is the last line.

Finally one has to mention that Romanian foreign trade statistics strongly deteriorated since 1986. No breakdown by partners and no data in absolute value are given. We have resorted to the data of the partners (through the IMF Direction of Trade Yearbook).

COMMODITY COMPOSITION OF TRADE WITH THE THIRD WORLD (TABLE 5)

These data have been computed from the *Monthly Bulletin of Statistics* of the United Nations (May 1984, May 1986, and May 1988); these issues give special tables on the commodity composition of trade between the centrally planned economies and the world. For reasons of consistency, we could not use the data of the Eastern European yearbooks, because only two countries (Czechoslovakia and Hungary) retain the SITC (Standard International Trade Classification). As usual, as the

screening of the data from different *Bulletins* shows, very important revisions are made from one volume to the following, for the past years. This is to say that these figures can only convey a general picture.

BIBLIOGRAPHY

- This article is a followup of Lavigne, 1986, and derives most of its information from the work done by the "East South Group" of the Centre d'économie internationale des pays socialistes, University of Paris I, which has been published in a collective book, in 1986 (in French) and 1988 (updated version, in English; see Lavigne, 1988). The English version contains a very substantial bibliography which we will not quote again here. Only the most important sources, including those referred to in the text, will be given.
- Brzoska, Michael, and Thomas Ohlson, *Arms Transfers to the Third World, 1971-85*, SIPRI (Stockholm International Peace Research Institute), Oxford, Oxford University Press, 1987, 383 p.
- Cook, E., Cummings, R., Vankai, T.A., "Eastern Europe, Agricultural Production and Trade Prospects Through 1990." *Foreign Agricultural Economic Report*, n°195 (Feb. 1984).
- Després, Laure, "Soviet and East European Arms Sales to the Third World," in Lavigne, ed., 1988.
- Jackson, Marvin R., ed., *East-South Trade—Economics and Political Economics*, special issue of *Soviet and Eastern European Foreign Trade*, vol. XXI, n° 1-2-3, Spring-Summer-Fall 1985; the volume reproduces a number of articles published in English in U.S. publications, and translates various articles from Soviet and East European foreign trade journals.
- J.K., "Hospodarské vzťahy Československa s rozvojovými zemi" (Economic Relations of Czechoslovakia With Developing Countries), *Zahranicny Obchod*, N° 6, 1987, p. 7.
- Kapuczinski, Jerzy, interview by *Slowo Powszechnie*, Nov. 15, 1984, p. 3, translated in *JPRS*, East Europe Report, 85/011, Jan. 23, 1985, pp. 56-59.
- Kaser, Michael, *Trends in Trade and Economic Cooperation Among Countries Having Different Economic and Social Systems*, study prepared for the UNCTAD (United Nations Conference for Trade and Development), UNCTAD /ST/TSC/9, Nov. 5, 1987, 31 p.
- Khaldin, M., "Contemporary Forms of Commercial and Economic Cooperation between the U.S.S.R. and the Developing Countries," *Vneshniaia Torgovlia*, 1984, n° 3, pp. 24-29, translated in *Soviet and Eastern European Foreign Trade*, vol. XXI, n° 1-2-3, Spring-Summer-Fall 1985, pp. 40-53.
- Konieczny, Marek, "What Poland Has in Store for the Third World," *Przeglad Techniczny*, n° 39, Sept. 9, 1984, and n° 40, Sept. 30, 1984, translated in *JPRS*, East Europe Report, Dec. 17, 1984, pp. 2-6.
- Lavigne, Marie, "Eastern Europe—LDC Economic Relations in the Eighties" in *East European Economies: slow Growth in the 1980's* vol. 2, Foreign Trade and International Finance, Joint Economic Committee, Congress of the United States, Washington, DC., U.S. GPO, 1986, pp. 31-61.
- Lavigne, Marie, ed., *East-South Relations in the World Economy*, Boulder, Westview Press, 1988.
- McMillan, Carl, *Multinationals From the Second World, Growth of Foreign Investments by Soviet and East European State Enterprises*, London, Macmillan, 1987, 220 p.
- McMillan, Carl, "Eastern Europe's Relations With OPEC Suppliers in the 1980's," in *East European Economies: Slow Growth in the 1980's*, vol. 1, Economic Performance and Policy, Joint Economic Committee, Congress of the United States, Washington, DC., U.S. GPO, 1985, pp. 368-382.
- Pecsi, Kalman, "Economic Contacts Between CMEA and the Development Countries," *Kupolitika*, 1985, n° 3, pp. 32-47, translated in *J.P.R.S., East European Report*, n° 67/85, Aug. 22, 1985, pp. 1-16.
- UNCTAD (United Nations Conference for Trade and Development). *Trade Relations Between Countries With Different Economic and Social Systems and All Trade Flows Resulting Thereof*, Annual Report 1988, with a statistical appendix.

TABLE 1.—CMEA-THIRD WORLD TRADE: GENERAL TRENDS AND SHARES OF THE U.S.S.R. AND EASTERN EUROPE IN TOTAL TRADE, 1983-87

A. SHARES OF THE EASTERN EUROPEAN COUNTRIES (THE SIX) AND OF THE U.S.S.R. IN TOTAL TRADE OF THE SEVEN WITH THE THIRD WORLD

	1983		1984		1985		1986		1987	
	X	M	X	M	X	M	X	M	X	M
Eastern Europe and U.S.S.R., total, million dollars.....	23,939	16,472	23,375	16,214	20,694	15,992	21,808	13,453	23,596	13,644
Total equals 100.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Shares (percent) in total trade:										
U.S.S.R.....	59.2	58.6	57.3	57.0	55.5	57.0	62.2	51.7	65.3	54.9
The Six.....	40.8	41.4	42.7	43.0	44.5	43.0	37.8	48.3	34.7	45.1
Bulgaria.....	6.7	4.7	8.5	5.0	9.3	6.6	6.4	8.4	7.2	5.2
Czechoslovakia.....	6.2	4.1	5.7	4.6	6.1	4.4	6.3	6.0	5.0	5.9
German Democratic Republic.....	6.0	6.1	5.4	6.2	6.0	6.2	6.0	8.1	5.6	6.3
Hungary.....	4.8	6.8	4.4	6.1	4.6	3.7	3.6	4.7	3.8	4.9
Poland.....	6.2	4.6	6.2	5.0	5.8	4.8	6.8	5.1	5.1	5.6
Romania.....	11.0	15.2	12.5	16.2	12.7	17.2	8.7	15.9	8.0	17.2

B. ANNUAL GROWTH OF TRADE (IN PERCENT, ON THE VALUE OF TRADE OF THE PREVIOUS YEAR IN CURRENT DOLLARS)

	1983		1984		1985		1986		1987		Overall, 1983-87	
	X	M	X	M	X	M	X	M	X	M	X	M
U.S.S.R.....	1.1	4.6	-5.5	-4.4	-14.8	-1.2	18.1	-23.9	13.7	7.9	9.9	-18.8
The Six.....	-6.7	3.5	2.1	2.4	-7.7	-1.6	-10.4	-5.3	-0.8	-5.2	-21.8	-6.3
Bulgaria.....	-19.1	8.6	24.7	5.3	-2.3	31.7	-27.4	6.5	21.4	-37.1	-13.5	1.0
Czechoslovakia.....	12.9	-1.3	-9.6	9.8	-5.1	-4.6	7.5	14.1	-13.0	0.2	-9.5	18.3
German Democratic Republic.....	-8.7	16.5	-12.9	1.0	-1.5	-1.7	6.1	10.3	0.3	-20.8	-16.7	1.0
Hungary.....	-2.3	20.0	-10.1	-12.0	-7.9	-40.3	-16.4	7.9	11.9	5.6	-24.3	-28.2
Poland.....	-3.8	26.6	-2.5	6.7	-16.7	-5.4	22.0	-9.1	-18.1	9.7	-22.0	27.3
Romania.....	-9.3	-10.9	11.1	5.3	-10.4	4.7	-27.3	-22.1	-1.0	9.7	-24.9	-6.1

Sources: Economic Commission for Europe, United Nations, General Economic Analysis Division data file, based upon national statistics.

TABLE 2.—TRADE BETWEEN THE INDIVIDUAL CMEA COUNTRIES AND THE DEVELOPING COUNTRIES, 1983-86

[Values, in millions of dollars]

	1983	1984	1985	1986
BULGARIA				
Total trade (with world) millions of dollars:				
X.....	12,134	12,856	13,349	14,143
M.....	12,288	12,730	13,656	15,205
B.....	-154	126	-307	-1,062
Trade with the Third World millions of dollars:				
X.....	1,592	1,983	1,935	1,401
M.....	771	809	1,066	1,134
B.....	822	1,174	869	268

TABLE 2.—TRADE BETWEEN THE INDIVIDUAL CMEA COUNTRIES AND THE DEVELOPING COUNTRIES,
1983-86—Continued

[Values, in millions of dollars]

	1983	1984	1985	1986
In percent of trade with world:				
X.....	13.1	15.4	14.5	9.9
M.....	6.3	6.4	7.8	7.5
Trade with identified LDC's, in percent of trade with the Third World:				
X.....	100.2	100.1	99.9	97.2
M.....	98.3	85.3	98.8	94.5
CZECHOSLOVAKIA				
Total trade (with world) millions of dollars:				
X.....	16,462	17,169	17,474	20,438
M.....	16,341	17,095	17,548	21,054
B.....	121	74	-73	616
Trade with the Third World millions of dollars:				
X.....	1,477	1,335	1,270	1,374
M.....	672	737	704	808
B.....	805	598	565	565
In percent of trade with world:				
X.....	9.0	7.8	7.3	6.7
M.....	4.1	4.3	4.0	3.8
Trade with identified LDC's, in percent of trade with the Third World:				
X.....	99.0	99.4	99.1	98.8
M.....	97.5	98.9	99.3	99.7
GERMAN DEMOCRATIC REPUBLIC				
Total trade (with world) millions of dollars:				
X.....	23,793	24,835	25,268	27,729
M.....	21,525	22,939	23,433	27,414
B.....	2,269	1,896	1,835	315
Trade with the Third World millions of dollars:				
X.....	1,556	1,255	1,350	1,312
M.....	1,075	1,009	1,123	1,094
B.....	483	246	227	218
In percent of trade with world:				
X.....	6.6	5.1	5.3	4.7
M.....	5.0	4.4	4.8	4.0
Trade with identified LDC's, in percent of trade with the Third World:				
X.....	(¹)	(¹)	(¹)	(¹)
M.....	89.7	100.0	81.9	96.9
HUNGARY				
Total trade (with world) millions of dollars:				
X.....	8,694	8,594	8,543	9,171
M.....	8,504	8,107	8,227	9,594
B.....	191	487	316	-423
Trade with the Third World millions of dollars:				
X.....	1,135	982	907	793
M.....	1,114	970	580	636
B.....	21	12	327	157
In percent of trade with world:				
X.....	13.1	11.4	10.6	8.6

TABLE 2.—TRADE BETWEEN THE INDIVIDUAL CMEA COUNTRIES AND THE DEVELOPING COUNTRIES, 1983-86—Continued

[Values, in millions of dollars]

	1983	1984	1985	1986
M.....	13.1	12.0	7.1	6.6
Trade with identified LDC's, in percent of trade with the Third World:				
X.....	99.1	104.0	104.9	99.8
M.....	99.5	102.0	101.5	99.7
POLAND				
Total trade (with world) millions of dollars:				
X.....	10,952	11,411	11,431	12,070
M.....	9,993	10,319	10,813	11,205
B.....	959	1,092	618	865
Trade with the Third World millions of dollars:				
X.....	1,402	1,406	1,201	1,473
M.....	704	781	760	692
B.....	698	625	441	781
In percent of trade with world:				
X.....	12.8	12.3	10.5	12.2
M.....	7.0	7.6	7.0	6.2
Trade with identified LDC's, in percent of trade with the Third World:				
X.....	87.0	85.7	87.9	73.7
M.....	98.9	81.1	76.3	82.4
ROMANIA				
Total trade (with world) millions of dollars:				
X.....	13,240	12,821	11,234	10,860
M.....	9,959	9,038	8,678	9,147
B.....	3,281	3,783	2,556	1,713
Trade with the Third World millions of dollars:				
X.....	2,918	3,843	3,156	1,910
M.....	3,208	3,135	2,830	2,148
B.....	-290	348	326	-239
In percent of trade with world:				
X.....	22.0	27.2	28.1	17.6
M.....	32.2	34.7	32.6	23.5
Trade with identified LDC's, in percent of trade with the Third World:				
X.....	101.1	65.7	63.2	93.4
M.....	100.3	99.4	96.6	115
THE SIX				
Total trade (with world) millions of dollars:				
X.....	85,276	87,685	87,298	94,410
M.....	78,609	80,228	82,355	93,618
B.....	6,666	7,457	4,943	791
Trade with the Third World millions of dollars:				
X.....	10,081	10,444	9,817	8,262
M.....	7,542	7,442	7,064	6,513
B.....	2,539	3,002	2,753	1,749
In percent of trade with world:				
X.....	11.8	11.9	11.2	8.8
M.....	9.6	9.3	8.6	7.0

TABLE 2.—TRADE BETWEEN THE INDIVIDUAL CMEA COUNTRIES AND THE DEVELOPING COUNTRIES,
1983–86—Continued

(Values, in millions of dollars)

	1983	1984	1985	1986
Trade with identified LDC's, in percent of trade with the Third World: ^a				
X.....	82.8	74.9	73.2	77.2
M.....	85.3	82.7	80.1	85.3
U.S.S.R.				
Total trade (with world) millions of dollars:				
X.....	91,335	91,649	87,281	97,224
M.....	80,267	80,624	83,140	89,172
B.....	11,068	11,025	4,141	8,051
Trade with the Third World millions of dollars:				
X.....	14,158	13,465	11,549	13,585
M.....	9,665	9,297	9,152	6,962
B.....	4,493	4,167	2,397	6,623
In percent of trade with world:				
X.....	15.5	14.7	13.2	14.0
M.....	12.0	11.5	11.0	7.8
Trade with identified LDC's, in percent of trade with the Third World: ^a				
X.....	50.6	48.7	54.2	41.8
M.....	97.2	98.8	98.7	98.5

¹ In the case of GDR: X + M in percent of X + M with Third World.

² Romania stopped giving data on its foreign trade in 1986, other than indices for overall exports and imports. For 1986 we used the figures of the ECE/GEAD data file (see table 1) for exports and imports with the World and with the Third World in aggregate. As for trade with individual countries, we have used the IMF Direction of Trade Yearbook. The result is slightly surprising— it seems that the partner countries export more to Romania than it would acknowledge, and import significantly less from it.

³ As GDR does not give figures disaggregated by exports and imports by countries, the percentages on these two lines are given only for the Five (the Six minus GDR).

Source: Databank CRIES.

TABLE 3.—MAIN GROUPS OF PARTNERS IN TOTAL TRADE OF EASTERN EUROPE WITH THE THIRD WORLD, 1983 AND 1986

[Shares, in percentage]

	Asia		Latin America		Africa (total)		Africa (tropical)		CSO (subgroup 1)		CSO (subgroup 2)		OPEC		NIC's		Middle East	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Bulgaria:																		
1983	51.8	43.7	3.8	15.0	44.2	41.0	6.2	3.2	3.6	0.9	27.8	4.1	72.3	59.5	2.8	4.1	46.8	31.4
1986	54.7	32.5	3.6	9.2	41.6	58.2	7.1	3.0	3.9	0.9	35.7	13.6	65.9	74.1	2.0	8.8	44.2	21.9
Czechoslovakia:																		
1983	66.9	51.5	5.1	31.8	27.8	16.0	2.9	3.7	3.7	1.7	33.2	4.4	39.7	20.2	3.2	22.8	52.1	22.0
1986	49.4	44.3	12.0	38.0	38.3	17.6	6.3	5.6	4.6	5.4	27.2	2.7	44.8	16.9	7.0	22.2	35.0	18.9
German Democratic Republic:																		
1983		63.7		15.6		20.7		9.8		8.6		37.2		50.2		11.5		55.1
1986		39.1		29.4		31.5		14.2		8.2		27.1		26.6		19.0		26.1
Hungary:																		
1983	61.0	32.4	7.3	28.8	31.6	38.8	4.7	1.3	1.5	0.1	30.4	3.8	63.6	56.4	5.8	25.3	49.6	23.3
1986	51.0	48.8	10.5	38.2	38.4	13.0	7.0	6.5	1.6	1.6	20.5	3.2	48.0	23.6	9.3	30.8	38.5	17.0
Poland:																		
1983	51.0	43.3	17.8	16.2	31.0	40.3	4.6	1.5	0.6	0.0	18.5	0.3	45.3	50.8	12.4	18.5	40.3	23.6
1986	45.0	37.9	26.0	49.13	28.6	12.8	4.1	1.1	0.4	0.0	18.4	4.7	33.4	14.1	27.7	48.5	30.9	21.4
Romania:																		
1983	68.3	65.3	2.7	4.9	29.0	29.9	2.2	0.9	0.3	0.0	25.9	24.9	47.7	48.2	3.4	4.6	58.1	60.9
1986	56.4	49.9	7.6	6.2	36.0	43.9	5.1	0.7	0.7	0.0	28.2	20.9	40.1	29.7	7.8	5.3	52.1	45.0
USSR:																		
1983	66.2	46.6	3.7	28.8	29.7	24.5	14.5	3.7	17.9	4.3	15.3	10.9	32.0	29.4	3.0	28.2	29.4	19.0
1986	64.5	55.5	9.8	11.2	25.5	32.9	13.7	6.3	25.3	5.9	25.6	17.6	14.9	31.7	2.9	9.8	23.0	17.3

Source: Databank CRIES.

TABLE 4.—RANKING OF INDIVIDUAL DEVELOPING COUNTRIES IN EASTERN EUROPEAN TRADE WITH THE THIRD WORLD 1983 AND 1986

Countries	Bulgaria				Czechoslovakia				German Democratic Republic		Hungary					
	1983		1986		1983		1986		1983		1986		1983		1986	
	X	M	X	M	X	M	X	M	X	M	X	M	X	M	X	M
									1983	1986						
								X+M	X+M							
Major partners:																
Iraq	2		2	3	3		3		1	2	1	6	4			
Libya	1	1	1	1	2		1				4	1	3	5		
Iran	3	2	4	2	5	2	8	1	2	5	2	3	5	2		
Egypt			9		6	4	4	5	6	4	8	8	2			
Brazil	7	3		8		1		8	3	1	6	2	7	1		
Syria			3	9	1	10	2		4	10						
India		6	7	5	7	3	5	3	5	3	5	9	9	4		
Argentina		4		4		7	9	2								
Turkey	4	7			4	9		9			9		6	8		
Algeria	5			7					7	9	3		1			
Other important partners:																
Afghanistan							7	7								
Angola	8								8	6						
Burma					10											
Chile												4		9		
Colombia								6		7						
Ethiopia									10							
Hong-Kong																
Indonesia						8									3	
Jordan		8														
Lebanon	10		8		9						7					
Liberia																
Malaysia		9				6					7			7		
Mexico							4					5				
Morocco																
Mozambique									9							
Nicaragua			10			10				8						
Nigeria	6		5			6								8		
Pakistan	9	5	6	6	8	5		10				10		6		
Saudi Arabia											10		10			
Singapore			10													
Shares (in percentage) of:																
The first 5 partners	75	73	72	80	59	55	58	46	62	54	59	77	42	48		
The first 10 partners in trade with identified countries of the Third World	85	85	85	91	78	74	74	69	76	78	78	85	67	64		

Countries	Poland				Romania				Eastern Europe (minus GDR)				U.S.S.R.			
	1983		1986		1983		1986		1983		1986		1983		1986	
	X	M	X	M	X	M	X	M	X	M	X	M	X	M	X	M
Major partners:																
Iraq	2		2	7	1	10	2	4	1		1	8	4	5	4	3
Libya	1	1	3		6	3		8	2	2	2	3	6	3		2
Iran	5	2		4	2	2	3	2	3	1	6	2	2	6		
Egypt	7		8	7	3	4	1	1	5	5	3	1	7	7	6	4
Brazil	4	3	1	1		6	7	6	10	4	4	4		4		7
Syria					8	1	4	3	6	3	5	5	8	8	3	9
India	8	4	5	3	7	8		5	9	7	7	6	1	2	1	1
Argentina		9	10	2				9		9		7		1		8
Turkey	3	5	4	6	5	7	5	7	4	8	8	9			9	

TABLE 4.—RANKING OF INDIVIDUAL DEVELOPING COUNTRIES IN EASTERN EUROPEAN TRADE WITH THE THIRD WORLD 1983 AND 1986—Continued

Countries	Poland				Romania				Eastern Europe (minus GDR)				U.S.S.R.				
	1983		1986		1983		1986		1983		1986		1983		1986		
	X	M	X	M	X	M	X	M	X	M	X	M	X	M	X	M	
Algeria	10		7		9		10	9	7								6
Other important partners:																	
Afghanistan													3	9	2	5	
Angola													9		7		
Burma																	
Chile																	
Colombia	6			10													
Ethiopia													10		8		
Hong-Kong	8			9				9	10								
Indonesia	7																
Jordan																	
Lebanon					4			6		8			10				
Liberia				9													
Malaysia	9														10		
Mexico																	
Morocco	6	6	5														
Mozambique																	
Nicaragua																	5
Nigeria								8				9		5			
Pakistan										10		10					
Saudi Arabia					5					6							10
Singapore																	
Shares (in percentage) of:																	
The first 5 partners	60	71	64	70	61	56	65	82	57	69	54	60	54	60	59	58	
The first 10 partners in trade with identified countries of the Third World	80	89	81	90	82	75	82	91	78	84	75	79	75	79	79	79	

X=exports of Eastern European countries; M=imports.

The numbers (from 1 to 10) give the ranking of the Third World country in the trade of the Eastern European country.

Sources as in Table 2.

TABLE 5.—TRADE OF EASTERN EUROPE WITH THE THIRD WORLD, COMMODITY COMPOSITION

[In percent of total trade, by SITC classes]

	SITC classes										Residual	Total					
	0+1	2+4	3	5	6+8	7	0 to 4	5 to 8									
5.A. Total trade with the developing countries																	
Exports:																	
1983	11	8	5	12	24	38	24	74	2	100							
1984	14	8	4	11	22	38	26	71	3	100							
1985	16	7	4	14	24	34	27	72	1	100							
1986	13	8	5	14	24	33	26	71	3	100							
Imports:																	
1983	21	15	56	1	7	0	92	8	0	100							
1984	22	16	51	1	8	1	89	10	1	100							
1985	17	18	52	1	9	2	87	12	0	100							
1986	21	15	51	1	9	3	87	13	0	100							
5.B. Trade with OPEC countries																	
Exports:																	
1983	16	10	0	8	24	38	26	70	4	100							

TABLE 5.—TRADE OF EASTERN EUROPE WITH THE THIRD WORLD, COMMODITY COMPOSITION—
Continued

[In percent of total trade, by SITC classes]

	SITC classes										Total
	0+1	2+4	3	5	6+8	7	0 to 4	5 to 8	Residual		
1984.....	20	9	0	7	20	40	29	67	4	100	
1985.....	27	8	0	6	20	37	35	63	2	100	
1986.....	20	7	0	6	17	42	27	65	8	100	
Imports:											
1983.....	6	3	90	1	99	1	0	100			
1984.....	3	3	93	1	99	1	0	100			
1985.....	4	3	93	0	100	0	0	100			
1986.....	4	2	93	1	99	1	0	100			
5.C. Trade with the developing countries of Asia (Middle East excluded)											
Exports:											
1983.....	2	2	10	25	23	38	14	85	1	100	
1984.....	4	5	7	24	28	32	16	84	0	100	
1985.....	5	3	9	26	31	26	17	83	0	100	
1986.....	5	7	4	25	37	22	16	84	0	100	
Imports:											
1983.....	22	42	0	1	31	1	64	33	3	100	
1984.....	23	43	0	0	29	2	66	31	3	100	
1985.....	17	45	0	0	32	3	62	35	3	100	
1986.....	26	27	0	1	40	5	53	45	2	100	
5.D. Trade with the developing countries of Latin America (belonging to the Latin American Integration Association)											
Exports:											
1983.....	7	6	19	26	11	32	32	68	0	100	
1984.....	6	6	19	26	12	31	31	69	0	100	
1985.....	2	8	19	42	6	23	29	71	0	100	
1986.....	11	6	18	30	5	30	35	65	0	100	
Imports:											
1983.....	61	22	0	1	15	0	83	16	1	100	
1984.....	60	19	1	1	14	4	80	19	1	100	
1985.....	53	25	1	2	13	6	79	21	0	100	
1986.....	66	19	0	1	9	6	85	16	-1	100	
5.E. Trade with the developing countries of Africa											
Exports:											
1983.....	17	3	1	7	28	37	21	72	7	100	
1984.....	19	4	1	4	21	42	24	67	9	100	
1985.....	22	4	3	6	29	29	29	64	7	100	
1986.....	16	5	3	6	28	34	24	68	8	100	
Imports:											
1983.....	13	12	71	0	2	1	96	3	1	100	
1984.....	10	14	72	1	3	0	96	4	0	100	
1985.....	12	18	65	1	3	0	95	4	1	100	
1986.....	7	18	67	2	5	0	92	7	1	100	

TABLE 6.—BALANCES WITH THE THIRD WORLD AND WITH THE WEST (FOR HUNGARY AND POLAND,
ALSO BALANCES IN HARD CURRENCY WITH CMEA PARTNERS)

[In millions of dollars]

	1983	1984	1985	1986	1987
Bulgaria:					
a.....	824	1,176	866	268	988
b.....	-445	-587	-943	-1,393	-1,346
a + b.....	379	589	-77	-11,25	-358
Czechoslovakia:					
a.....	808	599	565	561	381

TABLE 6.—BALANCES WITH THE THIRD WORLD AND WITH THE WEST (FOR HUNGARY AND POLAND, ALSO BALANCES IN HARD CURRENCY WITH CMEA PARTNERS)—Continued

[In millions of dollars]

	1983	1984	1985	1986	1987
b.....	-29	197	66	-266	-524
a + b.....	779	796	631	295	-143
German Democratic Republic:					
a.....	441	246	345	218	450
b.....	876	910	876	145	-155
a + b.....	1,317	1,156	1,221	363	295
Hungary:					
a.....	24	43	360	157	215
b.....	-75	120	-583	-746	+603
c.....	580	445	282	94	75
a + b + c.....	532	608	59	-495	-313
Poland:					
a.....	732	643	445	781	447
b.....	704	923	488	391	767
c.....	71	5	51	39	53
a + b + c.....	1,507	1,571	984	1,211	1,267
Romania:					
a.....	132	294	-133	-238	-465
b.....	2,196	2,486	2,259	2,235	2,896
a + b.....	2,328	2,780	2,126	1,997	2,431
Total:					
a.....	2,961	3,001	2,348	1,590	2,016
b.....	3,227	4,049	2,163	366	1,035
c.....	654	450	333	133	128
a + b + c.....	6,842	7,500	4,844	2,089	3,179

Source: ECE/UN GEAD DATAFILE. (See table 1.)

Notes: a=balance with the Third World. b=balance with the industrialized West. c=balance in nonruble trade with CMEA countries.

TABLE 7.—CLEARING AGREEMENTS BETWEEN EASTERN EUROPEAN AND DEVELOPING COUNTRIES IN FORCE IN 1987

	Bulgaria	Czechoslovakia	German Democratic Republic	Hungary	Poland	Romania	U.S.S.R.
Afghanistan.....		x	x				x
Bangladesh.....	x	x	x	x	x	x	x
Brazil.....	x		x		x		
Colombia.....	x			x	x	x	
Ecuador (1).....			x	x	x		
Egypt.....							
Ghana.....	x		x			x	
India.....		x	x		x	x	x
Iran.....	x	x	x	x	x	x	x
Lebanon (2).....					x		
Mali.....							x
Mozambique.....			x				
Nepal.....	x	x			x		x
Pakistan.....	x	x		x	x		x
Sao Tome.....			x				
Somalia.....							x
Syria.....							x
Turkey.....		x			x	x	x

Source: IMF, Annual Report on exchange arrangements and exchange restrictions, 1987 and 1988.

TABLE 8.—BALANCES IN EAST-SOUTH TRADE, 1983 AND 1986, ACCORDING TO THE SETTLEMENT REGIME

	Bulgaria	Czechoslovakia	German Democratic Republic	Hungary	Poland	Romania	Total ¹
Clearing balances (million dollars):							
Positive:							
1983.....	17,4	78,3	.....	139,7	179,0	46,0	460,4
1986.....	24,6	15,1	.....	2,2	179,3	129,3	350,5
Negative:							
1983.....	-24,7	-11,3	.....	-232,6	-27,8	-246,7	-543,1
1986.....	-49,2	-70,2	.....	-33,0	-41,1	-391,1	-584,5
Net:							
1983.....	-7,3	67,0	.....	92,9	151,2	-200,7	-82,7
1986.....	-24,6	-55,0	.....	-30,8	138,2	-261,8	-234,0
Overall balances with DC's (millions dollars):							
1983.....	822	805	483	21	698	-221	2125
1986.....	267	565	218	157	781	-239	1531
"Apparent" balance in hard currency with the Third World (overall minus clearing balances):							
1983.....	829	738	.....	114	547	-20	2208
1986.....	292	620	.....	188	643	23	1765
Ratio (in percentage) between: exports in clearing and total exports to the DC's (X + M):							
1983.....	16,7	19,5	34,7	35,0	29,7	22,5	23,9
1986.....	12,4	15,7	21,6	11,3	32,1	21,4	19,6
Imports in clearing and total imports from the DC's							
1983.....	36,0	33,0	.....	44,3	37,3	28,7	36,5
1986.....	17,5	34,3	.....	181,9	48,4	31,2	29,5

¹ German Democratic Republic excluded.

Source: Databank CRIES.

TABLE 9.—SOVIET AND EAST EUROPEAN ECONOMIC AID (WESTERN SOURCES)

	1983	1984	1985	1986	1987
Total aid extended (million dollars):					
GDR.....	166	151	169	170	175
The Six.....	434	507	544	521	550
U.S.S.R.....	2,708	2,687	2,982	4,230	4,700
The Six plus U.S.S.R.....	3,142	3,194	3,526	4,751	5,250
Share of GNP devoted to aid (in percent):					
CEMA, total.....	0.21	0.22	0.24	0.27	
U.S.S.R. alone.....	0.25	0.27	0.31	0.33	

Source: Press release of the OECD, June 17, 1988, on the financial resources extended to developing countries in 1987.

SUBSTITUTING SOUTHERN FOR WESTERN MARKETS: OPTIONS BEFORE EAST EUROPE

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INTRODUCTION

In my earlier work (Poznanski, 1986) I have demonstrated that the centrally planned economies (i.e., CPE's) of East Europe are losing markets in the West to a number of rapidly growing countries from the South. Repairing this damage will be difficult since, as I have shown, the gains by the South are due to its surpassing East European exports in technological terms. This leaves East Europe with two options, either to compensate for these losses by expanding the intraregion (plus the Soviet Union) trade, or to search for substitute markets in the South still many countries remain technologically inferior. It is the latter possibility—the southern option—that is being analyzed in this study.

Unlike most of the research on East-South trade done to date (e.g., Lavigne, 1986; Kaminski, 1988; and Maciejewski, 1988), this analysis is based on statistical sources for the developing countries themselves. Statistics so derived might differ from those offered by most of the existing studies due to differences in growth rates and structural trends in Eastern and Southern trade respectively. This study does not try many methodological innovations, but rather repeats the general approach taken in my earlier work. I am also adopting the same sequence of statistical tests, though in lesser depth, given the format of this analysis.

*University of Washington. The study has been in part supported by the Fritz Endowment in International Studies at the Henry Jackson School of International Studies, University of Washington. The initial impulse for this analysis came from a discussion with R. Amann back in 1985. I have benefited from comments by J. van Brabant, N. Lardy, and P. Marer. Part of the data on export-unit values for section 3 of this paper has been calculated by E. Larsen.

The study demonstrates that, contrary to a number of theoretical arguments presenting the developing countries as viable alternatives for East European exports, prospects in those markets are not very encouraging. A growing number of developing countries seem prepared to trade among themselves products which are enough technologically advanced to pose a challenge to East European goods. Moreover, by comparison with western exports to the South, East European supplies are both technologically inferior and marginal. East Europe's prospects of improving its relative standing in the South seem no better than its prospects in the competition for western markets.

1. DISINCENTIVES AND OPPORTUNITIES FOR TRADE

Traditionally there has been a very marginal interest among East European/Soviet economists in advancing theoretical work on the issue of East-South trade. Much of that effort, though still limited, has come from other sources, particularly western scholars representing the so-called dependency school. (See Nayyar, 1977.) Among the arguments advanced by the latter is the claim that mutual trade between the regions represents a policy superior to their traditional efforts to penetrate the West. However, some find that option impractical, reflecting political judgments more than economic rationale. Below, some points of disagreement between these opposite approaches are briefly discussed.

Appropriate technology.—One point made by the dependency school is that imports of capital-intensive technologies meant for labor scarce western economies contribute to high-unemployment levels in the South, and western-designed luxury goods overstimulate individual consumption, thus hurting capital expansion there. (For review, see Poznanski, 1984.) The main policy solution is de-linking, i.e., promotion of indigenous technology. (See critical comment, Lal, 1983.) Importing superior technology from second-best sources—such as East Europe and the Soviet Union—is seen as another alternative to reliance on the West.

However, even if East European products were second best, they could gain advantage over western goods in the South only if the West uniformly employed the most advanced technology. While western economies hold an unquestionable lead in technology, they most likely operate a diversity of models in each products area, in part because markets there are not totally "homogeneous" due to income discrepancies or regional diversity. In addition, because competitive forces, are constrained by various institutions of the modern welfare state, they do not force less technologically advanced producers immediately out (e.g., due to opposition by trade unions, governmental regulations on prices, or on access to specific markets).

Dual-economy.—Some economists who do not view East Europe as technologically superior to the South claim that the CPE economies have lost their edge only in products exported by southern countries (mostly the NIC's) to the West. This loss, as they argue, does not preclude East Europe from successfully competing against the manufactures producers in the South. (See van Brabant, 1987, p. 94.) This is presumably because the products that NIC's sell to

the West are designed according to the specifications of affluent and highly regulated markets (i.e., those setting demanding quality standards), and thus not suitable for southern economies.

For the above reasoning to be accepted one would have to demonstrate that the western-oriented producers in southern countries are not capable or willing to manufacture simpler goods for domestic purposes. However, to the degree these producers operate lines that allow for assembling differentiated, in quality terms, variants of the same goods, they should find it profitable to work for both markets, western and southern (e.g., to capture economies of scale, or achieve higher rates of capacity utilization).

The duality argument to be true requires that the prowestern export sector in the NIC's continuously keeps us with the high-market standards, and phases out these capacities that end up uncompetitive in the West. However, if the domestic buyers in southern countries are mostly interested in less advanced models of particular goods, then these failing prowestern exporters could find it useful to turn to internal markets, or other southern outlets.

Financing practices.—Southern countries usually face shortages of foreign currency, and thus tend to be less reluctant to pursue barter transactions. The same is true for East European countries though largely for different reasons. Since western economies are hardly interested in that type of transaction, some writers argue that these financial concerns should favor mutual exchange between the East and South at the expense of commercial contacts with the West. (See discussion, Wolf, 1983; Becker, 1986.)

However short on foreign currency, neither East nor South is prepared to encourage trade with some weaker partners by offering attractive credit conditions—something that financially strong western economies can do on a regular basis. The question is whether any potential convenience from clearing outweights the benefits of credit, the latter including an ability by the borrower to exploit market opportunities and an incentive to allocate productive resources wisely (important given the often “soft” state financing in southern economies, and even more in East Europe).

In addition, while a higher propensity to engage in barter trade might bring East Europe (or the Soviet Union) closer to the southern economies, it has to be kept in mind that such a form of transaction is defective (e.g., it drives the scope of trade to the abilities of the single weakest partner). These shortcomings may prevent successful expansion of East-South trade in the long run.

Marketing skills.—One of the most critical obstacles to East Europe's exports to the West is lack of marketing skills. (See Marer, 1986.) This is sometimes seen as a more critical barrier to trade than the technological lag itself. Thus, the question arises whether southern markets are less demanding in terms of marketing and thus easier to penetrate, all other factors being equal, than the countries of the West.

One can reasonably argue that southern markets in general should be posing fewer problems with marketing since their demand is less diversified (i.e., the bulk of it is for standard models), and because in smaller and less-developed economies, the quantities demanded are not big enough to justify large marketing accounts. However, southern societies, one may claim, are discrimi-

nating enough to make East Europe face bigger problems in persuading customers than those encountered by western counterparts.

East Europe is not helped by the fact that the strong demonstration effect makes various groups in southern societies—rich and poor—prefer western goods (a tendency somewhat tempered in countries adopting an antiwestern and/or autarchic stance). In addition, whether southern markets are less demanding in marketing terms or not, East Europe, one could argue, is probably less prepared to market in the South than in the West. East Europe's trade with western countries benefits not only from closer proximity, but also a more common cultural background and more extensive human contacts (including the presence of East European emigrants in the West).

Politics and ideology.—Countries do not usually just seek maximum welfare gains from trade, but also tend to arrange their commercial relations for the sake of power maximization. Thus, given the existing division in the world political system, or more specifically, the East-West conflict, southern countries may find closer economic ties with the Soviet Union and/or East Europe a source of improvement in their relative power, whether the purpose is to reduce dependence on western countries or rather to acquire a non-alignment status when western and eastern influences cancel out each other.

Much of East Europe's trade with the South is facilitated by close political ties, in most cases due to client relations by specific southern economies with the Soviet Union. (See Kaminski, 1988.) Those politically fostered relations with southern economies have, however, a negative impact on benefits derived by East Europe due to preferential prices, putting up with inferior quality of imports, forgiving unpaid bills, etc. While there is no empirical proof that East Europe subsidizes political allies in the South similar to Soviet practices (see Wolf, 1985a, 1985b), it is likely that this is the case, though probably on a smaller scale than that by the Soviet Union.

2. IMPORTANCE OF EAST EUROPE

One of the well established facts about East Europe's trade is that East Europeans typically capture a very small share of any individual western market for a particular product category and as buyers they likewise account for only a small portion of the exports of any single western country. This is typically attributed, at least in part, to technological backwardness of Eastern European goods. To find out whether the pattern for southern trade with East Europe is any different from that for the West, I am going to look at the total trade by developing countries, that of specific nations, and finally I shall conduct statistical analysis of particular product groups. Hopefully, with that evidence we should be better able to judge the validity of arguments on the prospects for East Europe's substitution of the South for the West.

A. TOTAL TRADE FLOWS

The IMF trade data (i.e., Direction of Trade series) provides a good basis for the analysis of flows of goods between East Europe

and the South (i.e., all developing countries except for low-income centrally planned economies such as China, Cuba, and Mongolia). Here we are analyzing the period 1960–87, using data in current dollars. While the collected time series began in 1960, we are taking the year 1965, since the former is likely to produce a distorted picture (e.g., because the 1960 statistic shows a large flow of trade with China dramatically scaled down after this country's breakup with the Soviet Union).

Aggregate data.—The data on total exports by developing countries to East Europe indicate that at no point in the period 1965–87 did the region represent a significant market for their goods. The share of East Europe in southern exports has never moved above the 2 percent mark. The Soviet Union has been a more significant outlet, but not by much, with the Soviet share hardly moving above 2.5 percent. Taken together, the East European and Soviet share of the total exports by developing countries has at its highest stayed around 4 percent.

If one begins with the year 1965, there is a dim indication that while generally marginal, the role of the European CPE markets in southern trade has been falling, with the combined percentage going from 3.8 to 2.4. While the share of East Europe dropped from 1.95 percent in 1965 to 1.20 percent in 1987, the share for the Soviet Union declined from 1.88 percent to 1.26 percent, or somewhat less. However, if one takes maximum shares for comparison of East Europe and the Soviet Union, then the fall by the latter turns out more substantial (while the 1965 percentage value for East Europe was the highest, the peak for the Soviet Union was in 1975, 2.55 percent).

Thus, the European CPE's have never become more significant trading partners for southern producers than they have been for exporters in the West, where the combined share of East Europe and the Soviet Union has also remained under 4 percent. The above-documented, downward trend for southern trade with the CPE countries in Europe is similar, if not in pace, than at least in direction, with that detected in the East-West trade during recent years. (See Poznanski, 1986.)

Dividing the total for East-South trade into four major regions—Africa, Asia, and the Middle East, and the Western Hemisphere (i.e., Latin and Central America)—one finds that East Europe and the Soviet Union are of marginal importance everywhere. (See Table 1.) Throughout 1965–87 the CPES were receiving relatively more Middle Eastern exports than on average and their shares were below the average in the case of African products, but the cross-region differences could not be considered meaningful. All regions reported declining shares, particularly in the case of exports from Africa and the Middle East, reflecting the shrinking demand for oil from East Europe and particularly from the Soviet Union.

TABLE 1.—SHARE OF EAST EUROPE (EE) AND THE SOVIET UNION (SU) IN TOTAL TRADE BY MAJOR REGIONS IN THE SOUTH

		[In percent]							
		1960	1965	1970	1975	1980	1985	1986	1987
		(a) Exports							
0. Total (1-4):									
EE	.....	2.32	1.95	1.92	1.69	1.56	1.31	1.39	1.20
SU	.....	4.33	1.88	2.24	2.55	1.83	1.49	1.39	1.26
1. Africa:									
EE	.....	.34	1.44	1.16	1.61	.70	.60	.64	.62
SU	.....	.51	1.16	1.69	.86	.78	.63	.72	.73
2. Asia:									
EE	.....	3.97	1.98	1.90	.70	1.53	1.03	1.19	1.02
SU	.....	9.16	3.25	3.13	2.15	1.81	2.24	2.20	1.81
3. Middle East:									
EE	.....	3.30	3.04	2.14	7.24	3.46	2.18	2.14	1.97
SU	.....	3.41	2.54	2.93	9.41	1.49	.39	.67	.45
4. Western Hemisphere:									
EE	.....	1.09	1.57	1.49	1.73	1.82	1.29	1.64	1.26
SU	.....	1.06	.97	.45	2.72	2.62	1.99	.82	1.10
		(b) Imports							
0. Total (1-4):									
EE	.....	2.06	1.97	2.07	1.62	1.37	1.73	1.72	1.45
SU	.....	5.09	1.36	1.17	.89	.73	1.16	1.28	1.07
1. Africa:									
EE	.....	.32	1.96	2.32	1.25	.91	1.47	1.41	1.27
SU	.....	1.54	.95	1.59	.69	.63	1.07	.98	.92
2. Asia:									
EE	.....	3.82	1.62	1.63	1.49	1.54	1.19	1.44	1.20
SU	.....	12.02	2.00	1.28	1.25	1.25	1.48	1.74	1.48
3. Middle East:									
EE	.....	2.00	5.39	5.25	5.20	3.88	3.45	3.25	2.82
SU	.....	2.76	2.19	2.82	1.99	.51	1.16	1.24	.87
4. Western Hemisphere:									
EE	.....	1.20	.67	.78	.79	.61	1.00	.88	.68
SU	.....	1.29	.56	.06	.13	.11	.32	.28	.31

Source: Calculated from Direction of Trade, IMF, Washington, DC (various years).

Turning to the imports neither East Europe, nor the Soviet Union have established themselves as important sources of supplies to the South. (See Table 1.) Their shares in the purchases by developing countries declined during the period in question, first between 1965-80 and then again in 1987 after a few years of partial recovery. This observation applies to both East Europe and the Soviet Union, though the relative drop in the importance of supplies from the former was less pronounced. The combined share of the two CPE exporters dropped from 3.4 percent in 1965 to 2.5 in 1987, about one-third (close to the Soviet record), while the drop for East Europe was about one-fourth.

On the regional level, the importance of East Europe as a source of supplies has been diminishing across the board, as has been the case with the Soviet Union. (See Table 1.) In Asia and the Western Hemisphere (i.e., Latin and Central America), the Eastern European economies have been losing ground since 1960, while in other regions—Africa and the Middle East—the downward trend started after 1970. If one takes the latter date as a point of reference, then the biggest point losses in East Europe's share of southern imports

have been those in the Middle East—from 5.25 percent in 1970 down to 2.82 percent in 1987, or more than 2.5 points.

A more disaggregated analysis involving nine important southern economies reveals that only in one of them and only for a short period, has East Europe been a significant recipient of exports. This country is India. Whereas in 1970 India used to place 6.8 percent of its goods in East Europe, this share was down to 3.3 percent in 1987. However, combined with the Soviet Union, the European CPE's took as much as 19.3 percent of Indian exports in 1987 (against 17.6 percent in 1970). The importance of East Europe has also diminished for such southern economies as Argentina and Brazil. (See Table 2.)

TABLE 2.—SHARE OF EAST EUROPE (EE) AND THE SOVIET UNION (SU) IN TOTAL TRADE BY SELECTED COUNTRIES IN THE SOUTH

	[In percent]							
	1960	1965	1970	1975	1980	1985	1986	1987
A. Exports								
Argentina, to:								
EE	3.83	2.05	2.61	1.55	2.17	1.70	4.75	2.53
SU	1.56	5.48	1.53	9.72	15.05	14.40	3.05	9.90
Brazil, to:								
EE	4.54	3.74	3.72	4.18	4.46	2.24	2.66	2.49
SU	1.06	1.83	.76	4.58	1.34	1.78	1.19	1.09
Mexico, to:								
EE .....	.00	.25	.20	.27	.07	.24	.23	.17
SU .....	.01	.00	.00	.14	.03	.04	.04	.02
India, to:								
EE	2.49	6.66	6.82	6.16	3.56	3.36	3.52	3.34
SU	4.72	10.92	13.41	11.71	13.42	16.85	17.18	15.99
Indonesia, to:								
EE .....	.79	.00	.00	.17	.31	.46	.53	.40
SU	3.34	.00	2.15	.37	.33	.42	.34	.31
Iraq, to:								
EE .....	.00	.18	.86	.24	2.46	1.62	1.55	1.49
SU .....	.63	.34	.51	n.a	n.a	n.a	n.a	n.a
Hong Kong, to:								
EE .....	.00	.00	.00	.19	.23	.18	.21	.19
SU .....	.00	.00	.00	.07	.08	.22	.11	.07
South Korea, to:								
EE .....	.00	.00	.00	.08	.00	.00	.00	.00
SU .....	.00	.00	.00	.01	.00	.00	.00	.00
Singapore, to:								
EE	2.68	n.a	1.88	.78	.54	.24	.29	.24
SU	1.78	n.a	2.99	1.00	1.21	1.06	.58	.40
B. Imports								
Argentina, from:								
EE	2.72	1.10	.85	2.05	.76	1.49	.87	1.12
SU	1.14	1.49	.02	.55	.14	1.09	1.25	1.58
Brazil, from:								
EE	4.23	2.67	1.79	1.62	1.05	2.17	2.58	2.22
SU	1.20	3.19	.10	.00	.15	3.18	1.71	1.76
Mexico, from:								
EE .....	.16	.28	.25	.18	.28	.26	.23	.13
SU .....	.04	.04	.01	.06	.06	.05	.04	.02
India, from:								
EE	2.80	4.22	6.98	5.25	3.05	2.56	2.54	2.75
SU	1.31	6.01	7.85	6.35	8.31	7.60	7.47	7.55
Indonesia, from:								
EE	1.59	.00	.00	2.09	.47	.26	.38	.29
SU	1.46	.00	.57	.77	.13	.03	.04	.01

TABLE 2.—SHARE OF EAST EUROPE (EE) AND THE SOVIET UNION (SU) IN TOTAL TRADE BY SELECTED COUNTRIES IN THE SOUTH—Continued

[In percent]

	1960	1965	1970	1975	1980	1985	1986	1987
Iraq, from:								
EE	6.06	13.44	10.97	4.04	3.22	8.13	7.33	12.34
SU	1.86	7.37	10.69	2.45	.98	.99	.95	1.07
Hong Kong, from:								
EE .....	.27	.22	.27	.19	.14	.21	.17	.17
SU .....	.33	.10	.20	.06	.16	.18	.17	.21
South Korea, from:								
EE .....	.00	.00	.00	.06	.06	.00	.00	.00
SU .....	.00	.00	.00	.00	.01	.00	.00	.00
Singapore, from:								
EE .....	.19	.28	.48	.22	.19	.22	.17	.21
SU .....	.16	.20	.43	.09	.09	.04	.14	.12

Note: n.a.—not available.

Source: Calculated from Direction of Trade, IMF, Washington, DC, various years.

On the import side, the role of East Europe does not seem to be significant in any of these countries either. The only exception has been Iraq, where the share of Eastern European supplies in that country's imports on occasion has been double digit (e.g., 12.3 percent in 1987). (See Table 3.) For all other southern recipients of East Europe's goods of some importance, the shares have been much lower and, unlike for Iraq, declining. India is a case in point, although the Soviet Union has been able to avoid such a reduction, so that its share of India's imports has continued to oscillate around 7 percent.

Interestingly, East Europe has not begun to build up even a limited trade relationship with a number of important southern economies. This applies to Mexico despite that country's good political relations with the European CPE's and longstanding inclination to allow for extensive state intervention and import subsidization strategy, both presumably making Mexico more compatible with East Europe or the Soviet Union. The CPE trade with Far Eastern NIC's has also been close to none, though this time political tensions clearly have been working against closer contacts.

B. TRADE BY PRODUCT CATEGORY

The next step is to determine the product structure of East Europe's trade with the South over time. Since the southern economies have been gradually increasing their overall ability to sell manufactured goods—the most drastic example being the NIC's—it is essential for the promotion of trade with the South that its trading partners provide outlets for those products. Consequently, the focus of the following section is on the role of manufactured goods in East Europe's trade with southern economies. To find out how attractive East Europe is as a trading partner of the South, a comparison with the West will be included.

Product Structure. The common perception (see Lavigne, 1982, 1986) is that East Europe traditionally tends to supply the South with manufactured goods in exchange for primary goods, particularly food and fuels. This can be confirmed with the help of data by

the United Nations (Monthly Bulletin of Statistics), but only for some earlier years. For instance, in 1970 the share of manufactured goods (SITC-6 to 8) in southern exports to East Europe was 13.8 percent, compared with a 74.5 percent share of those goods in East Europe's sale to the South. Since then, however, the southern economies have managed to increase the share of those goods, reaching 23.3 percent in 1985. At the same time, the role of manufactures in exports from East Europe to the South has diminished, with a 48.7 percent share reported in 1985.¹

If the oil-rich southern economies (i.e., the OPEC members) are excluded from the analysis, then the gains by the South in expanding the role of manufactured goods in total exports to East Europe appear larger than is suggested by the data on the totals for East-South trade. This time the gain was from 14.4 percent to 31.8 percent during 1970-85. Within this limited sample, the decline in the share of manufactured goods in East Europe's sales appears less than when the energy-abundant countries of the South are included, down from 73.78 percent to 59.5 percent. (See Table 3.)

TABLE 3.—PRODUCT STRUCTURE IN SOUTHERN TRADE (EXCL. OPEC) WITH SELECTED PARTNERS

[In percent]

	In total		
	East Europe	Soviet Union	Industrialized West
1. Share of machinery and transport equipment (SITC-7)			
Exports, to:			
1970.....	0.3	0.1	2.8
1975.....	1.3	.6	5.4
1980.....	.4	.5	8.6
1985.....	9.9	13.4	15.7
Imports, from:			
1970.....	45.4	28.9	40.7
1975.....	38.8	18.6	44.4
1980.....	40.1	20.6	42.8
1985.....	32.2	31.9	43.3
2. Share of other manufactures (SITC-6 and 8)			
Exports, to:			
1970.....	14.1	16.3	28.8
1975.....	27.6	13.0	26.7
1980.....	14.5	11.4	28.7
1985.....	21.8	16.4	32.8
Imports, from:			
1970.....	28.3	9.6	27.6
1975.....	27.8	6.6	23.3
1980.....	25.1	8.3	24.9
1985.....	27.3	6.7	23.8

Source: Calculated from Monthly Bulletin of Statistics, New York: United Nations, various years.

However, East Europe continues to maintain, for the most part, a heavy imbalance in one important segment of trade in manufactures with the South—machinery and transport equipment (SITC-7). Southern economies export a relatively small amount of ma-

¹ It is worth noting that similar changes have taken place in Soviet trade in the southern region, particularly in the structure of this country's imports from the South.

chinery and transport equipment, while sales from East Europe to the South are heavily concentrated in this most complex general category of goods. While the share of these goods in southern exports increased from 0.4 percent in 1980 to 9.9 percent in 1985, this was still way below the respective share in East Europe's sales to the South in the latter year, 32.2 percent (down from 40.1 percent in 1980).

Trade Bias.—The structure of East Europe's trade with the developing countries stands in obvious contrast to the region's trade with western economies. If one sees the minerals for machinery trade by East Europe with the West as evidence of the former's technological inferiority, then it appears that the commodity structure of East European trade with the developing countries should be viewed as a sign that the region holds a technological lead. However, that structure may reflect more than relative technological strength. It can result from East Europe's unwillingness to buy capital goods from the developing countries.

Since the West is further technologically away from the South than is East Europe, then one should—absent of state intervention—expect the Western economies to receive relatively fewer manufactured goods from southern markets than do Eastern European importers. Table 3 demonstrates that despite their more advanced technological status, the West has continuously been more involved in purchasing manufactured goods than East Europe. The share of machinery and transport equipment in western imports from the South was 5.4 percent and 1.3 percent in East Europe in 1975, and the respective shares in 1985 were 15.7 percent and 9.9 percent. This indicates some trade discrimination (or a more discriminatory attitude) on the part of East Europe.

If one takes the case of Brazil, it appears that East Europe (and the Soviet Union) are by far more closed to southern manufactures than markets of the West. In 1981, for instance, in the machinery and transportation equipment category (SITC-7), East European imports of Brazilian goods represented only 0.1 percent of the region's sales to Brazil (mostly by Hungary); so was the case of Soviet trade with Brazil in this class of manufactured goods. To compare, among the three major Western partners of Brazil—Japan, West Germany, and the United States—the relationship was more balanced, with respective ratios for trade with Japan, 12 percent; West Germany, 24 percent; and the United States, 48 percent, the highest.

Interestingly, in the case of Brazil's trade with southern economies, the country shows positive balance in machinery and transportation equipment. Brazil produces a strong surplus in its trade with Mexico and Argentina (e.g., close to \$0.5 billion in 1981). Sales to other NIC's have been much smaller than to Mexico and Argentina or to the other rapidly growing Latin American economies, but all cases except Taiwan show a positive balance as well. Brazil imports from many of its southern partners a multiple of what East Europe acquires from Brazil.

C. SOURCES OF THREAT TO TRADE

Overall picture.—At this point, it is appropriate to determine to whom East Europe has been losing its southern markets. In the case of Brazil, if one begins with 1975, it appears that in point terms the most significant gains in total imports have been made by other countries of Latin America, particularly the group consisting of Argentina, Chile, Mexico, Uruguay, and Venezuela. (See controversy on trends in South-South trade, Havrylyshyn and Wolf, 1983; Lall, 1985.) Initially, oil producers, excluding those in Latin America (Mexico, Venezuela), increased their percentage share in total imports considerably, mostly at the expense of western partners of Brazil. However, by 1987 all the gains by the former had disappeared, and the West regained much of its earlier loss. (See *Direction of Trade*.)

Given the structure of East European trade with Brazil, more meaningful is the data on geographical changes in imports of machinery and transportation equipment (SITC-7). Judging from the United Nations data (Bulleting of Statistics on Foreign Trade in Engineering Products), covering major sources of imports into Brazil during 1970-85, the Latin American countries did not make much progress. (See Table 4.) It was the West that expanded its share of Brazil's imports from 94.5 percent to 95.5 percent.² East Europe, in contrast, lost ground during that period, dropping from 4 percent in 1970 to 1.8 percent in 1985.

In the case of India, if total imports are concerned, East Europe seems to have been losing markets mostly to the NIC's, particularly those of the Far East. Using dollar figures from international sources (Foreign Trade Statistics of Asia and the Pacific), one finds the latter group of countries (excluding Taiwan) to have made a gain of more than 10 points between 1974 and 1984 (from 0.33 percent to 10.79 percent), while the whole group of NIC's (including Venezuela) increased its share by about 13 points (from 1.59 percent to 18.08 percent). If one adds Malaysia, considered a second-tier NIC, the advances are even more substantial (from 2.04 percent to 21.46 percent). The loss by western countries was small, with the major losers besides East Europe, being the Soviet Union (down from 11.57 percent to 6.34 percent).

The Soviet Union's continuously respectable share of India's market might be seen as an indication that East Europe, due to similarities between these two, should be in a position to increase its presence in India. However, the high share by the Soviet Union reflects mostly its strong exports of fuels and other primary goods. For instance, in 1985, the revenues from fuels accounted for 44.3 percent of total Soviet revenues from exports to India and the share of all raw materials was way above 50 percent. Poor in natural resources, East Europe is not able to augment its exports to India the way the Soviet Union has been doing in the past (though with softer prices for minerals the latter has lost much of its export potential).

² Though in the process West Europe suffered substantial losses to other western economies, particularly the United States (some gain was reported by the Soviet Union too).

Turning to machinery and transport equipment where East European exports are concentrated, Indian data reveals that here again western economies showed gains, though this time much more substantial than in Brazil. (See Table 4.) In 1970, the combined share of West Europe and Other West was 69.6 percent. But in 1985 it went up to 85.4 percent, more than 15 points. Large gains were also made by the NIC's, even if a limited sample is taken, without Mexico and Taiwan, the latter of some significance as a supplier (see Statistics of the Foreign Trade of India), a gain of almost 10 points in that period. All these advances were made at the expense of both East Europe and the Soviet Union, dropping from 30.3 percent combined to 4.9 percent.

TABLE 4.—SOURCES OF IMPORTS OF MACHINERY AND TRANSPORT EQUIPMENT (SITC-7) BY BRAZIL AND INDIA

	[In percent]			
	1970	1975	1980	1985
Brazil, total, in which.....	944.6 (100.0)	4,209.1 (100.0)	5,222.4 (100.0)	3,583.4 (100.0)
West Europe.....	413.0 (43.7)	2,115.2 (50.2)	2,555.2 (48.9)	1,308.8 (36.5)
Other West ¹	479.5 (50.8)	1,953.6 (46.4)	2,505.5 (48.0)	2,113.5 (59.0)
East Europe.....	39.2 (4.1)	² 57.02 (1.3)	² 1.6 (.8)	² 6.8 (1.8)
Soviet Union.....	.8 (.1)	4.7 (.2)	23.2 (.4)	³ 35.8 (1.0)
The NIC's.....	⁴ 12.1 (1.3)	⁵ 78.6 (1.9)	⁶ 96.9 (1.8)	⁶ 58.5 (1.6)
India, total, in which.....	536.4 (100.0)	1,132.9 (100.0)	2,885.1 (100.0)	4,291.0 (100.0)
West Europe.....	217.8 (40.6)	652.2 (57.6)	1,488.6 (51.6)	1,987.5 (46.3)
Other West ¹	155.6 (29.0)	362.7 (32.0)	1,021.6 (35.4)	1,679.9 (39.1)
East Europe.....	75.0 (14.0)	² 106.7 (9.4)	132.7 (4.6)	108.8 (2.5)
Soviet Union.....	87.9 (16.3)	2.0 (.2)	180.5 (6.2)	³ 105.0 (2.4)
The NIC's.....	0.1 (.2)	9.35 (.8)	61.75 (2.2)	⁴ 409.8 (9.6)

Note: 1—includes Australia, Canada, Japan, the United States; 2—excluding Romania; 3—estimated from national trade yearbooks for Brazil (see Table 5) and India (see Table 6); 4—Argentina, Brazil; 5—as in (4), plus Mexico, Hong Kong, Singapore, South Korea; 6—as in (5) minus Mexico.

Source: Bulletin of Statistics on World Trade in Engineering Products, New York: the United Nations.

The case of India tells a lot since this country has been for a long period of time very friendly to the Soviet Union and East Europe, initially in an effort to eliminate the remnants of colonial dependence, then to facilitate its search for a nonalignment status, and later because of an additional concern for China. Moreover, India since the early days of its independence has favored direct state intervention, including extensive public center sector and central planning (i.e., its indicative version). Clearly these advantages do not seem to be protecting East Europe (and the Soviet Union) against the growing competitive threat by other economies any more.

Product level.—The NIC's seem to be repeating in the South what they have accomplished in terms of concentrating certain markets in the West. A look at Indian imports reveals that, similar to western economies, the NIC's have been able to capture a substantial part of imports in television sets and related products, where the Far Eastern NIC's supplied 31 percent of television sets, 18 percent of TV image reproducers, 59 percent of TV tubes and 42 percent of TV parts imported by India in 1985, or 54 percent of the whole value of purchases in that product category. The only other important supplier was Japan (23 percent of the total value), followed by the Common Market (18 percent). To compare, the share of East Europe (and the Soviet Union) was 2 percent in that year.

In 1985, the NIC share of India's imports of computer systems was 2.5 percent only; but East Europe did not sell anything in that year, and its supplies of parts for computers, while comparable to those of the NIC's were not significant (both 1.8 percent). The imports were dominated by the United States with about 60 percent share in both product groups (the respective share for the Soviet Union was about 10 percent). The NIC's showed a marked share in India's imports of electronic microcircuits, about 10.5 percent, while East Europe (and the Soviet Union) were almost absent from that market, the picture being very similar to that found in the West.³ (See Poznanski, 1987.)

An interesting lesson from these two cases is that southern countries such as India tend to discriminate against imports of finished goods compared to intermediate goods, including parts. For instance, the value of television sets (only color models, given the restrictions) represented 0.9 percent of the value of parts imported in 1985, and 0.3 percent of the value of parts and picture tubes purchased in that year. In computers, finished systems and computer processors represented 42 percent of the value of parts of computers bought by India in 1985, and 25 percent of the combined value of imports of parts and electronic microcircuits in that year.

One can speculate that this specific structure of India's imports, characteristic of many southern economies following an extreme version of the import-substitution strategy of industrialization, may by itself be responsible for East Europe's low involvement in such areas of its trade as consumer electronics or computers. The CPE's are known for having particular difficulties in producing adequate supplies of parts for their domestic market and one can guess that with respect to foreign customers these problems are only aggravated. For that reason, among others, the CPE's do better in those types of products that require less attention to service. (See Murell, 1983.)

³ To expand the scope of this analysis, four other important manufactured products traded by East Europe with India are analyzed: fertilizers, iron and steel, drugs, and plastics (Statistics of the Foreign Trade of India). By 1975 in all these products areas, East Europe had an advantage over the NIC's, but in 1985, except for fertilizers, where these southern countries do not show sales, East Europe lost its lead almost entirely (e.g., in drugs), or was surpassed by a large margin. For instance, in iron and steel, the NIC exports represented 1.1 percent of Eastern European sales in 1975, while in 1985, the former accounted for 278.8 percent of the latter (with the majority of the NIC supplies coming from South Korea). In plastics, by 1985 the only significant supplier of plastics from East Europe was Romania, outmatched by South Korea, Singapore, and Mexico (201.5 percent difference).

This success in southern exports of manufactures in the southern markets, such as Brazil or India, suggests that the recent surge in those sales is not confined to western outlets itself. Thus, it appears that southern economies do not necessarily tailor their export products to the needs of western customers only, but are capable of meeting the needs of buyers in southern economies as well. To get a strong proof that this is the case with the majority of manufactured goods, one would have to extend this analysis and employ as disaggregate data as possible to be able to compare trade performance of as many homogeneous product classes as statistics of foreign trade of southern countries permit.

3. TRADE PATTERNS AND TECHNOLOGY

If one accepts the notion that in majority of cases (excluding, for instance, resource-based countries) it is the relative technological level of production that most determines long-term performance in foreign trade, then it is appropriate to determine how much of the earlier described patterns of exchange between East Europe and the South reflects the technological side of their respective economies. In this section I am looking at some indicators of how East European products compare to other sources of goods supplied to the South and in addition how much these two economic regions have to offer to each other in terms of advanced technology.

A. UNIT-VALUE INDICATORS

To judge the relative technological levels of exports, I am going to use, as in my earlier work on western markets (Poznanski, 1987) data on unit-values per kilogram. This kind of analysis, to my knowledge, has not been attempted yet, at least in any systematic fashion. An important barrier to such research is that there is much less country data on values and quantities of specific goods traded by southern economies, so that one has to rely on only a few cases. Still, the southern statistics offer richer sources than East Europe, where only Hungary and to a lesser extent Poland provide a long time series on foreign trade measured in both monetary and physical terms.

The example of Brazil suggests that East European exports of manufactures generally fall behind those by western producers in terms of unit values, and at the best are close to the least advanced country in the western sample, Spain. (See Table 5.) The gap in relative unit values between East Europe and the West in Brazil seems to be similar in magnitude to that established for their exports to western markets. (See Poznanski, 1987.) Similar to the patterns determined for western markets, East Europe seems to operate in Brazil in the same range of unit values as the NIC exporters, though the picture, given the scarcity of data, is not very clear to draw firm conclusions.

TABLE 5.—EXPORT-UNIT PRICES (PER KILOGRAM) FOR MANUFACTURES SOLD TO BRAZIL, 1981

Country	Product				
	Polymeriza- tion products	Internal combustion engines	Electric power machinery	Textile/ leather machinery	Machine tools
	(1)	(2)	(3)	(4)	(5)
West Europe:					
France.....	1.38	10.30	8.07	11.12	¹ 16.72
Great Britain.....	7.06	3.83	13.79	18.87	12.24
Italy.....	1.39	9.36	16.70	11.92	11.87
Spain.....	¹ 1.58	¹ 7.67	3.09	¹ 4.70	¹ 5.31
West Germany.....	1.60	11.48	11.73	14.06	12.07
Other.....	3.55	6.93	9.17	14.71	14.02
Other West:					
Japan.....	1.88	10.80	6.60	14.51	11.41
United States.....	1.55	12.24	16.86	19.01	15.07
East Europe:					
Bulgaria.....					
Czechoslovakia.....			3.77	7.68	2.66
East Germany.....	1.10				8.02
Hungary.....			3.24		
Poland.....			3.31		3.01
Romania.....					5.36
Soviet Union.....			7.32		3.90
The NIC's:					
Argentina.....	2.57	9.45		¹ 3.97	
Mexico.....	8.59		¹ 9.33		
Hong Kong.....			¹ 13.75		
South Korea.....	¹ 1.29				
Taiwan.....	¹ 1.60		¹ 7.18		¹ 13.69

¹ Less than 1 percent of total imports.

Source: Calculated from Foreign Trade of Brazil, Brasilia: Ministry of Finance, 1982.

More useful is the case of India, where due to larger amounts of manufactures sold by East Europe and the NIC's, unit-value indicators should be more reliable. However, because India tends to favor imports of parts, one is left with many product areas for which unit values can not be trusted, since parts tend to be very heterogeneous and thus not comparable in cross-country analyses. Having this in mind, one can conclude that in all products sampled (Table 6) East Europe and the NIC's earn lower prices per kilogram, particularly in more processed goods (i.e., internal combustion engines, machine tools, and telecommunication apparatus and television tubes) with little evidence of the former having higher unit values than the latter.

TABLE 6.—EXPORT-UNIT PRICES (PER KILOGRAM) FOR MANUFACTURES SOLD TO INDIA, 1980

Country	Product						
	Polymeriza- tion products	Steel (plates, sheets)	Internal combustion engines	Machine tools, parts	Teleconn. apparatus, parts	Tractors, parts	TV tubes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
West Europe:							
France.....	1.04	0.46	¹ 18.64	22.56	39.11	¹ 6.56	¹ 7.22
Great Britain.....	.93	.44	14.51	15.11	45.94	7.16	
Italy.....	¹ 1.17	1.05	11.47	13.05		¹ 5.43	15.39
Spain.....	1.08	.11	¹ 3.86				
West Germany.....	1.05	.38	14.83	18.97	52.18	7.40	2.67

TABLE 6.—EXPORT-UNIT PRICES (PER KILOGRAM) FOR MANUFACTURES SOLD TO INDIA, 1980—
Continued

Country	Product						
	Polymeriza- tion products	Steel (plates, sheets)	Internal combustion engines	Machine tools, parts	Teleconn. apparatus, parts	Tractors, parts	TV tubes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Other West:							
Japan	1.12	.62	7.11	8.09	23.32	¹ 3.80	11.90
United States .....	.91	.66	10.91	21.16	75.11	15.18	¹ 8.17
East Europe:							
Bulgaria .....		.38				¹ 5.43	
Czechoslovakia	¹ .92	.41	5.22	20.59		¹ 5.78	
East Germany	¹ .96	.36	4.38	8.88	¹ 10.64		¹ 3.21
Hungary	¹ .76	.43		¹ 2.96			
Poland		¹ .42		4.74	¹ 14.56	¹ 2.29	2.54
Romania .....	.78	.36				8.91	¹ 1.83
Soviet Union		¹ .87		2.51	30.92	¹ 1.99	
The NIC's:							
Brazil			¹ 2.69				
Hong Kong	¹ .95		¹ 3.95		11.03		¹ 4.23
Singapore .....	.94			¹ 16.67	12.55	9.28	7.70
South Korea .....	.79	.34					4.45
Taiwan	¹ .33	¹ .39			¹ 11.64		6.52

¹ Less than 1 percent of total imports.

Source: Calculated from Statistics of the Foreign Trade of India, Government of India, Calcutta, 1982.

One could consider the above price pattern, consistent with some more casual observations (e.g., Brazil's or India's complains about poor quality of East European or Soviet goods), as evidence of the region being caught, in technological terms, by the southern economies. It would follow then that the losses reported by East Europe in southern markets for manufactured products are related to the disappearance of the technological lead by the region, combined with East Europe's inability—as demonstrated by the above comparison of unit values—to reduce its technological lag behind western exports to the South.

Loss of its technological lead could not have been the only reason for market losses by East Europe in the South. The sluggish economic performance of East Europe in recent years might be seen as another determining factor. Unable to import western machinery at the previous rate, East Europe—particularly its most indebted members, Hungary, Poland, and Romania—has had to rely more on domestic sources of goods, so that the pool of products available for export has diminished. Pressure on debt repayment, it might be speculated, has caused southern markets to be finally given lower priority i.e., after short-lived promotion of exports to oil-rich countries in the determination by East Europe of where to sell its reduced supplies of investment goods earmarked for export.

B. TECHNOLOGICAL INTERDEPENDENCE

East Europe does not do well in the South also because its economics have been unable to offer the disembodied (i.e., not contained in physical products) technology that southern economies need for development. Despite the arguments made by the dependency school, there have been very few sales of technology by East

Europe to the South. The claim that East Europe with its allegedly "intermediate" status in technology should be better prepared to satisfy southern needs is either false, or the South does not have enough concern for "appropriate" technology to seek it in East Europe, or maybe there is no economic mechanism to assure such transfer even if desired by the South.

In 1983, East Europe obtained, according to the most reliable source (Industrial Property Statistics), 101 patents in the South (while the Soviet Union was granted 28 patents). Most of these patents were obtained in Latin America (i.e., Argentina, Brazil, Mexico, and Venezuela), while almost none were granted in the Far East. By comparison, in 1977 the number of patents obtained by East Europe in the South—again mostly in America Latin—was 127 (with the Soviet Union granted 55 patents in that year).

The two major sources of patents in East Europe have been East Germany and Hungary. In 1976 their respective figures were 36 patents and 37 patents, more than half of the total for East Europe, while in 1983 the figure for East Germany was 18 patents, and in Hungary 69 patents, almost four-fifths of the total. Since these two countries do not seem to have as big a technological advantage over other countries in the region as the patent data suggests, it follows that there is some untapped potential for more intense transfers of technology to the South.

Most of the patents received by East Europe have been concentrated in a very few areas of technology, particularly in chemicals and pharmaceuticals. In Hungary, one-third of the patents granted in 1983 fell into this category (and one-third of Soviet patents were in that category as well). Another area of concentration is agriculture, accounting for one-tenth of the Hungarian patents in that year. It is interesting that East Europe (and the Soviet Union) obtained very few patents in machinery and transport equipment. (Of all the patents granted, none were for transportation technology, and only one was for machine tools (by the Soviet Union).)

The technology patented by East Europe (and the Soviet Union) continues to account for a small fraction of the total flow of patents to the South. For instance, in 1983 Brazil and Mexico, two of the southern economies which are most active in patenting, granted 21 patents to East Europe (and 18 to the Soviet Union), while their total number of patents granted to western countries was 7,157. Most of this technology came from the United States (e.g., 141 patents out of 327 total in technology for transport equipment, 77 patents out of 178 total in machine tools, or 41 patents out of 131 total in agriculture).

There is even less patenting by southern economies in East Europe and the Soviet Union. In 1977, a total of four patents by southern countries (only in Latin America) have been reported in East Europe, and an additional two patents in the Soviet Union. By 1988 the total was 11 patents in East Europe and none in the Soviet Union (again by Latin Americans, specifically Brazil and Mexico). These patents accounted for a very insignificant part of the total number of patents granted to the respective southern economies in those years (e.g., in 1983 the total of 102 patents was granted to Brazil and Mexico by western countries, and many others were granted by southern counterparts).

C. SCOPE OF FOREIGN INVESTMENT

As demonstrated earlier (Poznanski, 1987), foreign direct investment has played a critical role in bridging southern economies with those of the West, and the practical absence of such contacts with East Europe (and the Soviet Union) is to a large degree responsible for the diminishing involvement by the region in western trade. Consequently, one could view foreign direct investment activities involving southern and Eastern European economies as an important indication of the status of their trade relations. Here, relying on secondary sources, an assessment of that aspect of East-South relations will be made.

Admittedly, the southern economies have emerged as a source of sizable foreign direct investment. (See Wells, 1983.) Oil-rich countries excluded, the largest single direct investor has been Hong Kong, with about \$1.5-\$2 billion cumulative value of equity stock abroad in 1982; most of it in the manufacturing sector of other southern countries in Asia. (See Lall, 1983.) Two other important direct investors by 1982 were Brazil (with \$1 billion in 1982) and Singapore (with \$0.5 billion in 1982), the former located mostly in western countries outside of manufacturing, and the latter putting money mostly into the manufacturing sectors of the South.⁴

So far no significant direct investment has been made by southern economies in East Europe or the Soviet Union. This is probably for reasons similar to those responsible for the lack of western interest in such involvement in the CPE's, including nonconvertibility of Eastern European currencies or a bureaucratic mode of operation. However, in the case of the South these obstacles are further accentuated by the fact that its present involvement in the manufactures trade with East Europe is miniscule, far behind that achieved by the countries of the West; so that the use of subsidiaries as an additional vehicle of market penetration here is clearly premature.

The countries of East Europe (see McMillan, 1979 and 1987) have lately embarked on foreign direct investment as well, but the scale remains small, even by southern standards. The value of the total direct investment by East Europe and the Soviet Union outside of the CPE's, both European and other, is very difficult to measure. Only scattered incomplete data on individual projects is available. Using such information as McMillan (*ibid.*) estimated that value to reach \$4-\$8 billion in 1983, with \$1 to \$2 billion located in the South; more than four-fifths of that amount came from East Europe (with very little activity shown by East Germany). Very little has been added to that stock since, due to a number of adverse factors.

Most of the direct investment by East Europe in the southern economies is outside of manufacturing and concentrated in agriculture, mining, construction, and marketing. In addition, a very small portion of this investment has been in the NIC's (*ibid.*, p. 46). This structure—sectoral and geographical—is different from that of

⁴ By now southern investments are much larger, with Taiwan and South Korea rapidly moving into a leadership position, much of their money going to the West (e.g., Canada and the United States).

western direct investment in the South, and the amount of East Europe's assets in southern countries accounts for a marginal fraction of the total inflow of capital from the West.

4. CONCLUSIONS

To summarize, East European standing in the markets of developing economies seems to share many elements with the region's position on the western markets. This includes the fact that like in the West, East Europe plays the role of marginal supplier to the South, which puts the region in a certain disadvantage, say, in terms of trade stability or relative prices. Moreover, similar to the pattern observed in East Europe's trade with the western countries, exports by the region to the developing countries appear to be technologically inferior, not only to western exports but often also to the products that the developing countries exchange among themselves.

However, even with the existing disadvantage, East Europe can somewhat expand its trade with the South, mostly by rationalization of the product structure. For instance, with its high-labor costs and consumer-goods hunger, East Europe may allow more imports of southern products for the consumption market. This would release some domestic resources for other applications, such as complex capital goods, where large—allowing for economies of scale—capacities have been created in the past. This is particularly advisable if East Europe decides to fundamentally reform its economic system, since improving consumption standards would generate support for such a change.

BIBLIOGRAPHY

- Becker, A., 1986, Soviet Union and the Third World: The Economic Dimension, *Soviet Economy*, vol. 2, No. 3.
- Bulletin of Statistics on Foreign Trade in Engineering Products.
- Dawisha, K., 1988, Eastern Europe and Perestroika Under Gorbachev: Options for the West, Department of Government, University of Maryland (mimeo).
- Direction of Trade, Washington, DC: IMF.
- Foreign Trade of Brazil, Brasilia; Ministry of Finance.
- Foreign Trade Statistics of Asia and the Pacific, Bangkok: United Nations, Economic and Social Commission for Asia and the Pacific.
- Handbook of International Trade and Development Statistics, 1987, New York: UNCTAD.
- Havrylyshyn, O., and Wolf, W., 1983, Recent Trends in Trade Among Developing Countries, *European Economic Review*, No. 21.
- Hough, J., 1986, The Struggle for the Third World: Soviet Debates and American Options, Washington, DC: The Brookings Institution.
- Industrial Property Statistics, Geneva: World Intellectual Property Organization.
- Kaminski, B., 1988, Economic Underpinning of East European Policy in the Third World, Department of Government, University of Maryland (mimeo).
- Lal, D., 1983, The Poverty of "Development Economics," London: The Institute of Economic Affairs.
- Lall, S., 1985 Trade Between Developing Countries, *Trade and Development: an UNCTAD Review*, No. 6.
- Lavigne, M., 1982, Consequences of Economic Developments in Eastern Europe for East-West and East-South Relations, *Trade and Development: an UNCTAD Review*, No. 4.
- , 1986, Eastern Europe—LDC Economic Relations in the Eighties in, *East European Economies: Slow Growth in the 1980's*, Joint Economic Committee, U.S. Congress, Washington, DC.

- Maciejewski, W., 1988, East European Economic Relations With Less Developed Countries, Department of Economics, European Economic Institute, Firenze (mimeo).
- Marer, P., 1985, East-West Technology Transfer: Study of Hungary, 1968-1988, Paris: OECD.
- McMillan, C.M., 1979, Growth of External Investment by the Comecon Countries, *The World Economy*, vol. 2, No. 3.
- , 1987, Multinationals From the Second World, London, Macmillan.
- Monthly Bulletin of Statistics, New York: U.N. Murrell, P., An Evaluation of the Success of the Hungarian Economic Reform: An Analysis Using International Trade Data, *Journal of Comparative Economics*, vol. 5, No. 4.
- Nayyar, D., ed., 1977, Economic Relations Between Socialist Countries and the Third World, London: Macmillan.
- Poznanski, K., 1984, Technology Transfer: West-South Perspective, *World Politics*, October.
- , 1986, Competition Between Eastern Europe and Developing Countries in the Western Markets for Manufactured Goods, in *East European Economies: Slow Growth in the 1980's*, Joint Economy Committee, U.S. Congress, Washington, DC.
- , 1987, Technology Competition and the Soviet Bloc in the World Market, Berkeley, Institute of International Studies, University of California.
- , 1988, Economic Determinants of Technological Performance in East European Industry, *Eastern European Politics and Societies*, vol. 2, No. 3.
- Statistics of Foreign Trade of India, Calcutta: Government of India.
- Van Brabant, J., 1987, Economic Adjustment and the Future of Socialist Economic Intergration, *Eastern European Politics and Society*, vol. 1, No. 1 (Winter).
- Wells, L.T., 1983, Third World Multinationals, Cambridge, Mass.: MIT Press.
- Wolf, T., 1983, Changes in the Pattern of Soviet Trade With the CMEA and the Non-Socialist Countries, in *External Economic Relations of CMFA Countries: Their Significance and Impact in a Global Perspective*, Brussels: NATO, Economic and Information Directorates.
- , 1985a, An Empirical Analysis of Soviet Economic Relations with Developing Countries, *Soviet Economy*, vol. 1, No. 3.
- , 1985b, Soviet Trade with the Third World: A Quantitative Assessment, *Osteurop Wirtschaft*, vol. 30, No. 4.

REFORM AND MEMBERSHIP OF THE PLANNED ECONOMIES IN THE GATT, THE IMF, AND THE WORLD BANK

By Jozef van Brabant* and Paul Marer**

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SUMMARY

The first part of the essay reviews the chronology of which of the 15 planned economies—the group of countries that comprises the “socialist world”—has become affiliated, and when, with the GATT, the IMF, and the World Bank. Next we assess the link between the affiliation of the planned economies with these international economic organizations (IEO's) and the introduction of market-oriented reforms in the countries. The third part considers the main strategic issues on whether to welcome into membership the planned economies that are not currently affiliated with the GATT, the IMF, or the World Bank. The last part presents the authors' recommendations.

I. BRIEF HISTORY

In reviewing the participation of 15 so-called “planned economies” in the General Agreement on Tariffs and Trade (GATT), the International Monetary Fund (IMF), and the World Bank, it is im-

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portant to recall that when these IEO's were established, most of the planned economies had not yet passed through their "socialist revolutions."¹ In fact, at that time, only the U.S.S.R. and Mongolia were CPE's. When the CPE system was embraced by the other countries, most were members of one or more of the three IEO's. Some CPE's subsequently decided to sever relations with some of the IEO's. We begin with a brief chronology of the planned economies' association with the IEO's.

A. AFFILIATIONS WITH THE GATT

Table 1 summarizes the history of association of the planned economies with the GATT. Each country is classified into one or more of the following categories, with dates:²

(1) Founder; (2) withdrew; (3) shows interest in some form of association; (4) observer; (5) associate member; (6) Contracting Party (equivalent to membership); and (7) no association or publicly expressed interest in any type of association, as of yearend 1988.

TABLE 1.—STATUS OF PLANNED ECONOMIES IN THE GATT

Country	Founder	Withdrew or inactive	Shows interest	Observer	Associate member	Contracting party	Disinterested ¹
Albania.....							X
Bulgaria.....				1967.....		Applied 1986.....	
China.....	X	1950.....		1982.....		Applied for readmission, 1986.....	
Cuba.....	X	inactive.....					
Czechoslovakia.....	X	inactive.....					
GDR.....		1986.....					
Hungary.....			1958.....	1966.....		1973.....	
DPR Korea.....							X
Laos.....							X
Mongolia.....							X
Poland.....				1957.....	1959.....	1967.....	
Romania.....				1957.....		1971.....	
Soviet Union.....			1986.....			(²).....	
Vietnam.....			1989.....				X
Yugoslavia.....				1950.....	1959.....	³ 1966.....	X

¹ As of Dec. 31, 1988.

² Expected to submit application before 1990.

³ Provisional accession in 1962.

¹ We are focusing on a group of countries that have Communist governments and belong to what is often referred to as the "socialist world economic system." They are: Albania, Bulgaria, China, Cuba, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Laos, Mongolia, North Korea, Poland, Romania, the Soviet Union, Vietnam, and Yugoslavia. With the exception of Yugoslavia, this group of countries can also be labeled centrally planned economies (CPE's); sometimes called "nonmarket economies" (NME's) or "state-trading countries." We refer to the entire group, including Yugoslavia, as "planned economies." Other small Communist countries, such as Angola, Cambodia, and North Yemen, are not included in this discussion.

² Provisional membership is still another phase. But inasmuch as so far it has only been applied to Yugoslavia, and for a short period, we do not include it as a separate category. For details, see Maciej M. Kostecki, *East-West Trade and the GATT System* (London: Macmillan, 1979) and Petra Pissulla, "International Organizations," in *Economic Warfare or Détente—An Assessment of East-West Economic Relations in the 1980's*, edited by Reinhard Rode and Hans-Dieter Jacobsen (Boulder, CO: Westview Press, 1985), pp. 226-242.

China, Cuba, and Czechoslovakia were founders of the GATT. The People's Republic of China's (PRC) seat was taken over by the Republic of China (Taiwan) in late 1949. During the 1970's, as the PRC reemerged in international economic affairs, it insisted that granting its membership to Taiwan had been illegal and that the PRC should be allowed to resume its original membership; the PRC's readmission is currently being considered.

Czechoslovakia provided the first test of the compatibility of a CPE with GATT rules, after the country became a CPE around 1950. Ever since then, its status in the GATT has been largely ignored because Czechoslovakia has not insisted on full reciprocity from the GATT's other signatories. The other contracting parties have chosen to control their imports from Czechoslovakia (and from other state-trading countries) through quantitative restrictions (QR's) and through rules of varying strictness against dumping. During the early 1950's, the United States protested the fictitious nature of Czechoslovakia's tariff concessions and on that basis, in 1951, renounced unilaterally its Agreement with that country. The complaint brought by Czechoslovakia before the contracting parties was dismissed without investigation, on the grounds that the issue was a political one, and thus outside the GATT's jurisdiction. Although since then, the United States and some other countries have discriminated against Czechoslovakia, the latter has continued to take part, with a very low profile, in the activities of the GATT, and has generally refrained from attacking it openly, as did certain other CPE's that were not members.

Cuba's case, a decade later, had many parallels with that of Czechoslovakia, except that Cuba placed its complaints against U.S. discrimination in the context of its status as a developing country.

Yugoslavia first approached the GATT in 1950, after it had severed relations with other Communist countries in consequence of its expulsion from the Cominform in 1948 and being blockaded by the Soviet Union and its allies. Soon thereafter it obtained observer status in the GATT. Following the reforms introduced in 1952, which entailed considerable relaxation of central planning, Yugoslavia explored the possibility of closer association with the GATT. Because during the 1950's it still had retained important features of the CPE system, in 1959 the contracting parties created for it the "associate" status.³ Following the establishment of a tariff system in 1962, Yugoslavia's status was upgraded to provisional accession.⁴ In 1966, following the 1965 introduction of market-oriented reforms, Yugoslavia was granted Contracting Party status, without any special provisions on reciprocity.

Poland formally requested observer status in 1967, obtained associate status in 1959, and gained full accession in 1971. Romania also applied for observer status in 1957 and obtained full accession

³ Associate status entails mutual affirmation of a desire to develop commercial relations on the basis of mutual advantage and reciprocity. It establishes direct contacts between the associate member and the Contracting Parties and provides for the full participation by the former in the "general activities" of the organization.

⁴ This means essentially obtaining full accession, subject to meeting the conditions upon which the accession is predicated. For Yugoslavia that meant the introduction of an effective tariff system that intermediates between domestic and foreign prices.

in 1971. Poland and Romania satisfied the requirement of reciprocity by committing themselves to increasing their imports from the contracting parties as a group by agreed percentages (7 percent per annum in the case of Poland, and by no less than the same percent as planned total import expansion over a 5-year period in the case of Romania). In exchange for these commitments, the contracting parties granted them most-favored-nation (MFN) status, but with certain restrictions, most importantly, by the European Community (EC) and the United States, as will be indicated.

Hungary originally applied for observer status in 1958, but withdrew the request as a result of pressure by a number of influential contracting parties, including the United States. The vivid memory of the Revolution that was suppressed less than 2 years earlier was an important reason why, at the time, Hungary was not welcome. In 1966, Hungary again applied for observer status; it obtained full accession in 1973. Hungary pressed its accession under standard terms, claiming that the New Economic Mechanism it introduced in 1968 had made tariffs a meaningful instrument of import regulation. After difficult negotiations and upon recommendation of the GATT working group that examined its application, Hungary's argument was accepted, even though several contracting parties had reservations about Hungary's system of import controls even after the reforms were introduced.⁵ In any event, no special reciprocity was requested, partly to reward and partly to encourage the further development of market-oriented reforms. But some contracting parties maintained QR's, promising that they would gradually be reduced.

Bulgaria applied for observer status in 1967 and for full accession in 1986. China requested observer status in 1982 and full accession (actually, readmission) in July 1986. Both applications, presently under review, request admission on the same terms as market economies. Bulgaria claims that enterprise decisions *will be* governed mainly by commercial considerations under the reforms the country plans to introduce, while China asserts that such already is the case as a result of recent reforms. The deliberations are likely to take several years, revolving around the issues of reciprocity and market access.

In 1986, the Soviet Union formally requested participation in the new round of GATT negotiations that were to commence later that year at Punta del Este, Uruguay. Its letter stated that the Soviet Union wished to learn more about the GATT to decide whether to seek accession and mentioned the prospective liberalization in its foreign trade system. The United States reportedly took the lead in formulating a response that amounted to a rejection of this overture by the Soviets. Nevertheless, according to apparently authoritative sources, in 1988 the U.S.S.R. has been preparing its request for full accession to the GATT. It will reportedly be seeking a status comparable to those of market economies, that is, without special provisions for reciprocity, based on the reform program it is

⁵ Several contracting parties noted that the effectiveness of Hungary's tariffs could be weakened by quotas, the presence of an unusually large number of monopolies on the domestic market, and restrictions on free price formation.

gradually implementing.⁶ A formal request is expected to be submitted to the GATT on or before 1990. The creation of an effective customs tariff depends on the nature of the domestic price reform scheduled to be introduced in 1991.⁷

This review of the planned economies in the GATT suggests the following three conclusions:

(1) By 1988, among the East European countries only Albania and the GDR, elsewhere in the "socialist world" only Laos, Mongolia, North Korea, and Vietnam, had not expressed any interest in the GATT. Czechoslovakia and Cuba, while nominally members, do not actively participate and do not receive MFN status from many contracting parties. Vietnam is currently exploring accession. Thus, in terms of the number of countries, about half of the socialist world is affiliated with and is active in the GATT, or would like to become affiliated; the other half is inactive or seemingly has no interest.

(2) Requests by the planned economies for GATT association have all been handled on a case-by-case basis (except when the country was a founder). The possibility of a comprehensive agreement with the planned economies has always existed but the GATT has never explored it. One reason for this is the substantial differences in the foreign trade regimes of the CPE's and those of other members; another, that the GATT is not well suited, organizationally and politically, to sign sweeping framework agreements that require a political resolution of the issues.

(3) The planned economies except Yugoslavia enjoy *de facto* "second class" status in the GATT, owing mainly to the incompatibility of their CPE system with the fundamental principles of the GATT.

First, their protocols of accession contain stringent special provisions designed to enable other GATT members to insulate their economies from the potentially disruptive effects of trading with CPE's. The most onerous of these provisions, from the standpoint of the planned economies, is the provision that allows the contracting parties to maintain discriminatory QR's (provided that the discriminatory element is not increased and the QR's are "eventually" eliminated).⁸ The EC, in particular, insists on maintaining QR's, not only for protection, but as a leverage for negotiating bilateral trade agreements between the EC and the individual "state-trading" countries. Another provision that confers second-class status on the planned economies is that GATT members are allowed to impose selective restrictions on imports from state-trading countries that cause or threaten to cause domestic market disruption.⁹

⁶ See summaries of pronouncements by highly placed Soviet spokespersons in *Financial Times*, June 4, 1988, pp. 1 and 20; and June 8, 1988, p. 4.

⁷ Interviews during March-April and September 1988 in Moscow by Jozef van Brabant with Ivan D. Ivanov and other officials.

⁸ Jozef M. van Brabant, "Planned Economies in the GATT Framework: The Soviet Case" *Soviet Economy*, Vol. 4, No. 1 (January-March 1988). For an earlier discussion of this issue, see Mark Z. Orr, "Eastern European Participation in the Tokyo Round of Multilateral Trade Negotiations," in Joint Economic Committee, U.S. Congress, *East European Economic Assessment*, part 2 (Washington, DC: U.S. GPO, July 10, 1981).

⁹ Although "escape clause" provisions also operate in trade among market economies, it is easier to invoke market disruption against planned than against market economies.

Second, Poland and Romania accepted import commitments in return for some of the benefits of membership. If they do not fulfill them, this provides a legal basis for other members to retaliate against them.¹⁰

Third, all but two planned economies (Yugoslavia and Poland) have second-class status in the United States. The U.S. Trade Expansion Act of 1962 prohibited the President from entering into GATT relations with any Communist country with which the United States did not, at the time, already have GATT relations (i.e., Yugoslavia and Poland). Thus, when Romania and Hungary acceded to the GATT, the United States had to invoke Article XXXV, providing for the nonapplication of the GATT between two contracting parties. The Trade Act of 1974 provided for the extension of MFN treatment to other Communist countries on a limited conditional basis. That is, MFN can be granted only after a bilateral trade agreement is negotiated and ratified by Congress. Granting MFN status is further conditioned upon the annual waiver by the President of the provision of the Jackson-Vanik Amendment to the Trade Act of 1974, which denies the extension of trade benefits to Communist countries whose citizens do not have freedom of emigration. The GATT relations of the United States remain suspended vis-a-vis Czechoslovakia.

B. AFFILIATIONS WITH THE BRETTON WOODS INSTITUTIONS

Membership in the IMF and the World Bank is unambiguous: countries must subscribe to all Articles of Agreement without exception, reservation, or interpretation. Table 2 lists the memberships, withdrawals, readmissions, and informal explorations on admission by the planned economies, with dates. Since membership in the Fund is a precondition of membership in the Bank, in some cases only one of the institutions is mentioned.

TABLE 2.—STATUS OF PLANNED ECONOMIES IN THE IMF AND THE WORLD BANK

Country	Founder	Withdrawn or inactive	Shows interest	Applies to become member	Membership	Disinterested ^a
Albania			1948			X
Bulgaria			1948			
China	X	1950 ^a		1980 ^a	1980	
Cuba	X	1964				X
Czechoslovakia	X	1954/5	1988			
GDR						X
Hungary			1964	1981	1982	
DPR Korea						X
Laos	X	Inactive				
Mongolia						X
Poland	X	1950		1981 ^a	1986	
Romania			1964	1971	1972	
Soviet Union			1986			

¹⁰ A case in point is the United States suspending Poland's MFN status from October 1982 until February 1987. At various GATT rounds, "over the years," the EC proposed that planned economies reciprocate for any new concessions they receive by also undertaking sectoral import commitments, i.e., obligations to import specific amounts of certain products over a certain time period. The planned economies rejected these suggestions and the United States supported them. See Orr, *op. cit.*

TABLE 2.—STATUS OF PLANNED ECONOMIES IN THE IMF AND THE WORLD BANK—Continued

Country	Founder	Withdrawn or inactive	Shows interest	Applies to become member	Membership	Disinterested ¹
Vietnam ⁵	X	Inactive				
Yugoslavia	X					

¹ As of Dec. 31, 1988.

² Did not formally withdraw; its seat was taken by the Republic of China.

³ Request to take over seat held by Republic of China. It had tried in early 1950's to accomplish the same but was rebuffed.

⁴ Approached the Fund in 1956 but did not pursue the matter.

⁵ North Vietnam became a member in 1975 after the unification of South and North by virtue of the South's membership in the Fund and the Bank.

The Soviet Union was an active participant in the deliberations that led to the establishment of the Bretton Woods institutions. Several of the draft Articles of Agreement were modified at the request of the U.S.S.R. After the first Governors' meeting at Savannah, GA, in March 1946, where the Soviet Union was an observer, it decided no longer to participate in the negotiations. The most likely basic reason was the emergence of the Cold War.¹¹ For economic and political reasons, the U.S.S.R. did not contact the Fund or the Bank until 1986, when it first extended some "feelers."

Albania and Bulgaria made inquiries about Fund membership in 1948, but they did not pursue it.

China, Cuba, Czechoslovakia, Laos, Poland, Vietnam, and Yugoslavia were among the Fund's early members—several in fact were founders. (See Table 2.) Poland withdrew in March 1950, alleging that the Fund was sidetracked from its original aims and had become subservient to U.S. interests.¹²

Czechoslovakia remained in the Fund until the end of 1954. When expulsion was recommended by the Executive Directors because Czechoslovakia had not consulted with the Fund about the 1953 devaluation of its currency and had refused to furnish information or otherwise cooperate with the Fund, Czechoslovakia resigned in May 1955. Czechoslovakia claims that its membership ended when it resigned; the Fund lists 1954 as the date when membership was terminated. The country has not sought readmission.¹³ But some interest in the Fund has been shown since mid-1988.

Cuba withdrew from the Fund in 1964 because it could not meet its financial obligations and because of U.S. pressure after it became a Communist country; it withdrew from the Bank in 1960.

Soon after the Communist Party gained victory in the civil war in China in 1949, its seat was transferred to the Republic of China; in 1982 the PRC was readmitted to the IMF.

¹¹ For details and original-source documentation, see Paul Marer, "Centrally Planned Economies in the IMF, the World Bank, and the GATT," in Josef C. Brada, Ed A. Hewett, and Thomas A. Wolf, *Economic Adjustment and Reform in Eastern Europe and the Soviet Union: Essays in Honor of Franklyn Holzman* (Durham, NC: Duke University Press, 1989) and Valerie J. Assetto, *The Soviet Bloc in the IMF and the IBRD* (Boulder and London: Westview Press, 1988).

¹² The charge was based on the alleged U.S. role in the Bank's deliberations about granting a coal loan to Poland. Details can be found in Piotr Mroczkowski, "History of Poland's Relations With the IMF and the World Bank," in Paul Marer and W. Siwinski (eds.), *Creditworthiness and Reform in Poland* (Bloomington, IN: Indiana University Press, 1988), and Mięczyński Blusztajn, "Polska w Międzynarodowy Fundusz Walutowy," *Bank i Kredyt*, 13, (1982:4/5), pp. 105-110.

¹³ During the Prague Spring (1967-68), there were informal suggestions in the country that an overture should be made.

In 1964, during the first session of the United Nations Conference on Trade and Development (UNCTAD), exploratory talks reportedly took place between the representatives of the Fund and Hungary and Romania, but there was no followup then.¹⁴

In 1971 Romania applied; in 1972 it became a member.

Vietnam took over South Vietnam's membership in 1975, but it has not been active in the organization, in part because of U.S. opposition to loans to Vietnam.

In 1981, Hungary applied and became a member in 1982.

Poland also applied at the same time, but its application was held in abeyance for several years, at U.S. insistence, following the imposition of martial law in Poland. After a great deal of political maneuvering, Poland was readmitted to the IMF and the World Bank in June 1986.

In the summer of 1986, the Soviet Union—and at about the same time also Bulgaria—put out “feelers” about the possibility of joining the IMF and the World Bank.¹⁵ After Gorbachev assumed the top post, internal debate had begun on the U.S.S.R.'s relationship with the IMF and other IEO's. The current Soviet position, we understand, is that the Soviet Union would be interested in exploring membership in the Fund and the Bank upon receiving signals from the West that its overture would be seriously considered and, if mutually acceptable terms of membership would be reached, that its accession would not be blocked by a U.S. veto. Our interpretation of the Soviet negotiating position (based on discussions with Soviet officials) is that U.S.S.R. would advocate (1) an international agreement to reduce exchange rate fluctuations, (2) anchoring exchange rates to a composite currency unit, such as the SDR or the ECU, and (3) the abolition of veto power by the United States through dilution of the U.S. capital share.¹⁶

Yugoslavia, a founding member of the Fund and the Bank whose economy was centrally planned until 1951 has remained a member and has exercised its rights and obligations continuously.

This review of the record of the planned economies in the IMF and the World Bank shows that (1) the only country that is a member of the IMF and the World Bank but is not affiliated with the GATT is Vietnam, but the country has remained inactive in the Fund and the Bank, and (2) some planned economies are more reluctant to join, or to express any intention to join, the Fund and the Bank than to be affiliated with the GATT. This is shown by the fact that several CPE's became affiliated with the GATT much earlier than with the IMF and the Bank, that some CPE's affiliated with the GATT are not in the Fund or the Bank, and that the U.S.S.R. appears to be more interested in joining the GATT than the Fund. To be sure, the observed outcomes may well reflect the welcome, or lack of it, by the influential members of the IEO's.

¹⁴ Jerzy Kranz, “Pan'stwa socjalistyczne w MFW i Banku Siwiatowy,” *Sprawy Międzynarodowy*, 37, (1984:11), pp. 27–44.

¹⁵ Paul Marer, “Top Soviet Economists Advocate Membership in the IMF, World Bank and GATT,” *PlanEcon Report*, Vol. II, No. 31 (July 31, 1986).

¹⁶ Based on interviews conducted by Jozef van Brabant in Moscow during September 1988.

II. MEMBERSHIP IN THE IEO'S AND ECONOMIC REFORM: HAS THERE BEEN A LINK?

This question is explored from two perspectives: that of the planned economies and from the perspectives of the IEO's.

A. PLANNED ECONOMY PERSPECTIVES

Tables 1 and 2 reveal at a glance that, since the late 1950's, there has been no common stance among the planned economies on affiliation with the IEO's. This reflects the divergent interests of these countries. The issue is how policymakers in each country assess the tradeoff between the benefits and costs of membership in the IEO. In our interpretation, the following are among the important determinants of such an assessment:

Development level;

Foreign trade direction and structure;

The desire for improved access to foreign credits;

Attitude toward economic reforms and the kinds of economic reform that membership may promote or make possible to postpone;

Willingness to allow the IEO's to exert a degree of influence on domestic economic policies;

Attitude toward international economic arrangements that are promoted or tacitly supported by the IEO's;

Changes in the international economic or political environments;

Strength and effectiveness of Soviet pressure on allies to conform with the Soviet position on membership in IEO's; and

Willingness to deviate from the Soviet position.

Development level can be significant because members of the GATT that have developing country status qualify for improved access to the markets of the developed countries through the generalized system of preferences (GSP). Developing countries are also the only group that qualify for loans from the World Bank.¹⁷ Only Romania is so designated by both. Hungary and Poland have developing country status in the World Bank but not in the GATT. The fact that Czechoslovakia and the GDR would not qualify for developing country status may have been, and could still be, a factor in their lack of interest in the GATT, the Fund, and the Bank. It is also unlikely that the U.S.S.R. would qualify for developing country status either in the GATT or in the World Bank. But each of the other CPE's has or would so qualify at the Bank; most of them also in the GATT.

Foreign trade direction and structure could be important, especially when considering membership in the GATT. A country that chooses to maintain a relatively small share of its trade with market economies (e.g., Albania, Cuba, North Korea, Laos, Mongolia, and Vietnam), or is exporting predominantly energy and raw materials (e.g., the U.S.S.R.), which are generally not subject to

¹⁷ The GATT and the World Bank use different methods to establish developing-country status. On the controversy surrounding the developing-country status of Hungary in the World Bank, see Paul Marer, "Centrally Planned Economies . . ." *op. cit.*, especially the section, "Which CPE Is Also an LDC?"

high-tariff or nontariff barriers in international trade, would have less interest in the GATT than countries that export manufactures and covet substantial trade relations with the West. Gorbachev's desire to increase the share of manufactures in exports to the West thus may be a factor in recent Soviet interest in the GATT.

Desire for foreign credits on "normal" terms is a powerful stimulant for membership in the IMF and the World Bank. Membership in the two international financial institutions provides not only direct finance to members but also improves access to credit, and the terms, in international financial markets. This was certainly an important consideration for Romania during the early 1970's, when it had (along with Bulgaria) the highest debt-to-export ratio among the CMEA countries, and for Hungary and Poland when they applied for membership in the Fund in the early 1980's. Czechoslovakia's relatively low debt-to-export ratio and the GDR's access to large credits from the Federal Republic of Germany may have played a role in their lack of interest in membership.

Economic reforms of certain kinds tend to make policymakers more interested in membership in IEO's. That is, when policymakers modify a CPE system by (1) placing less reliance on administrative directives and more on indirect (mostly financial) instruments to implement the plan, (2) giving increased autonomy to enterprises, and (3) possibly even allowing some scope for the operation of a genuine market mechanism, they become less averse to membership in IEO's. One reason is that the introduction of such reforms makes their country's economic system *less incompatible* with the rules of the IEO's than they were before. Another reason is that such reforms usually involve greater public disclosure of hitherto unpublished economic, trade, and financial information. Since membership in the IEO's, especially in the IMF and the World Bank, requires the provision of a great deal of economic information, reforms tend to make it easier to fulfill this particular condition. The timing of Hungary's, China's, the U.S.S.R.'s (and to a very limited degree Bulgaria's) interest in the GATT did coincide with periods of economic reforms and increased "openness" in their countries, as did Poland's application to join the Fund. Moreover, if sufficiently far-reaching economic reforms are initiated, then it may be possible to join the GATT without having to make quantitative import commitments as a condition of membership.

IEO influence on domestic economic policy may be viewed as a benefit or a cost, depending on whether policymakers agree with an IEO's prospective recommendations. Affiliation with IEO's can assist reformers with expert advice on reform measures and help protect existing reforms against domestic opposition. External pressure for additional reforms might even help reformers in a country to foster further reforms. But whether membership in IEO's is helpful in this regard depends on each country's domestic political culture and economic and political situation. Generally speaking, some large and powerful countries, like the U.S.S.R., are less likely to see or accept foreign advice than would small countries, like Hungary. Autocratic dictators (like Romania's Ceaușescu) are less likely to heed advice than would rulers who govern more by consensus (like Hungary's Kadar or Grósz). Most important perhaps is whether a country's leadership has decided to move ahead with do-

mestic reforms. If so, cooperation with the IEO's becomes easier. Countries that by and large have maintained a traditional CPE system (Albania or Czechoslovakia) or have introduced mainly administrative decentralization without modifying the instruments of planning (the GDR), are less likely to become interested in membership in IEO's. And were any such country to become a member, it would be less likely to heed reform-oriented advice from the IEO's, as is shown by the example of Romania.¹⁸ Incidentally, Romania's Ceaușescu is not alone as a leader of a country who views conditional lending by the IMF or the World Bank (or the conditional granting of MFN by the United States) as unacceptable interference into the country's internal affairs.

Attitude toward international economic arrangements promoted or approved by an IEO's is certainly a factor, especially for a major power like the U.S.S.R., which would hope to have a say in the arrangements. For example, the Soviet Union in 1955 (when there was a temporary relaxation in East-West tensions) recommended that the charter of the defunct International Trade Organization (ITO) be ratified, although it did not express an interest in joining the GATT. The ITO had been conceived as a U.N. organization with universal membership, whose charter contained sufficient ingredients to elaborate a general solution for state-trading countries in an otherwise market-oriented global trading environment. By contrast, the GATT was initially comprised mostly of the industrial Western countries. Since 1986, the Soviet Union has been reassessing its policies and has apparently concluded that its strategic and economic interests would be better served by cooperating with the GATT, whose membership has, in the meantime, become nearly universal.

The main issues being negotiated by GATT signatories under the current Uruguay Round are (1) the restoration of greater multilateralism in trade in manufactures by rolling back the so-called new protectionism of the past two decades; (2) the elimination of a number of national treatments, including price supports, production regulations, and export subsidies for trade in agriculture; and (3) the elaboration of a code in international trade in services. Regarding the latter, the U.S.S.R. is not likely soon to become a major force in international insurance, finance, telecommunications, data processing, and related services. But just like other minor actors in such exchanges, the Soviet Union has an interest in seeing to it that any new code would enable it to participate if and when it is able and ready to do so. Likewise with respect to merchandise trade: because it aspires to increase the share of manufactures in exports, although it cannot do so quickly, its posture is to oppose market foreclosures. Regarding trade in agriculture, the Soviet position is awkward. So far it has been a major beneficiary of the unregulated nature of that trade, including the rivalry on subsidies among major foodstuff exporters. But, at the same time, if the Soviets were to cut their agricultural output to minimum food security levels, they would want to be assured of greater transparency and

¹⁸ Details of differences among the East European countries are addressed in Petra Pissulla, "Romania and Hungary in the IMF and Implications for Poland," in Paul Marer and W. Swinski, *op. cit.*

stability in output and prices on the world market. If an orderly reduction in price and income supports to agriculture in the developed countries would contribute to greater stability, the Soviet Union would probably not oppose it.

In sum, one benefit the Soviet Union appears to be seeking is a say in the formulation of new international trading rules being negotiated during the Uruguay Round. This suggests that the Soviets are more likely to have an interest in becoming associated with an IEO when that IEO's rules are being formulated or reformulated than when its only choice regarding rules and arrangement would be to "take it or leave it."

Regarding the IMF, the Soviet Union would prefer a more stable exchange rate system, anchored to a universal reserve currency, and that no country should have sufficient power for veto. As the world's second largest gold producer, the Soviet Union probably favors some role for gold, although key policymakers no longer insist on it.

Changes in the international economic or political environment can alter attitudes toward membership. For example, the signing of the Rome treaty in 1957 undoubtedly played a role in the emerging interest of the East European countries in the GATT. They wanted to be in a better position to parry the adverse impacts of EC policies, such as those in agriculture, and to reduce West European QR's on imports from Eastern Europe. The state of East-West political relations is sure to be important also. A relaxation of tensions fosters, on both sides, a spirit of cautious cooperation. Not only would a planned economy become somewhat less concerned with the political cost of membership in an IEO, but its request for affiliation would also more likely to be welcomed. Moreover, Soviet pressure on its allies to conform with the Soviet position on IEO's is likely to ease.

Soviet pressure on allies to conform has certainly been a factor. How strongly the Soviet Union prefers that its allies remain unaffiliated with an IEO as long as the U.S.S.R. is not a member depends on the U.S.S.R.'s foreign policy and the cost to its allies (and indirectly, possibly to the Soviets also) of not being affiliated. The Soviets may well have been less concerned with East European membership in the GATT than in the Fund and the Bank because the GATT can only give advice on trade while the Fund and the Bank are concerned with nearly all aspects of a member's domestic and foreign economic policies. Also, the GATT has much less leverage than the Fund and the Bank to obtain compliance with its recommendations. These considerations may well have played a role in the East European countries seeking affiliation with the GATT much earlier than with the Bretton Woods institutions.

The outcome of pressure exerted by one country on another depends on the strength of the pressure, the domestic political and economic situation in the country being pressured, and the international political environment. For example, pressure on Hungary by the Soviets reportedly delayed the country's application for membership in the IMF and the World Bank. By contrast, earlier pressure on Romania was not effective. That there was a great deal of Soviet pressure on the East European countries to conform, and

that under Gorbachev this has been changing, is now acknowledged by specialists in the U.S.S.R.:

Major deformations of socialism in the East European countries, major mistakes in their internal policies, together with the hegemonic aspirations of the Soviet leadership of the [Stalin and Brezhnev-Suslov periods] were among the main reasons for the deep political crisis in Hungary in 1956, Czechoslovakia in 1968, Poland in 1956, 1970, and 1980. . . .

The *Perestroika* initiated in the Soviet Union when the Gorbachev leadership came to power marked not only a drastic turn in Soviet internal policy . . . , but also introduced profound changes in the system of political and economic relations of socialist countries within the framework of the Warsaw Treaty and the CMEA. Today . . . these countries are free from any dictate, pressure, and interference in each other's internal affairs. . . . The countries of Eastern Europe now have broad opportunities to realize unhindered their national interests both within the framework of the socialist community and in relations with the West.¹⁹

Willingness to deviate from Soviet positions has always been greater for some countries than for others. For example, China has always been in a much better position to pursue independent foreign policies than have been the countries of Eastern Europe. Within Eastern Europe, Romania has always been more of a maverick on foreign policy than, say, Bulgaria. This explains to a large extent why Romania became an observer in the GATT 10 years before Bulgaria, and why Romania did and Bulgaria has not applied for membership in the Bretton Woods institutions.

In conclusion, the introduction of market-oriented reforms is only one of a number of factors that help shape the policies of planned economies on membership in IEO's. In many cases, reforms do not appear to be among the most decisive factors. The three cases in which the introduction of a reform program may have been a critically important factor are Poland's and Hungary's application to join the GATT in 1957 and 1966, respectively, and, two decades later, the Soviet Union's expression of interest to become an observer in that same institution.

B. IEO PERSPECTIVES

Whatever the motive of a CPE for joining the IEO, does a planned economy's affiliation with an IEO promote the introduction, the preservation, or the further development of market-oriented economic reforms? In seeking to answer this question, it is useful to distinguish between what happens during the application phase and after a CPE becomes a member.

With the GATT, the key issue is the contemplated protocol of accession on reciprocity. If the planned economy remains a traditional CPE and so must make an import commitment, the process of becoming a member will not push it toward economic reforms. Moreover, import commitments to reciprocate for tariff concessions even strengthen the central planning and administration of foreign trade to "facilitate" the implementation of such commitments. But if, at the time of its application, a planned economy had already reformed its CPE mechanism sufficiently to accede to the GATT on the same terms as market economies, or were to negotiate transitional arrangements during which the country would have specific

¹⁹ Institute of Economics of the World Socialist System, "East-West Relations and Eastern Europe: The Soviet Perspective," *Problems of Communism*, May-August 1988.

obligations to move toward market-oriented reforms, then, and only then, would membership in the GATT promote economic liberalization. In such cases, the country would also be under some pressure to preserve its reforms in order to maintain "GATT conformity." The effectiveness of such pressure depends on the ability and willingness of the GATT to monitor and penalize a country for infractions of GATT rules.

Reforming a traditional CPE is not a legal precondition of membership in the IMF or the World Bank. The only legal requirement is the unconditional acceptance of financial obligations toward the Fund and the Bank and of the other rules laid down in their charters. The most important other rules are the provision of adequate economic and financial information and regular consultations on policy measures that affect other member countries. But the willingness of many influential members to admit a CPE is likely to be greater, *ceteris paribus*, if the applicant has embarked on a significant economic reform program because the greater the role of markets or of market-type instruments, the more compatible is the economy with the operating principles of the IEO's. The West values market-oriented reforms also for political reasons.

During negotiations leading to membership in the Fund, the key issue has been the provision of adequate economic information. Also, if the applicant has a multiple exchange rate system vis-a-vis convertible currencies, the Fund suggests that the rate be unified. Both Hungary and Poland unified their multiple convertible currency exchange rates before joining the Fund.²⁰ That the planned economies cannot realistically be expected to achieve convertibility while maintaining traditional central planning is not a formal obstacle to membership. Since the Fund long ago accepted that many developing countries may more or less permanently avail themselves of the "traditional" escape clause from convertibility under Article XIV, from a strictly legal perspective, the Fund cannot require a higher standard of compliance from planned economies than it imposes on the developing countries.²¹ But such a requirement could be provided for in the instrument of accession.

In sum, desire for membership in the Fund and the Bank may push a CPE toward releasing economic information, unifying its multiple exchange rates vis-a-vis convertible currencies, and agreeing to consultations. But even if fully complied with, these are small steps. They do not, by themselves, ensure significant economic reforms.

Much more important, therefore, is what happens after a CPE becomes a member. The component parts of this question are: What are the views of the directors and the staff of the Fund and the Bank on economic reforms in the CPE's that are members? How much leverage does the Fund or the Bank have vis-a-vis member countries? How willing are these IEO's to use the leverage they have? Can these organizations effectively monitor and ensure compliance with their recommendations?

²⁰ Formal unification of the exchange rate does not mean that a country may not retain a *de facto* multiple exchange rate system through variable taxes, levies, subsidies, and other devices.

²¹ Additional issues of convertibility and Fund membership are discussed in Paul Marer, "Centrally Planned . . ." *op cit*.

Most executive directors of the Fund and the Bank as well as the staff by and large strongly favor market-oriented reforms. The main reason is that the set of policy recommendations these organizations have developed (to improve a borrower's balance of payments and efficiency of resource use) work best when a country has a market-oriented economic system. For example, to reduce domestic absorption, Fund programs typically focus on tighter money and credit policies. But if enterprises in CPE's are not profit oriented and do not face hard budget constraints, then tighter monetary policies will not yield the desired effects.

The IMF and World Bank tend to promote systemic reforms during their frequent consultations with policymakers in the CPE's. But the proreform orientation of the Fund and the Bank does not necessarily translate into an insistence on the introduction of comprehensive and far-reaching reform programs in the CPE's. Some consider that it would be undue interference into the internal affairs of a country. Furthermore, the principal concerns in the case of the IMF are that a borrowing country maintain or reestablish its creditworthiness and in the case of the World Bank that the borrowed funds also promote economic development. These IEO's want to ensure that loans will be serviced. The best way to improve a CPE's balance of payments, in the short to medium run, does not necessarily require the introduction of comprehensive economic reforms. Some in the Fund and the Bank believe that reestablishing macroeconomic equilibrium should precede systemic reforms. Others advocate a joint emphasis on policies to regain equilibrium and the introduction of reforms. Still others believe that economic reforms should have the highest priority. The most likely outcome is that the Fund and the Bank will push strongly the introduction of partial reform measures.

As to leverage, only when a member country is seeking relatively large loans from the Fund or the Bank will the IEO's have substantial leverage. The extent of leverage depends on how badly the country needs the loans, and on the internal economic and political situation in the borrowing country. Whether this leverage will be exercised by making partial reform one of the explicit conditions of a new loan, depends on the specific assessment of the staff and the Directors.

It is by no means certain that a CPE will always agree to policy and reform measures recommended by the Fund or the Bank; Romania is a case in point. Much more likely than outright refusal is that the borrowing country, while ostensibly agreeing with the recommendations, will not implement them fully. The Fund and the Bank often do not have the means to effectively monitor compliance. For example, a country may agree to the automatic or quasi-automatic licensing of imports but then rely on an informal administrative mechanism to control them.

Our main conclusion is that the ability of the IMF and the World Bank to succeed in promoting systemic reforms cannot be guaranteed any more in a CPE than in any other country. Only when influential constituencies among policymakers in a member country are themselves convinced of the advantages of reform and cooperation, and have a firm commitment to such a course, are the prospects of meaningful external influence assured.

III. STRATEGIC ISSUES OF CPE MEMBERSHIP

A. ARE IEO'S "OPEN SOCIETIES" OR "CLUBS"

Although no IEO has universal membership, some are, in principle, open to all states. That is, they are "open societies," as distinct from others whose constitutions limit membership in some way. The latter are "privileged clubs." All IEO's have rules of eligibility for membership. But in the final analysis, the real issue in deciding whether an IEO is an open society or a club is how its rules are interpreted when a nonmember requests affiliation or when a member's expulsion is on the agenda. For example, the legal counsel of the Fund, writing about the 1954 debate on the expulsion of Czechoslovakia, revealed that some directors of the Fund looked upon the organization as an international society and believed that the expulsion of a member would weaken the structure of the Fund, while other directors thought that there was a set of club rules, such as the provision of information and a willingness to consult, from which it was not practicable to exempt members.²²

B. BENEFITS AND COSTS OF CPE MEMBERSHIP FOR THE WEST

The benefits and costs of membership in an IEO may be conceptualized as members receiving various private and public benefits in return for the economic resources they contribute, the sovereignty they give up when they join, and the reduced organizational effectiveness that might occur when adding members.

In the IMF, the principal "private" good that members obtain is access to resources: SDR allocations and conditional eligibility to the Fund's "lender of last resort" facilities. Although all members benefit from them, they are relatively more important for the developing countries and the CPE's than for the industrial countries, which are net contributors. The situation is in many ways similar in the Bank, although there the financial contributions are smaller and only developing countries can receive loans directly. But since suppliers to Bank-financed projects are located mainly in the industrial countries, they derive private benefits also. Membership in the GATT requires only minor financial contributions to defray the cost of administration, so the financial burden of membership is small.

The principal public benefit that all members obtain through several channels is increased international economic and political stability. As a lender of last resort, the Fund (and to some extent also the Bank) helps reduce the likelihood of defaults which, through their domino effects, could cause irreparable harm to the international economy. Since many CPE's have large foreign debts, this is a relevant consideration. Members also derive benefits on account of the IEO's legal prohibitions against beggar-thy-neighbor policies and discrimination. Whether in this regard the membership of CPE's is (or could be) helpful to the rest of the world depends on the nature of their economic system, the rules under which they join the IEO's, and the economic policies they pursue.

²² Joseph Gold, *Membership and Nonmembership in the International Monetary Fund* (Washington, DC: IMF, 1974), p. 367.

The more enterprise decisions rely on commercial criteria, and the more CPE governments use market-type instruments to implement economic policy, the greater is the contribution of these countries to the better functioning of the international economic system.

For the West, there are certain additional considerations too. During the postwar period, there has been a great deal of acrimony within the Atlantic Alliance over East-West trade and financial policies; today, substantial disagreements continue. This has weakened the Alliance. Taking certain aspects of East-West economic relations out of the political realm and placing them under the authority of IEO's would strengthen the Atlantic Alliance. It would be desirable to bring East-West economic relations under rather more international surveillance than is the case today. It would also be beneficial to provide opportunities for more multilateral discussions of the manifold problems that are posed by differences in economic systems.²³

Furthermore, it would be constructive to seek ways and means to buttress the economic reform process underway in the Soviet Union. This is particularly germane when economic reforms are placed in their sociopolitical contest. At the very least, it would be desirable to avoid deliberately harming this unprecedented societal transformation process. Western refusal even to discuss issues that would arise if the Soviet Union were to negotiate affiliation with the IEO's clearly does not facilitate the reform process in the U.S.S.R.

A related consideration is that the Soviet Union is the *primus inter pares* of the socialist world. Any radical change in the Soviet approach to economic decisionmaking is bound to have an impact on its major trading partners in Eastern Europe, and hence on the CMEA as a whole. If the Soviet Union were to become affiliated with IEO's, that is bound to entail a number of repercussions for the way in which the CMEA economic mechanisms would function.

One potential cost of admitting a CPE to the IEO's is the possible reduction of their organizational effectiveness. This depends mainly on whether the new member wished to promote or thwart the purposes of the organization and, if the latter, whether it would be more effective in bringing about this result from the outside or as a member. Reduced organizational effectiveness would be a distinct possibility even if the "dissident" could not veto the adoption of important decisions because:

[T]he refusal to abide by obligations can have a demoralizing effect on members that would be assiduous in observing their obligations if not confronted with the example of malefactors. Even if "dissident" members do not violate their obligations, they may inhibit the effectiveness of the organization by preventing consensus on proposed decisions.²⁴

The greater the possibility that a CPE would try to thwart the purposes of an IEO, and the greater the prospective influence of the CPE owing to the size of its economy or to some other factor, the larger is the nonfinancial cost of admitting it. This is why the

²³ Agreement on what constitutes "normal economic relations between East and West" would be highly desirable. For a constructive analysis of the problems, see Philip Hanson, *Western Economic Statecraft in East-West Relations—Embargoes, Sanctions, Linkage, Economic Warfare, and Détente* (London: Routledge & Kegan, 1988).

²⁴ Joseph Gold, *op. cit.*, p. 162.

memberships of China and especially that of the U.S.S.R. raise especially difficult issues. This explains why, when a country applies for membership, the Fund and the Bank focus less on whether an applicant can perform, at the time of its application, all the obligations of membership, than on the country's intentions to cooperate once it becomes a member.²⁵ The assurance of cooperation is important because it gives the IEO's an opportunity to convince the country of the desirability of putting into practice systemic changes and policies that would bring it increasingly into conformity with the purposes of the IEO's.

IV. POLICY RECOMMENDATIONS

A. BACKGROUND

At least two reasons suggest that in considering the costs and benefits of a CPE becoming affiliated with an IEO, substantial emphasis should be placed on its long-term commitment to market-oriented economic reforms. Although the introduction of reforms is not a legal requirement, it is difficult to see how a country that intends to remain a traditional CPE can be an effective supporter of the basic purposes of the IEO's. The nature of a CPE's economic system is simply not consistent with the principles of the IEO's. The other, related reason for promoting comprehensive economic reforms more strongly than the IEO's appear to have done up to now is that the best assurance of sustained cooperation with the IEO's is a commitment to an economic reform process whose implementation would be concretely supported by the terms of membership.

Let us review briefly the incompatibility of the traditional CPE system and the principles of the IEO's. The backbone of the GATT trading system is reciprocity, nondiscrimination, transparency, and safeguards. Reciprocity means the mutual trading off of concessions on each other's import levies and nontariff barriers. Nondiscrimination means that all signatories are treated equally. These principles presume that much of trade is conducted by private firms guided by commercial, particularly profit motives. There can in principle be discrimination only in favor of domestic production through *ad valorem* duties. Transparency requires getting rid of nontariff barriers or translating them to *ad valorem* duties. Safeguards are temporary means to contain imports to ease the speed and burden of adjustment imposed by rapid shifts among countries of comparative advantage. In a traditional CPE, where factor and product prices are predominantly not market determined, production and trade decisions are not (and cannot) be made largely on commercial grounds. Business decisions, therefore, are not transparent.

The international financial system established at Bretton Woods is based on the market mechanism, private profit incentives, single equilibrium exchange rates, convertibility, multilateralism, and the absence of exchange restrictions. Bank policies are supposed to enhance private international investment; only when private markets

²⁵ Joseph Gold, *op. cit.*, p. 159.

fail to provide desirable capital financing will the Bank foster investments through various governmental guarantee and borrowing programs. Again, there is not much commonality between these objectives and the economic mechanisms and policies of a traditional CPE.

The description and analysis presented in sections I and II of this essay show that if there is political will on both sides, even an unreformed CPE can now be admitted to any of the IEO's; there are no legal obstacles to membership. The analysis also reveals that membership is no guarantee that comprehensive, market-oriented reforms will be introduced. At the present time, the likelihood that a planned economy would move in that direction is greater, in the case of the GATT, if the country is not obliged to make a quantitative import commitment; in the case of the IMF and the World Bank, if the planned economy is seeking loans. But in all three instances, the key is the voluntary reform commitment of the authorities in the member countries.

The key question is this: Is it possible to design mutually acceptable arrangements for CPE affiliation that would reduce the conflict between the principles of the IEO's and the systemic and policy features of traditional CPE's? We think the answer is affirmative, provided that firm and concrete arrangements are made that would strengthen the reform process in the CPE's, both in those that are already members and for prospective new members.

Before offering specific recommendations, let us note that the commercial and financial relations among market economies today involve a host of more or less permanent exceptions and deviations from the principles of the IEO's. Some of the exceptions are recognized *de jure* by the IEO's, others are practiced *de facto*. For example, not all goods—not to mention services—receive equal nondiscriminatory treatment: automobiles, textiles, chemicals, and agriculture are cases in point. Special integration arrangements, such as the EC and the recently negotiated free trade agreement between the United States and Canada, are examples of discrimination against third parties. The prices of imported goods are not always set equal to the landed import price converted to domestic prices at the prevailing exchange rates (plus tariffs, distribution costs, and profit margins). The domestic prices of imported goods are frequently "managed" by the seller whose principal short- or medium-term target may not be profit maximization but market share. Although Article VIII of the IMF requires that members maintain or work toward convertibility, there are many, more or less permanent exceptions even among market economies. Even the minority of Fund members that have Article VIII status often impose various kinds of restrictions that are not in accord with the basic rules. However, all these exceptions and deviations from the basic principles of the IEO's should not obscure the fact that a substantial share of international trade and financial transactions among market economies is conducted in accord with the principles embodied in the charters of the three IEO's.

In light of how the contemporary trade and financial systems actually function, and in view of the systemic and political constraints on the CPE's, it needs to be recognized that the CPE's cannot, in the short run, fully multilateralize their trade and pay-

ments, abrogate their bilateral trade and finance, and introduce drastic shifts in their trade patterns, either by commodity or partner or both. The solution would seem to lie in devising appropriate *transitional arrangements*. Carefully designed procedures agreed upon at the time of affiliation might ultimately prove far more expeditious and supportive of reform than some of the arrangements that are currently in place.

B. PROPOSED TRANSITIONAL ARRANGEMENTS

Without attempting to draft full-fledged transitional trading and financial regimes for CPE's, a few suggestions may be sketched.

We are not in favor of GATT membership for CPE's that require them to undertake quantitative import obligations. Such commitments are difficult to define meaningfully on account of the unpredictability of inflation, East-West political tensions, shifts in the commodity composition of trade, or adjustment problems in the balance of payments.²⁶ More importantly, they are not compatible with the kinds of reforms that a CPE's membership in an IEO should encourage, as others have also noted.²⁷ We are also not in favor of admitting a CPE to any IEO without a CPE making a commitment to a long-term economic reform program. The implementation of an agreed program should be monitored; if discarded unilaterally by the CPE, that should have appropriate consequences for the member country. The monitoring of a reform program would require close cooperation between the IMF, the World Bank, and the GATT. Specifically:

(1) The key provision should be a basic commitment by the authorities in a CPE to grant growing autonomy to producers and trading companies, allowing them substantial freedom to dispose freely of their aftertax profits.

(2) Another key provision would be a program to strengthen the linkage between foreign trade prices and domestic wholesale prices through the use of a unified exchange rate, initially vis-a-vis convertible currencies but in time against all currencies. The link could be specified as some type of an "average" over a period (somewhat analogous to the smoothing of prices by market-economy exporters and importers) to help maintain a reasonable degree of domestic price stability.

(3) Set forth explicitly the governmental preferences that influence the formation of domestic retail prices relative to trade prices. Agree to transform societal preferences into *ad valorem* tariffs, subsidies, and taxes, thereby making the preferences of the authorities transparent to foreign partners.

(4) Agree on a timetable for achieving the external (nonresident) financial convertibility of the domestic currency for current-account transactions, with free trading in the domestic currency, so that foreign recipients of the currency could divest themselves thereof without difficulty.

²⁶ Eliza R. Patterson, "Improving GATT Rules for Nonmarket Economies," *Journal of World Trade Law*, 20 (1986:2), p. 203.

²⁷ Robert E. Herzstein, "China and the GATT: Legal and Policy Issues Raised by China's Participation in the General Agreement on Tariffs and Trade," *Law and Policy in International Business*, 18 (1986:2), p. 386.

(5) Upon agreement on such a program, the IEO would accept the CPE as a regular member. MFN status would be granted by the contracting parties of the GATT with transitory safeguards tailored to the conditions agreed upon during the transition toward reform. The implementation of the reform program would be monitored, as standby programs are now monitored by the IMF. Unwillingness on the part of a CPE to discuss with representatives of the IEO's how implementation is proceeding, or the unilateral abandonment of substantial parts of the program, would be grounds for loss of MFN status in the GATT and for the IMF (and for the World Bank, if relevant) to declare the CPE, after due process, ineligible for participation in their loan programs.

III. CMEA AND SOVIET-EAST EUROPEAN RELATIONS

OVERVIEW

By Francis T. Miko*

Soviet "glasnost" and "perestroika" are having major repercussions in Eastern Europe. Important changes in Soviet foreign and domestic policy under Gorbachev are likely to bring new opportunities but also uncertainties for Eastern Europe. The opportunities arise from the greater East European autonomy and diversity that the Soviet Union now seems willing to accept. Reform-minded leaderships may find greater latitude to bring changes in their domestic and foreign policies, as they seek formulas for dealing with mounting economic and social problems. Uncertainties stem from the unknown future of Gorbachev's experiment in the Soviet Union and the rising expectations among East European publics created by "glasnost" and "perestroika," expectations which could easily outpace the ability or willingness of East European governments to bring desired change.

In addition, Soviet President Mikhail Gorbachev has indicated that he wants to put relations with Eastern Europe on a new basis. The rethinking of Soviet policy toward Eastern Europe is encouraged by the reality that, after more than 40 years, the Soviet position in Eastern Europe, as well as the Marxist-Leninist systems that Moscow has set in place, have achieved very little acceptance and still rely ultimately on Soviet military power for their continuation. The Soviets are now beginning to publicly recognize the heavy price they and Eastern Europe have paid to maintain the present situation. The costs can be measured in terms of the repeated East European upheavals and the negative impact they have had on the political and economic evolution of the region, heightening economic stagnation and social tensions. But the upheavals have also dashed hopes for reform movements in the Soviet Union.

Mikhail Gorbachev hopes to transform the Soviet relationship with Eastern Europe, within the framework of the existing Marxist-Leninist system and the present Warsaw Pact/CMEA alliance structure. Gorbachev does not seem ready to alter the underlying institutional foundation of Soviet-East European relations. He wants to achieve closer economic and perhaps even political integration at the same time that he is loosening Soviet control and accepting greater diversity. But the two objectives may be difficult

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to achieve simultaneously since they appear to be at odds. He is seeking these changes in face of a growing conviction, even among Communist Party elites in Eastern Europe, that the system itself is the problem and that a more drastic overhaul may be required. He also must contend with a traditional Western orientation of most East European countries, now coupled with government beliefs that the best hope for overcoming stagnation is through closer economic cooperation with the West, not with Moscow. In addition, as Karen Dawisha notes in "Eastern Europe and Perestroika Under Gorbachev," Gorbachev faces a dilemma of how Soviet domestic and foreign policy reforms improve the viability and performance of East European regimes without unleashing societal forces that might ultimately threaten the reform movement in both Eastern Europe and the Soviet Union. Past efforts at reform under Nikita Krushchev and Leonid Brezhnev were followed by periods of recession.

The implications of Soviet "new thinking" about Eastern Europe are still unclear. Gorbachev has supported the concept of different roads to socialism, severely criticizing past examples of slavish adherence to Moscow's model and encouraging governments to tailor their policies to their specific traditions and circumstances. Gorbachev has encouraged reformist policies of Poland and Hungary, but has not pressured other countries to adopt Soviet style reforms. And he has tolerated markedly anti-reform policies in Czechoslovakia and the GDR, as well as the most rigid hardline policies of Romania. Soviet formulations on a "common European home," though not yet well defined, seem to accept greater independent interaction of the East European countries with Western Europe. Gorbachev has been vague on the question of the Brezhnev Doctrine, generally rejecting the notion of interference in other countries' affairs but not explicitly ruling out the use of force under all circumstances.

Basic Soviet interests in Eastern Europe have not changed under Gorbachev. The Soviets want to maintain a Soviet controlled national security zone in the region. Their presence is meant to ensure that no foreign power can use East European territory as a base from which to threaten the Soviet heartland and, as Karen Dawisha suggests, perhaps to suppress hostilities among East European countries of the kind that have embroiled the Russians in larger European wars in the past.

Beyond national security, the Soviets still have significant ideological stakes in Eastern Europe. The collapse of socialism in Eastern Europe could call into question the irreversibility of Communist rule in the Soviet Union itself. In the past, Eastern Europe has been used as a buffer against Western ideological penetration of the Soviet Union. Under glasnost, the region could become more of a transmitter of Western information and ideas.

The Soviet Union has considerable economic interests in Eastern Europe. Under Gorbachev, Eastern Europe is expected to play a role in the modernization of the Soviet economy. Accordingly to Dawisha, though, Soviet-East European relations are not a one-way street, despite Moscow's perceived dominant position in the region. In order to maintain an essentially alien system and governments in place, to forestall the threat of unrest or collapse of central au-

thority, the Soviets have been willing in the past to use force where they felt it necessary but also to accommodate East European interests on some issues. The threat of crisis has given East European regimes leverage to get concessions from Moscow. This has been particularly apparent in the economic sphere. Not only have the terms of trade become less favorable to the Soviet Union, but past Soviet efforts to achieve closer economic integration have had to give way repeatedly to Eastern European opposition. Several East European governments have viewed CMEA integration as just another instrument of greater Soviet control and a barrier to diversification of their foreign economic relations.

Now, by placing its relations with Eastern Europe more on the basis of equality and mutual benefit, the Soviet Union hopes to gain East European support for broader economic integration. But here, as indicated in several of the papers in this section, success has been very limited. Gorbachev wants to use a revitalized CMEA to stimulate technological modernization and innovation in the Soviet and East European economies. Among the primary instruments for integration have been the "specialization agreements," whereby one country agrees to satisfy the needs of the others in certain products and the others agree to stop or limit production. Therefore, Keith Crane and Deborah Skoller look at trends in these agreements as a measure of progress toward integration. The number of specialization agreements has risen. In most cases the Soviet Union has been the driving force. But the authors find little evidence that the agreements have furthered economic integration. In the majority of cases, they have not led to increase exports or imports of a given product by individual countries and in many they have led to a decline.

Judy Thornton and Robert Epplin look at the results and prospects of one particularly important specialization agreement on "Coproduction and Reciprocal Deliveries of Equipment for Nuclear Power Stations for the Period of 1981-1990." While the Soviet Union and Eastern Europe remain committed to nuclear energy development even after Chernobyl, and the nuclear share in overall energy production for the region has reached a not-insignificant 10 percent, there have been significant problems with cooperation. Due to delayed and unreliable equipment deliveries, concerns over safety, and other factors, East European countries have not achieved planned nuclear energy development, and several have begun looking to the West or to their own production capacity to meet their needs.

Highest priority is given to computer technology under the "Comprehensive Program for Scientific and Technological Progress to the Year 2000." But as Lucja Swiatkowski points out in her paper, the program represents the traditional Soviet approach of seeking to bring about a high-technology revolution by decree. The program seems to be patterned on the Soviet defense industry. It seeks to blend central planning and market instruments. It encourages direct ties among enterprises, and design bureaus. It has not been very successful to date because of the continued prevalence of command methods of management and the divergent attitudes toward economic reform among member countries.

Steven Popper surmises that East European countries are not very enthusiastic about the Soviet dominated program because it might reduce national sovereignty over budgetary decisions, as well as drag them into long-term joint investment programs with uncertain prospects. East Europeans are likely to see the program as benefiting primarily the Soviet Union, ensuring that the Soviet Union will be closely linked to the technological development of its allies who in some cases are better able to utilize domestic and Western aid to productivity. He feels that CMEA institutions are ill suited to supporting the program's integration goals. He sees no real incentive for integration without clear prospects for mutual gain from such activities. To carry out the intent of the program would require the complete overhaul of CMEA institutions.

East European governments are aware that computer development is a prerequisite for international competitiveness and at the same time a fundamental challenge to the existing political and economic order, according to the paper by Jamoszko, Geipel, and Goodman. Their approaches to dealing with this dilemma have differed. Some countries have instituted national programs, organizational changes, and closer cooperation with the West. Poland and Hungary have encouraged private initiatives. But they conclude that none of the reform efforts go far enough to overcome the systemic causes of backwardness. Despite the Program to the Year 2000, they believe that an overall strategy for computer integration no longer exists.

Each of the articles concludes that the evolving new relationship between the Soviet Union and Eastern Europe has significant implications for Western policy. Greater diversity and pluralism in Eastern Europe would offer new opportunities in East-West relations. It is likely to hasten the cultural reunification of Europe. As Eastern Europe continues to push for closer economic cooperation with the West, this will reinforce the movement toward economic and political reform. While a more open and diversified East-West relationship may create strains on Western alliance cohesion and cause other difficulties, it is still likely to favor Western interests overall and should be actively pursued, Dawisha concludes. But she also recommends that Western governments more closely coordinate their policies to clearly signal the West's readiness to engage in expanded economic cooperation with regimes committed to sustained reform.

EASTERN EUROPE AND PERESTROIKA UNDER GORBACHEV: OPTIONS FOR THE WEST

By Karen Dawisha ¹

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SUMMARY

When Mikhail Sergeevich Gorbachev came to power in March 1985, facing him was a challenge which went to the very heart of socialism. Gorbachev obviously believed socialism to be a dynamic and transnational system capable of reforming itself not only in the U.S.S.R., but also in those East European countries that have had a legacy of both fierce anti-Sovietism and strong cultural allegiance to the West. But would Gorbachev be able to pursue domestic and foreign policies which would improve the viability and stability of these regimes without unleashing societal forces which could threaten the reform movement in both Eastern Europe and the U.S.S.R.? Both Khrushchev, in 1956, and Brezhnev, in 1968, had tried—and failed—to juggle the competing and perhaps irreconcilable demands of reforming Soviet-style socialism without relinquishing control of Eastern Europe. Would Gorbachev also fail? Would untrammelled popular aspirations for change in Eastern Europe get out of control and reactivate this cycle of stagnation, reform, and repression, thereby threatening both Gorbachev's domestic policy agenda and his own political position?

The challenges facing Gorbachev in reforming his own society are numerous and nearly intractable. Failure to achieve his objectives not only would risk Gorbachev's career, but also, and more importantly, would condemn his country to more decades of waste and stagnation. But the process of reform in the Soviet Union does

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not carry many of the dangers inherent in that process in Eastern Europe, for there dangers lie both in failing to reform and in trying to reform at all. The legitimacy of socialism, both as an ideal and as a system, depends on the success of reform, but Soviet military and security interests in Eastern Europe, arguably, are not in all circumstances enhanced by reform. Indeed, the process of reform and the end results of certain types of reform could be seen as positively deleterious to Soviet security interests, particularly, if as can reasonably be feared in Moscow, many East Europeans see the reform process not as a "green light" to improve cooperation with Moscow but rather to turn toward the West.

Gorbachev's success also depends upon the extent to which "New thinking" about Soviet-East European relations within his own foreign policy establishment takes hold and effects substantial and consequential changes both in the traditional Soviet perception of Eastern Europe and in the objectives pursued by Moscow in Eastern Europe. This new thinking and the extent of its impact on the Soviet-East European relationship are the subject of an analysis below which concludes that while many of the previous sources of crises in the bloc which led to Soviet intervention have been removed, neither the ideological justification nor the practical capability to use force in Eastern Europe has been eliminated, should the need arise in the future.

As for Western policies, while it is often felt in the West that these policies are marginal in effecting change in the block, this is not the view taken in Eastern Europe, where Western initiatives and reactions are closely observed and keenly debated. The role of the West and options available for pursuing a policy better geared to the demands of the 1990's are outlined in the final section.

I. SOVIET CONCERNS IN EASTERN EUROPE

The historical, cultural, and ideological influences which combine to shape contemporary Soviet views of Eastern Europe are important to consider not only because Russia, a large and militarily powerful country, has had a love-hate relationship with the region for centuries, but also because since Lenin its leaders have espoused an ideology which takes the historical process extremely seriously. They derive their legitimacy from being agents and vanguards of an historical process which they maintain will culminate in the establishment of a Communist society. They also derive authority from leading "fraternal peoples" who have "common historical destinies,"² in the words of the new program approved at the 27th Congress of the Communist Party of the Soviet Union (CPSU) in 1986.

The Soviet conception of Eastern Europe has its roots in the contradictory and complex Russian view of Europe as a whole. Although the split between the Slavophiles and Westernizers dating from the 1830's was not as clear cut as is sometimes presented, the Westernizers nevertheless did seek to introduce "enlightened" Western ideas and political institutions into Russia against the ob-

² "Programme of the Communist Part of the Soviet Union. A New Edition, Approved by the Twenty-Seventh Party Congress," *Information Bulletin*, Vol. 24, No. 9, 1986 (Moscow: Novosti Press Agency Publishing House), p. 72.

jections of most Slavophiles. In their determination to defend Russian traditions and in their conviction of the moral superiority of the Russians over European peoples, the Slavophiles turned their backs on the "contagion" of Western civilization.

As for the non-Germanic countries of northeastern and southeastern Europe, the gap between Russia's Westernizers and Slavophiles was not always so large. Neither group, for example, saw this geographic area as a separate entity in the middle of Europe; both saw Europe as divided between a Latin or Germanic West and Slavic East. However, although the Slavophiles saw the two forces or cultures as being implacably opposed, the Westernizers sought the merger of the Slavic East with the West. Both groups neglected the minority nationalities of the areas (namely, the Hungarians and the Romanians); both were ambivalent about the Czechs and Slovaks, having had less contact with them than with other Slavs to the north and south; both expressed sympathy for Bulgarian pan-Slavism; and both were consumed by "the Polish question."

On the issue of Polish independence and reunification, Russian opinion in the 19th century, as in the 20th, was both more divided and more impassioned. To both the Slavophiles and non-Slavophile right, the Polish question was intimately connected to Catholicism. This grouping would not have quarreled with the judgment of the Russian nationalist poet Fyodor Tiutchev, who branded Poland as the "Judas of Slavdom."³ Seeing the Poles as having betrayed their Slavic inheritance, these Russians also held Catholicism responsible for the decline of Poland—an extremely enduring perception that again emerged not only during the 1980–81 Polish crisis, but also since then, including since Gorbachev came to power.⁴

On the other side of the political spectrum, leading liberal thinkers like Alexander Herzen and Mikhail Bakunin were at different times supporters of Polish independence. But this group, like all other Russians then and since, resented continued Polish attempts to deny their cultural and ethnic links with the Russians. Even Paul Miliukov, regarded by some as the last pre-revolutionary Westernizer, expressed his annoyance at the extreme Russophobia of Polish nationalists who, he believed, have "presented themselves to European public opinion as defenders of Europe from Russian 'barbarism'—in the past, present, and future."⁵

Elements of history, culture, and ideology combined in 1945 to shape Soviet policy toward Eastern Europe in the postwar era. That policy has undergone many changes since that time, but it has always been motivated by core Soviet interests, interests determined by geography as much as by ideology and power politics. And these interests, although subject to varying analysis by differ-

³ Andrzej Walicki, *The Slavophile Controversy* (Oxford: Clarendon Press, 1975), p. 220.

⁴ Soviet analyses of the 1980–81 Polish crisis are extensively discussed in Sidney I. Ploss, *Moscow and the Polish Crisis* (Boulder, CO: Westview Press, 1986). Although attacks on the Catholic Church in the Soviet press have subsided since Gorbachev came to power, one interesting exception was provided by a *Krasnaya zvezda* article on May 5, 1987. Timed to appear during the same week that Gorbachev and Jaruzelski signed a significant bilateral agreement improving political and cultural relations, the article pointedly maintained that "the influence [of the Church] is not harmless as some would like to argue."

⁵ Paul Miliukov, *Political Memoirs, 1905–1917* (Ann Arbor, Mich.: University of Michigan Press), pp. 213–214.

ent Soviet leaders, have all played their part in driving Soviet policy toward Eastern Europe in the last 40 years.

A primary Soviet interest stems from the geographic vulnerability of the Russian and Ukrainian heartland to attack through the plains and valleys of Czechoslovakia and Poland. Securing Soviet control over this strategic corridor was, therefore, a major Soviet objective of Stalin's wartime strategy, just as maintaining control over this area has been a continuing priority for every political and military leadership since then. And it is quite clear that even if a doctrine of "reasonable sufficiency" were to be adopted by the Warsaw Pact command, accompanied by a pullback or thinning out of Soviet forces, such a decision would be made only if Soviet planners were convinced that the security of the Soviet heartland could be safeguarded without having direct control over this vital zone.

Second, the Soviet takeover of Eastern Europe served to suppress all the overt and latent conflicts in that region between states, nationalities, ethnic groups, and religions, all of which had served as kindling for wars that regularly had engulfed Russia in both the pre- and post-revolutionary periods. Thus, the Soviet presence in Eastern Europe was designed to act not only as a defensive glacis protecting Soviet territory from future Western, and particularly German, expansion, but also as a stabilizer, ensuring that local rivalries could not be used by the West, or escalate independently, to threaten the security of either the Soviet Union's borders or its political system.

General Secretary Gorbachev appeared to reaffirm this interpretation of Soviet interests in Eastern Europe during his April 1987 visit to Czechoslovakia. On that occasion, he forthrightly stated:

Socialism has marked a crucial turn in the centuries-old history of this part of the world. From time immemorial, wars have been milestones here. The routing of fascism and the victory of socialist revolution in East European countries brought about a new situation on the continent. A powerful force arose here which set itself the aim of breaking the continuous chain of military conflicts. It is precisely to Socialism that Europe is indebted for the fact that over four decades its people have known no wars.⁶

In the past, the existence of allied socialist regimes in Eastern Europe also served the interests of those neo-Slavophiles in the Soviet leadership who sought to seal more completely the Soviet border from Western cultural influences. Such neo-Slavophilism was ascendent in the Soviet leadership until recently when a competing conception, espoused by Gorbachev personally, became dominant. This new view saw Eastern Europe not as a sealant but as a major source for innovative ideas about the improvement of socialism and as a laboratory for the experimental reform of Soviet-style systems. Speaking at the 27th Party Congress in February 1986, he emphasized the need "to understand the processes of protecting democracy, management methods, and personnel policy on the basis of several countries rather than of one country [the U.S.S.R.]. A considerable and respectful attitude to each other's experience and the employment of this experience in practice are a huge potential of the socialist world."⁷

⁶ *Pravda*, Apr. 11, 1987.

⁷ *Pravda*, Feb. 26, 1986.

Finally, and of great importance to the Soviet Union, Eastern Europe is important to Moscow because the ideological legitimacy of Soviet-style socialism is on the line there, more so than in underdeveloped socialist countries like Vietnam or Cuba. While a substantial setback for socialism in a Third World country like Afghanistan could be justified ideologically as an example of a basically semifeudal society unable to make the transition directly to socialism, no such excuse could be mustered if socialism were to collapse in Eastern Europe, where the level of economic development has always been as high as, or higher than, that of the Soviet Union. The collapse of Soviet-style socialism would have the most serious implications for the legitimacy of Communist rule in the Soviet Union itself, exposing the fallibility of the central core of Soviet ideology—namely, the irreversibility of the historical process and the universal applicability and scientific nature of Marxism-Leninism.

Despite the preeminence of Soviet interests in Eastern Europe, the relationship between Moscow and regional capitals is not a simple one-way street. Even in the darkest days of Stalinism, the Soviets recognized the difficulty of imposing an essentially external and alien ideology on this region, a task which Stalin concluded [particularly in Poland] was akin to “putting a saddle on a cow.”

The challenge to Moscow in Eastern Europe is particularly acute in those countries whose standard of living was higher than the Soviet Union's before the war and who, therefore, feel that being allied with the Soviet Union has held them back. This is exacerbated in those countries which have a history of close interaction with Western Europe, and have an experience of preexisting democracy and an established civic culture. As a result, in these countries, while the state institutions have been co-opted by the East, the nation still resides spiritually in the West. This disjunction between a Western-oriented nation and an Eastern-oriented state has been particularly marked in Poland, East Germany, Czechoslovakia, and Hungary. In all of these countries, to varying degrees and at different times, this tension between East and West, between state and nation, has vastly increased the risk of widespread popular rebellion and the inward collapse or implosion of central authority. This duel threat of rebellion and implosion is constantly present and challenging, not only to Soviet control of the entire bloc but also to the West and to broader security in Europe.

II. NEW THINKING ABOUT EASTERN EUROPE

From the inception of the Gorbachev period, greater awareness was expressed about the need to rethink the basis of Soviet policy toward Eastern Europe. Soviet pronouncements emphasized the need both to “avert crisis situations”⁸ and to avoid mismanaging relations as had been done in the past.

Recognition by Gorbachev that Soviet-East European relations required closer scrutiny produced important “new thinking” about certain key issues. In particular, these relations have been affected by the following new formulations: (1) The rejection of a single

⁸ *Pravda*, Feb. 26, 1986.

model of socialism, (2) the redefinition of socialist internationalism, and (3) a broader conceptualization of Europe as "a common home."

A. REJECTION OF A SINGLE MODEL OF SOCIALISM

Gorbachev himself set the standard in revising these notions, beginning at the 27th Party Congress when he specifically emphasized "unconditional respect in international practice for the right of every people to choose the paths and forms of its development." In what appeared as almost a *mea culpa* for past Soviet practices, Gorbachev stated that "unity has nothing in common with uniformity, with a hierarchy."⁹ Gorbachev was subsequently to outline in detail the source of many previous problems in Soviet-East European relations:

In the field of state building, too, the fraternal socialist states largely relied on the Soviet example: To an extent, this was inevitable. Assertions concerning the imposition of the "Soviet model" distort this objective necessity of that time [the immediate postwar period]. . . .

But it was not without losses, and rather serious ones at that. Drawing on the Soviet experience, some countries failed duly to consider their own specifics. Even worse, a stereotyped approach was given an ideological tint by some of our theoreticians and especially practical leaders who acted as almost the sole guardians of truth. Without taking into consideration the novelty of problems and the specific features of different socialist countries, they sometimes displayed suspicion toward those countries' approaches to certain problems.

. . . Furthermore, negative accretions in these relations were not examined with a sufficient degree of frankness, which means that not everything obstructing their development and preventing them from entering a new, contemporary stage was identified.¹⁰

If this was the problem, the solution also appeared clear: Adopt new principles which eliminate the need for slavish adherence to a single model of socialism. Toward this end, Gorbachev enunciated the need for intrabloc relations to proceed according to principles which have at their root the "absolute independence" of every socialist state. As Gorbachev made clear: "The independence of each Party, its sovereign right to decide the issues facing its country and its responsibility to its nation are the unquestionable principles."¹¹

This view came to be shared by other leaders and top advisers. Central Committee Secretary and Politburo member Yegor Ligachev was at pains during a trip to Hungary in April 1987 to emphasize his agreement with this new approach. Speaking on Hungarian television, Ligachev stressed that "every country looks for solutions independently, not as in the past. It is not true that Moscow's conductor's baton, or Moscow's hand is in everything Every nation has a right to its own way."¹²

Both Gorbachev and Ligachev were also in agreement that while there may be more models of socialism and more paths to socialism, nevertheless it was the improvement of socialism and not its

⁹ *Pravda*, Feb. 26, 1986.

¹⁰ Mikhail Gorbachev, *Perestroika: New Thinking for Our Country and the World* (New York: Harper & Row, 1987), pp. 162-164.

¹¹ Gorbachev, *Perestroika*, p. 165.

¹² Budapest Television Service in Hungarian, Apr. 26, 1987, in Foreign Broadcast Information Service, *Daily Report: Eastern Europe*, Washington, DC (hereafter *FBIS-EER*), Apr. 27, 1987, p. F6.

demise which was to be the object of the exercise. Gorbachev was able to tell Western reporters (who had asked his opinion of reforms in Poland following disturbances there in April 1988) that "perestroika was born out of our conditions, and we need it But we will not impose it on any other country. Therefore, it is up to the Polish people to decide what they want to do." However, at the same time he expressed confidence that Poland would remain socialist.¹³

The definition of a socialist system undoubtedly became broader and was able to encompass both the progressive political reforms in Poland and Hungary on the one hand and the still rigid uniformity of the German Democratic Republic and Czechoslovakia on the other. Multicandidate secret elections were to be as admissible as single-candidate public acclamation for the selection of officeholders. Even the central features of traditional socialist systems were challenged: the primacy of the proletariat in a society and world divided into classes; the monopolistic role of the Communist Party in leading and directing all aspects of society; the organization of the party according to the principle of democratic centralism, with particular emphasis on centralism at the expense of democracy; and the planning and central control of all aspects of economic activity. The defining features which remained were the central role of ruling Communist parties in systems still characterized by the absence of wholly independent political parties; state ownership of the means of production and planning of output in the core areas of the economy governing heavy industry, resource extraction, and defense; and the continuation of formal societal adherence to the teachings of Marxism-Leninism, especially in the mass media and education.

B. REDEFINITION OF SOCIALIST INTERNATIONALISM

That the Soviets, even under Gorbachev, would continue to monitor reforms in Eastern Europe and communicate their views about events there was foreseeable. Soviet support for liberalization in Hungary and Poland; Soviet concern with the continued conservatism of the regimes in Czechoslovakia, the GDR and Romania; and Soviet worries that the apparent zealotness of Bulgarian reforms actually masked a desire to avoid reform altogether became a matter of public record. What remained unclear was whether Soviet leaders would still maintain the right to interfere—including through the use of force—if they deemed socialism to be threatened.

After coming to power in March 1985, Gorbachev called several times for building intrabloc relations on a new basis. On the whole he shied away from using the term "socialist internationalism" in his own speeches and writings. But specific Soviet reference to, and support for, the principle continued to be affirmed in important agreements and Party documents, such as the May 1985 renewal of the Treaty creating the Warsaw Pact, the Party Program introduced at the 27th Party Congress, and the April 1987 Polish-Soviet Declaration on Cooperation in Ideology, Science, and Culture.

¹³ *The Washington Post*, May 22, 1988.

Even in his own writings, Gorbachev left the door open by continuing to use formulas which emphasized principles other than the complete independence and sovereignty of each party. In his speech before the Party meeting to celebrate the 70th anniversary of the Bolshevik revolution in November 1987, Gorbachev acknowledged that "unity does not mean being identical or uniform." But he went on to add that "we also know what damage can be done by weakening the internationalist principle in mutual relations of socialist states, by deviation from the principles of mutual benefit and mutual aid, and by a lack of attention to the general interests of socialism in action on the world arena."¹⁴ A similar tone was struck in his book *Perestroika*:

We are also firmly convinced that the socialist community will be successful only if every party and state cares for both its own and common interests, if it respects its friends and allies, heeds their interests and pays attention to the experience of others. Awareness of this relationship between domestic issues and the interests of world socialism is typical of the countries of the socialist community. We are united, in unity resides our strength, and from unity we draw our confidence that we will cope with the issues set forth by our time.¹⁵

On the other hand, Gorbachev used other important occasions to emphasize principles which were at odds with socialist internationalism, principles like the independence and sovereignty of every state, the "inalienable right" of all parties "to make decisions on the choice of paths of social development," and the "impermissibility of interference in internal affairs under any pretext whatsoever," all of the above being affirmed in an important mutual declaration with the Yugoslavs in March 1988.¹⁶ In his speech to the 19th Party conference in June, Gorbachev also stated that "the imposition from outside by any means—not to mention military means—of a social system, way of life, or policy constitutes the dangerous armor of past years."¹⁷ And many of his top foreign policy advisers, including key Central Committee aides Nikolai Shishlin and Georgiy Korniyenko, affirmed quite explicitly when challenged by Western reporters that "We think a state's sovereignty must not be limited by anything or anyone, whatever its nature. . . . We've given up the Brezhnev principle of limited sovereignty."¹⁸

What then can be concluded on the important question of whether the "Brezhnev doctrine" in fact came to be repudiated during the first 4½ years Gorbachev was in power? During this period, the Gorbachev leadership certainly sought to base its relationship with its East European allies on a firmer footing and was willing to accept its share of responsibility for past bloc crises.¹⁹ Moscow also

¹⁴ *Pravda*, Nov. 3, 1987.

¹⁵ Gorbachev, *Perestroika*, p. 165.

¹⁶ *Pravda*, Mar. 19, 1988.

¹⁷ CPSU Central Committee report delivered by Mikhail Gorbachev at the 19th All-Union CPSU Conference, Moscow Television in Russian, June 28, 1988, *FBIS-SOV*, June 29, 1988, p. 12.

¹⁸ The statement was made by Korniyenko during a debate in Italy, and reported by ANSA, Rome, Sept. 16, 1988, *FBIS-SOV*, Sept. 19, 1988, p. 76. Shishlin also categorically denied that Soviet troops would be used by this leadership in Eastern Europe under any circumstances short of a Western invasion, as stated on PBS, *Global Rivals*, Part IV, Oct. 11, 1988.

¹⁹ See the paper prepared by the Soviet Academy of Sciences' Institute of Economics of the World Socialist System, "East-West Relations and Eastern Europe," *Problems of Communism*, May-August 1988, in which the authors concede that the "negative consequences of Stalinist distortions" and the "hegemonistic aspirations of the Soviet leadership" were among the reason for the many bloc crises.

clearly appeared to be willing to allow significant changes in the fabric of East European societies. The number of serious issues which could trigger a bloc crisis and consequent Soviet intervention consequently were reduced.

But some remained: Nothing Gorbachev did eliminated the notion that Eastern Europe, and above all the northern tier states of Poland, Czechoslovakia and the GDR, still constituted part of the Soviet Union's self-defined national security zone. Changes in these core countries, therefore, continued to be judged through the especially sensitive lens of Soviet security interests, a magnifying glass which traditionally has exaggerated the potential damage of indigenous reforms on Pact military capabilities. Concern about the negative ramifications in Moscow of political changes in the bloc as a whole also derived more generally from the fact that the Soviet leadership and Gorbachev himself still maintained loyalty to the notion of a community of socialist states and continued, if to a lesser extent, to espouse the idea that the fate of reform in one country inevitably would affect the reform movement elsewhere. In this way, despite Gorbachev's repeated assertions that "unity has nothing in common with uniformity," he nevertheless made it absolutely clear that these countries were irrevocably intertwined. This means both that Soviet perestroika becomes a kind of standard by which all other reforms are judged and that the tendency for domestic crises within a member of the community to spill over and affect other countries will continue to be greater in the socialist bloc than elsewhere.

When the radical Soviet historian and parliamentarian Yurii Afanaseev proposed that East European states must be free to choose whatever system, whether socialist or capitalist, they preferred, he was quick to point out that the Kremlin's reaction would be "negative; there would not be fireworks in Red Square to celebrate the development." Indeed, he went on, many of the more dogmatic officials "would look very favorably on what is called in the West 'the Brezhnev doctrine'."²⁰ It must be concluded, therefore, that the likelihood of a Soviet invasion of an East European country markedly had declined during this initial period, although the top Soviet leadership, including Gorbachev himself, both in practice and in theory had so far maintained the option of using force to prevent the collapse of an alliance system still regarded as central to Soviet strategic and ideological goals.

C. EUROPE AS A "COMMON HOME"

As discussed above, Soviet views of Europe are complex and multifaceted. They arise from the historical Russian conflict between, on the one hand, the Slavophile rejection of Western culture's subversive and corrupting nature and, on the other, the Westernizers' embrace of the values of the enlightenment and the objectives of economic development. The clash between these two schools reverberated into the post-1917 Soviet period, with Soviet policy toward the West frequently influenced by one or another conflicting view.

²⁰ *La Stampa*, Sept. 1, 1988.

The first phase of the Gorbachev period proved to be no exception. The goals of economic autarky and social isolationism were as alien to Gorbachev's reform plans as they were to the Westernizers who were brought into the Russian court under Peter the Great. Gorbachev's conception relied on greater economic, political, and social interaction amongst the socialist and capitalist states of Europe with the aim of reducing the rigid division of Europe. While some NATO policymakers expressed concern about the impact of such formulations on alliance cohesion, East European leaders without exception welcomed the Soviet change of heart.

To many in Eastern Europe, Gorbachev appeared sincere when he labeled Europe a "common home" and declared that "Europe's historic chance and its future lies in peaceful cooperation between the states of that continent." This pan-European element of Gorbachev's outlook was first enunciated at the 27th Party Congress, and then further elaborated during his 1987 visit to Czechoslovakia and in his book *Perestroika*. There he emphasized the broader philosophical, historical and cultural underpinnings of this view, stemming as they do from his own belief that: "We are Europeans. Old Russia was united with Europe by Christianity. . . . The history of Russia is an organic part of the great European history. . . . Europe 'from the Atlantic to the Urals' is a cultural-historical entity united by the common heritage of the Renaissance and the Enlightenment."²¹

In addition to the general concepts which lay behind this notion, Gorbachev also reconceptualized the Soviet view of European security, bringing it more into line with the ideals embodied in the Helsinki Final Act. At the center of this new view of European security was an acceptance of the need for an inter-European dialogue separate from the U.S.-Soviet relationship. This formulation represented a victory for those East European—and West European—leaders who had argued in the early 1980's that European détente had to be protected from the deterioration in U.S.-Soviet relations which marked that period. Soviet officials, including Gorbachev, evolved the view that the United States and Canada were also part of Europe. Gorbachev himself, for example, called for these two countries to be included in a proposed pan-European summit,²² thereby attempting to reassure NATO that this policy was not designed to decouple Western Europe from its North American allies. This line was most evident during Gorbachev's June 1989 trip to the Federal Republic.

In line with this call for inter-European dialogue, Soviet leaders also emphasized new formulations about security which could have a fundamental impact on Soviet-East European relations in the military sphere. Deputy Foreign Minister Loginov, speaking in Hungary, characterized as a "new feature" of Soviet foreign policy the fact that Soviet leaders had come to believe that Soviet security could only be guaranteed if "we take into consideration other

²¹ Gorbachev, *Perestroika*, pp. 191-197, *passim*.

²² Gorbachev interview, *Der Spiegel*, Oct. 22, 1988.

states' security," Loginov went on to stress that "the only possible solution to issues is one that is acceptable to our partners too."²³

This new conceptualization of Europe and European security was seen as having the most far-reaching possibilities for the future of Eastern Europe. In reaction to statements by Soviet leaders, even the most skeptical East European intellectuals like Hungary's George Konrad admitted the possibility of a "gradual, controlled transformation of the Soviet bloc into a looser community of nations capable of interacting with Western Europe on a partnership basis."²⁴

Moreover, Alexander Dubcek, the former General Secretary of the Czechoslovak Communist Party, who had been in internal exile for almost two decades, gave an illicit interview to the Italian Communist paper, *L'Unita*, in January 1988. In it, he emphasized that "one of the main positive aspects of Gorbachev's visit to Prague was the idea of a 'new way of thinking' about Europe. This idea ought to be consistently affirmed in our country, to overcome the burden of the past and to set in motion Czechoslovak restructuring. To build a united process, we must first restore confidence among European nations and states. I see this as the only way in which we can have a future, given the present conditions."²⁵

It is unquestionable that the primacy of Soviet political, ideological, and security interests in Eastern Europe will place limitations on the extent to which the "new thinking" will go. At the same time, such formulations opened up whole new possibilities for the improvement both of living conditions in Eastern Europe and of relations between East and West in Europe. Given that both have been at the core of Western concerns about Eastern Europe for the past 40 years, it can only be concluded that this "new thinking" is to be encouraged to the extent that it does produce changes in Soviet-East European relations and that these changes are consistent with Western objectives, the subject of the next two sections.

III. SOVIET RELATIONS WITH EASTERN EUROPE

A. THE REFORM RELATIONSHIP

The abandonment of the notion of a single model of socialism both legitimized existing differences and produced increased diversity between socialist states. All of these changes took place under the watchful eye of Soviet leaders who, more often than not, welcomed changes both as contributing to the new "treasure chest of socialist experiences" and as meeting the specific needs of individual countries. Particularly close attention was paid to political, social, and economic reforms in Poland, Hungary, and Bulgaria, all of which instituted reforms which on the surface at least appeared to be along the lines of those being debated in Moscow.

Economic reforms of many types were introduced throughout Eastern Europe; and provided they appeared to be cogent and care-

²³ Budapest Television Service in Hungarian, Jan. 25, 1987, Foreign Broadcast Information Service, *Daily Report: Soviet Union*, Washington, DC [hereafter *FBIS-SOV*], Jan. 30, 1987, pp. CC 3-4.

²⁴ George Konrad, interviewed by Richard Falk and Mary Kaldor, "The Post-Yalta Debate," *World Policy Journal*, Vol. 2, No. 3, Summer 1985, p. 461.

²⁵ *L'Unita*, Jan. 10, 1988, *FBIS-EEU*, Jan. 19, 1988, p. 18.

fully thought out, they have been implemented virtually without impediment from Moscow. In fact, judging from Soviet sources, most East European regimes have yet to deplete the potential for economic reform opened up by the Gorbachev leadership.

Political reforms traditionally have been more difficult to introduce, both because of Moscow's sensitivities and due to the vested interests of the East European leaders themselves in maintaining the political status quo. Such reforms, where they have taken place, have not always been accepted by Moscow as within the purview of legitimate East European actions.

The cases of Bulgaria, Poland, and Hungary provide three examples of the Soviet attitude toward East European reform. In Bulgaria, a series of far-reaching political and economic reforms were introduced throughout 1987 and 1988 which were aimed at allowing unprofitable firms to go bankrupt, breaking up the approximately 300 agro-industrial enterprises into around 2,500 self-managing work teams, establishing a parallel private banking sector, eliminating political parades and ceremonies, introducing multi-candidate elections at the local level, and limiting the top elective offices in the Bulgarian Communist Party (including the Secretary General) to two consecutive terms in office. Many of the reforms had been rushed through the Bulgarian Politburo, producing deep dissent over their wisdom. Evidently as a result of the growing feeling in Bulgaria itself that the reforms were incoherent and unworkable, Zhivkov was summoned to Moscow for an unannounced and unscheduled meeting with Gorbachev on October 15, 1987. The Bulgarian party daily paper *Rabotnichesko Delo* subsequently wrote that the Zhivkov-Gorbachev encounter had "confirmed that the goals are the same," but the widespread belief persisted that while the substance of the reforms has been approved, the pace of their introduction has been questioned in Moscow. As Bulgarian Politburo member and Party Secretary Chudomir Aleksandrov bluntly admitted when discussing the visit, "between the processes of restructuring in Bulgaria and in the U.S.S.R. there is no difference in terms of objectives, principles and basic approaches. At the same time, we comply with our specific conditions and it is they that determine the forms, terms and rates of restructuring."²⁶

Aleksandrov quickly emerged as a leading critic of past practices, calling openly for power to be handed over from "generation to generation, so as to implement innovation more and more fully."²⁷ He also advocated "expulsion from Party ranks as a means to purge and temper the vanguard,"²⁸ a measure aimed at those in the leadership who has come to regard the nomenklatura "as a protective shield that ensures a quiet life."²⁹ Aleksandrov's view that "the stage of looking around critically and smiling and negating everything is over"³⁰ set the stage for further attacks on

²⁶ Chudomir Aleksandrov, *Restructuring, Necessity and Chance* (Sofia: Sofia Press Publishing House, 1988), p. 11.

²⁷ Chudomir Aleksandrov, "The Great Beginning," *Narodna Mladezh*, Oct. 28, 1988, *FBIS-EEU*, Nov. 6, 1988, p. 5.

²⁸ Chudomir Aleksandrov, speech at the BCP National Conference, Jan. 29, 1988, *FBIS-EEU*, Feb. 1, 1988, p. 5.

²⁹ *Ibid.*

³⁰ *Ibid.*

empty sloganeering in the name of perestroika. Calls for "practical deeds" abounded to such an extent that Zhivkov was obliged to state in his closing speech to the February 1988 Bulgarian Communist Party [BCP] National Conference that the previous reform package "is not a dogma, it is not the final truth. We will continue to analyze our social experience We will continue to apply the experience of the fraternal socialist countries and of the Soviet Union, in particular, as regards the innovation of our socialist society."³¹

The summoning of Chudomir Aleksandrov to Moscow in May 1988 for a meeting with his Soviet counterpart for cadres and organization, Georgiy Razumovskiy, appeared to foreshadow further imminent changes in the Party, perhaps as early as the July 1988 Central Committee plenum. But Zhivkov once again proved unwilling to move aside; and instead, in an entirely unexpected move, Aleksandrov himself was sacked. Zhivkov may be willing to introduce a number of economic reforms; but there seemed little prospect that substantial political change would occur as long as he remained in office. Moreover, it appeared that Moscow's attempt to court alternative reform figures failed, at least in the short term, to have the desired effect in Sofia.

To the extent that the Soviet leadership, even under Gorbachev, continued to exercise influence in Eastern Europe over particular personnel and policy decisions, its "hand" was even more hidden in the case of Poland. It is very difficult to find evidence of Moscow's role in the introduction of the alternatively decentralizing and recentralizing reforms which were a see-saw feature of the political landscape there for well over 2 years after Jaruzelski's 1986 decision to free political prisoners, a decision which set in motion the domestic policy of reconciliation and consensus building. Nor is there any major indication of Soviet involvement in the handling of the April 1988 strikes in Gdansk and Warsaw and the subsequent movement by the leadership to open talks with the banned Solidarity free trade union.

The Soviet role was, if anything, conspicuous by its very absence, with Gorbachev's summer 1988 trip to Warsaw producing no new statements of any kind which might be construed as domestic interference. The Soviet public debate was rather freer and more diverse on Polish matters, as on all other matters, with open criticism of Polish economic mismanagement (including an article directly critical of the Polish Government which appeared in the week before Zbigniew Messner was replaced as Prime Minister by Mieczysław Rakowski, the ex-editor of the weekly *Polityka*) and a greater willingness on the part of some Soviet political figures to admit publicly that the Soviet Union would not react negatively to negotiations legalizing Solidarity.³² In June 1989, as a result of accords signed between the Polish Government and Solidarity, parliamentary elections were held which produced an overwhelming political and moral victory for Solidarity. However, here, too, the

³¹ *Ibid.* Todor Zhivkov, closing speech at the BCP National Conference. Jan. 29, 1988. FBIS-EEU, Feb. 1, 1988, p. 9.

³² As indicated by Nikolai Shishlin, in a *Le Monde* interview, which the Polish leadership reportedly felt compelled to rebut in an internal party memorandum as not representing, in their view, official Soviet policy [*Washington Post*, Oct. 4, 1988].

Soviet leadership and press—preoccupied as they were with the first meeting of their own Congress—did not signal their alarm with events in Warsaw.

Soviet willingness to stand back from the developing storm in Poland was all the more striking in light of the extensive involvement of Western governments and institutions, like the World Bank, the IMF, and various Paris Club members, in working with the Poles to develop a stabilization program and debt servicing plan which would boost the momentum of effective, democratic and market-oriented reform. It can only be concluded that given the high level of personal confidence expressed by Gorbachev in Jaruzelski, this appeared to be one instance in which the new policy of noninterference in domestic affairs was calculated to rebound to Moscow's benefit: neither would the Soviets be blamed by Warsaw and Washington for interfering and exacerbating tensions, nor would the Soviets bear the consequent responsibility for having to achieve the unachievable—economic and political stability in Poland.

In Hungary, Karoly Grosz, who had replaced Janos Kadar as General Secretary of the ruling Hungarian Socialist Workers' Party [HSWP] in May 1988, was less hesitant than some of his East European colleagues to seek direct Soviet endorsement for the political and economic changes occurring at home. Returning from Moscow in July, he was quick to report that Gorbachev personally had informed him that "it is probably the Hungarian endeavors and the Hungarian perceptions that are the closest to those of the Soviet Union."³³

Soviet reforms were certainly in line with Hungarian changes, which, however, were more advanced and deeply rooted. Having begun the reform process in 1968, Hungary already had 20 years of experience and experimentation. In the economic realm, the profit motive, enterprise accountability, personal income tax, a stock exchange, and a partially privatized banking sector all had been introduced, in an effort to boost production and pay back Hungary's \$17.7 billion hard currency debt. Asked whether such changes did not forebode the introduction of capitalist formations into Hungary, Grosz forthrightly stated: "If they [the formations] are efficient, I find things sympathetic, regardless of slogans. I think we cannot live on slogans. The duty of theory is not to justify existing practice."³⁴

In the political realm, too, Hungary was far ahead of its other bloc allies. A large number of non-Communist political associations had assumed an active part in public life, particularly with the advent of multicandidate parliamentary elections. And Politburo members themselves sought ways to reduce and redefine the party's role in governing the country. Domestic political and economic changes were in line with changes in Hungary's relations with the outside world. Political restrictions on travel abroad for all Hungarians were virtually eliminated, with the Austro-Hungarian border in particular becoming more and more permeable to free movement in both directions. Even such an explosive event as

³³ *New York Times*, July 10, 1988.

³⁴ *Ibid.*

the June 1989 reburial of Imre Nagy, the leader of the 1956 rebellion which produced a Soviet invasion, did not evince a particularly vehement Soviet reaction, although the Soviet press clearly continued to regard the 1956 rebellion as essentially counterrevolutionary in nature.

Changes such as those in Hungary would have been unthinkable in previous years. They reflect the possibilities which had opened up for those political leaders in Eastern Europe who were bold enough to take advantage of the new current generated from Moscow.

Freedom to reform may not, however, always go in Moscow's direction. The greater independence of East European parties can also benefit conservatives and/or ultranationalists in these countries who seek to further entrench their power. Thus, the East German leadership was able to maintain its conservative stance and, if anything, that stance was strengthened by the stronger political position of like-minded leaders in Czechoslovakia (following the ouster in October 1988 of the reform-minded Prime Minister, Lubomir Strougal) and Bulgaria (following Aleksandrov's replacement). And the nationalistically inspired turmoil in the U.S.S.R. and Yugoslavia, which finally broke out into the open in the autumn of 1988, did nothing to assuage the doubts of conservative leaders in the bloc that a commitment to economic and political liberalization would be a panacea for the ills facing their societies.

B. THE MULTILATERAL RELATIONSHIP

The three major bloc mechanisms regulating political, military, and economic cooperation between member states are inter-Party links, the Warsaw Pact (WTO—the Warsaw Treaty Organization), and the Council for Mutual Economic Assistance (CMEA or Comecon).

In the field of inter-Party links, there was a dramatic increase in Soviet activism after Gorbachev came to power, with both bilateral and multilateral bloc meetings at all levels and in all spheres enjoying increased emphasis. The May 1987 joint declaration with the Poles in the fields of ideology, science and culture and the joint declaration with the Yugoslavs in March 1988 were but two examples of the efforts made, largely at Soviet instigation, to put their political relations with East European socialist states on a more regular footing. This involved the rejection, in principle, of the past pattern for dealing with Eastern Europe, which could be characterized as the issuing of orders, the delivering of empty slogans on state visits, and otherwise ignoring Eastern Europe except during crises. In marked contrast, numerous visits were made to Eastern Europe by the Soviet leadership, including Gorbachev, Ligachev, Dobrynin, Yakovlev, and of course Medvedev (whose functional responsibility as a CPSU Secretary included Eastern Europe) on the Party side, and by many State officials including former President Gromyko, Prime Minister Ryzhkov, Foreign Minister Shevardnadze, and numerous other ministers and subordinates (including those in the newly formed sector of the Foreign Ministry dealing with socialist countries). Moreover, the number of multilateral bloc meetings also significantly increased, including those held to brief

East European leaders after each U.S.-Soviet summit and the multilateral party meeting in Moscow during the 70th anniversary of the October revolution. Because of greater willingness not to force compliance to a Soviet-dictated general line on major issues, as was the practice until the Gorbachev era, these meetings tended to be more frequent and designed more to exchange views.

The Soviet desire to reform bloc mechanisms extended also to the economic sphere, where efforts to promote genuine multilateral exchange have always foundered. Beginning even before Gorbachev came to power, Soviet planners once again had attempted to coordinate bloc economies in such a way as to facilitate mutual growth, particularly in the critical fields of technological innovation and application. After the 1985 Complex Program for Scientific and Technical Cooperation Until the Year 2000 was announced, it became apparent to Soviet and East European planners alike that its implementation was impeded by the absence of thoroughgoing political and economic reforms within CMEA member states as well as by the failure to evolve bloc mechanisms—including in particular a convertible currency—to ease and promote real multilateral exchange and development.³⁵

The solution was sought in another CMEA-wide scheme—the Collective Concept for the Socialist International Division of Labor for the Period 1991–2005. This plan combined communitywide economic reforms and new multilateral trade mechanisms with an agreement that member states would allocate production of key products according to the principle of comparative economic advantage. “Economic levers” would be used to determine which country would be allowed to produce which products, with major changes in pricing and currency policies making it possible to evaluate the real cost of production.

Soviet Prime Minister Ryzhkov revealed the Soviet view on these matters at the 43rd Session of the CMEA in October 1987 when he stated:

We support the accord of the majority of countries on the introduction of the mutual convertibility of national currencies and the transferable ruble for servicing direct production links, joint economic activity, and scientific and technical cooperation.

As a goal for the future we should keep in mind the gradual transfer . . . from the mutual convertibility of national currencies to the creation of a collective monetary unit, which would be convertible in the future into freely convertible currencies as well.³⁶

He also revealed that not all CMEA countries were eager to implement reforms of any kind, emphasizing that “the Soviet delegation considers it important that countries which are not prepared to participate . . . should not hinder others from reaching accord.”³⁷ The speeches delivered by the Romanian, East German, and Czechoslovak delegates indicated that they were especially cool about introducing CMEA structural changes, direct interenterprise exchanges, and other measures called for by the Soviets at this

³⁵ This analysis can be found, for example, in Oleg Bogomolov, “Sotsialisticheskiye strany na perelomnom etape mirovogo ekonomicheskogo razvitiya,” *Kommunist*, No. 8, May 1987, pp. 102–111.

³⁶ TASS, Oct. 13, 1987, *FBIS-SOV*, Oct. 14, 1987, p. 9.

³⁷ TASS, Oct. 13, 1987, *FBIS-SOV*, Oct. 14, 1987, p. 10.

meeting. The speech by Hungarian Prime Minister Grosz, on the other hand, underlined Hungarian impatience with the slow pace of CMEA reform and criticized in particular the draft resolutions for containing so few concrete proposals for the reform of multilateral currency and monetary mechanisms.³⁸

CMEA has never succeeded in developing an economically coherent or politically feasible plan for promoting increased interaction on a multilateral basis. To the extent that this new "Collective Concept . . ." proposal relies on economic, and not political, levers to drive the interaction; takes into account the need for thoroughgoing price and currency reform; and does not exclude the further expansion of East-West trade, then it stands a better chance than its predecessors of seeing the light of day. But that day is likely to be far off since it depends first and foremost on the success of political and economic reforms within each country.

In the military realm, the structure of the Warsaw Pact as such did not come under the influence of reformist aspirations in Moscow during this first phase of Gorbachev's rule.

There were, however, important and interesting new developments in the realm both of arms control and of doctrine which began to have an important bearing on Soviet military posture in Eastern Europe. These proposals were numerous and detailed, and can be summarized as follows:

The 27th Party Congress lent official support to a redirection in Soviet military doctrine in two areas: the need for military doctrine with a defensive and not an offensive orientation and the related rejection of parity superiority both in strategic and conventional weaponry in favor of "reasonable sufficiency."

In line with these moves, at the subsequent East German Party Congress, Gorbachev called for deep cuts in ground and air forces in Europe "from the Atlantic to the Urals."

In June 1986, the Warsaw Pact proposed that each side reduce forces within Europe by up to 150,000 troops in 2 years, with a further reduction of 500,000 in the early 1990's, representing a cut of about 25 percent.

In September 1986, the Stockholm Conference on Disarmament in Europe was able to reach agreement following a shift in the Soviet line allowing intrusive verification.

In May 1987, the Warsaw Pact proposed further cuts in force levels and recognized, for the first time, the need for asymmetrical cuts between the Warsaw Pact and NATO. Moreover, the need to formulate doctrine with a defensive orientation was formally adopted, including mutually denying both sides the ability for a surprise attack on the other side. At the same meeting, Poland's plan for a disarmed zone between the Rhine and the Bug was also adopted as an official Pact proposal to be negotiated with NATO.³⁹

In summer 1988, the Warsaw Pact proposed a strategy for conventional arms reductions which as a first step would identify existing asymmetries between NATO and WTO forces, then would

³⁸ MTI in English, Oct. 13, 1987, *FBIS-SOV*, Oct. 14, 1987, p. 16.

³⁹ See Michael McGwire, "Rethinking War: The Soviets and European Security," *The Brookings Review*, Vol. 6, No. 2, Spring 1988, pp. 3-13.

eliminate those asymmetries, and finally would mutually reduce remaining forces.

In spring 1989, the withdrawal was begun of 50,000 troops from Eastern Europe, as promised by Gorbachev in his speech before the United Nations the previous December.

These proposals were made against the backdrop of accelerated U.S.-Soviet negotiations to reduce both long-range and intermediate-range nuclear weapons. In light of the signature and ratification of the Soviet-American Treaty banning Intermediate-Range Nuclear Forces from Europe, further measures in the field of arms reductions, including conventional arms reductions in Europe, became the subject of serious negotiation by all sides.

The implication of these developments for Eastern Europe are obvious. Confidence-building measures agreed at the Stockholm CDE meeting effectively denied the Soviets a whole range of options for concealing a military buildup during a crisis which might be a prelude to an invasion of an East European country. The withdrawal or redeployment of Soviet forces would be a step in the right direction toward giving East European militaries a greater degree of control over territorial defense. And, of course, a far-reaching demilitarization of any part of Central Europe would have a great impact on the process of breaking down the political, cultural and psychological barriers between East and West.

IV. OPTIONS FOR THE WEST

The signature of the INF treaty appeared to give relief to the growing feeling in Europe, the United States, and the Soviet Union during the mid-1980's that a continuing arms race in Europe, far from alleviating tensions, actually increased them. The historical record had indicated that no change was likely in Eastern Europe as long as tensions between Eastern and Western Europe remained acute. The prospect of further arms agreements held out the promise of a significant reduction of tensions in Central Europe and the achievement of "common security."

Arms agreements, however, could be only the first step toward the goal of common security. Long-term security in Europe depends on the achievement of major tasks by both East and West. The first task, for the Soviet Union, is the fundamental transformation of the Soviet-East European relationship in such a way that would finally eliminate the Stalinist legacy from that relationship and transform the good words of the Soviet leadership into action.

For the West, such a transformation will provide opportunities. But in order to achieve this goal, the West must also meet certain demands. The first demand will be the need for reassurance that liberalization in Eastern Europe in no way increases the likelihood of military attack on the Soviet Union. The next demand is in the area of arms reductions. Mutual acceptance of the need to reduce both conventional and nuclear arsenals, as supported by both sides, would go far to check Soviet conventional predominance and end the preeminence of the military instrument in interbloc relations.

Side by side with negotiations to reduce weapons should be a two-pronged effort: on the one hand, to engage all Warsaw Pact states, including of course the Soviet Union, in a dialogue about

new developments in military doctrine governing the disposition of forces on the central front; and on the other hand, continuing efforts to develop bilateral contacts with the non-Soviet Warsaw Pact (NSWP) member states to determine the impact of reforms on WTO cohesion in war time.⁴⁰

In the economic realm, whether based on conditions of economic rationality (as in the IMF formula), linkage between progress on political reform and economic ties (as the U.S. Congress seeks), or without overt strings (as favored by many Europeans including above all the West Germans), economic ties between East and West are likely to increase in the foreseeable future. This was proved by the visit of West German Chancellor Kohl to Moscow in October 1988, when over 30 commercial agreements worth \$1.5 billion were signed and a West German credit line to the Soviets worth \$1.7 billion was concluded. The success of the Kohl visit lends credence to the view that credits on an even larger scale are likely to be put together by consortia of Western banks in the future; more joint enterprises with Western businesses will be established in those East European countries prepared to create a climate conducive to investment; and East European adoption of export-led growth strategies will strengthen both the movement toward liberal reforms and the links with the West irrespective of other conditions attached to them by any Western institution.

While the private sector may assume the lead in taking advantage of the opportunities offered by economic reforms, nevertheless Western governments could benefit by a closer harmonization of policy designed to signal more clearly the readiness of the West to engage those East European regimes willing to undertake substantial and sustained reform. In doing so, standards of compliance beyond the political capability of these regimes at the present state of reform should not be set, since to do so would be both futile and potentially counterproductive if they were to be pulled back from cooperation by Soviet pressures. Credits which are targeted for privatized sectors of East European economies, those which are designed to support specific export industries, or those which are conditioned on sectoral restructuring (including especially the banking sector) are most likely to have a positive impact on the liberalization process.

Economic links which not only encourage the development of the private sector within bloc countries, but which also promote the structural redirection of East European external economic links should be encouraged. Speaking during Chancellor Kohl's visit to Moscow, Gorbachev renewed his call for building a "common European house" and suggested that Western and Eastern Europe should cooperate in constructing a unified electrical power grid, transport system, and information network for the continent.⁴¹ Any move which promised to erode, in particular, Soviet control over East European satellite, computer, telex, telephone, and telegraphic information systems offers enormous potential for elimi-

⁴⁰ For further development of this idea, see Edward B. Atkeson, "The 'Fault Line' in the Warsaw Pact: Implications for NATO Strategy," *Orbis*, Vol. 30, No. 1, Spring 1986, pp. 111-133. The author served as Commander of the U.S. Army Concepts Analysis Agency.

⁴¹ *Washington Post*, Oct. 25, 1988.

nating one of the most important results of the division of Europe, and deserves the closest and most serious scrutiny.

In attempting to formulate a policy that promotes transformation, greater attention also needs to be focused on the absolutely crucial role of cultural relations in spawning ties that draw Eastern and Western Europe closer together. In promoting such ties, the ability of the East to gain knowledge of and access to the West is crucial. Radio and television broadcasting, tourism and travel in both directions, educational and cultural exchanges, the dissemination of high and pop culture, business contacts for trade and investment, and relations between churches, trade unions, and professional organizations all contribute to this access.⁴² The inter-German relationship has already borne substantial fruits: significant person-to-person contacts that by 1989 had resulted in hundreds of thousands of East German emigrations, millions of cross-border visits, unencumbered telephone, postal and telegraph services, and East German cooperation in the transmission of West German television to all parts of East Germany. And Gorbachev's promise, made at the end of October 1988, that a common European house implied an open door in Berlin, since "without it, the architecture of the house would be incomplete,"⁴³ provided very real hope of further movement on this crucial issue.

Cultural relations clearly are not, and should not be considered, a mere byproduct of favorable political, economic, or military environment. While they, like each of the others, will be affected by any deterioration in overall relations, they represent an important and independent part of the fabric of East-West dialogue, and should be pursued in their own right.

V. WHERE WILL IT LEAD?

It is very difficult to determine in advance what changes in Eastern Europe will be considered compatible with Soviet security interests as well as with the general interests of socialism. This difficulty is compounded when the Soviets themselves are in a state of flux on these issues, as they have been during the first years of Gorbachev's rule.

On the other hand, the Soviet leadership needs change in Eastern Europe: they need viable economies with which to trade, they want political leaderships that are secure and not tottering on the brink of collapse, and they want militarily strong allies, willing and able to present a united front against NATO both at the bargaining table and in the event of war. In other words, they need to transform the bloc from an unworkable empire into an alliance, and they themselves know this is the task they face.⁴⁴

But to do so requires great skill, not least because the emergence of a strong alliance system will be regarded by many in Eastern Europe and the West as a setback for their maximalist aspirations

⁴² For more detailed policy recommendations, see Lincoln Gordon, et al., *Eroding Empire: Western Relations With Eastern Europe* (Washington, DC: The Brookings Institution, 1987), Ch. 9.

⁴³ *Washington Post*, Oct. 23, 1988.

⁴⁴ This task is fully recognized by the Soviets themselves, as indicated in the paper prepared by the Soviet Academy of Sciences' Institute of the Economics of the World Socialist System, "East-West Relations and Eastern Europe," *Problems of Communism*, May-August 1988.

of breaking down the postwar division of Europe. Setting in motion the process of change while seeking to control the direction and tempo in which it flows is full of dangers and can be achieved only with great skill and tremendous fortune.

No transformation at all, however, would be a greater misfortune not only for the Soviet bloc but also for Western policy. And such an eventuality might come to pass if Gorbachev's reform strategy is successfully resisted by socialist conservatives resistant to change, and/or impeded by Western and East European revisionists who overplay their hands and demand too much, too overtly, and too soon.

The potential gains for both East and West from genuine cooperation in Europe are enormous; but risks and dangers, too, are present. For Moscow, the danger lies in the breakup of the "socialist community," while for the West, it lies in undue strengthening of a potential adversary. But it is overwhelmingly in the West's favor to take such risks since failure will rebound to affect Eastern cohesion and viability more than Western.

Since Stalin pronounced his policy of "socialism in one country," socialism has been an inward-oriented power, little influenced by external forces. With Gorbachev, the Soviet bloc—intellectually, politically, and economically—has become more externally open and absorbing of Western ideas. If there is a genuine opportunity to engage, and possibly help shape, the future development of political life in the Soviet bloc, failure to explore that opportunity fully would not quickly be forgiven by future generations.

PERESTROIKA OF THE COUNCIL OF MUTUAL ECONOMIC ASSISTANCE: THE NEW SCIENCE AND TECHNOLOGY POLICY

By Lucja Ursula Swiatkowski*

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SUMMARY

The purpose of this paper is to analyze the new CMEA science and technology strategy, embodied in the Comprehensive Program for Scientific and Technological Progress Up to the Year 2000 and the International Socialist Division of Labor, 1991-2005. First, the reasons for deteriorating economic performance and a lack of technological innovation in centrally planned economies are discussed. Second, the blueprint of the new CMEA strategy is presented. Third, an assessment is made to what extent the new strategy is implemented, whether the implemented elements have been successful, and the prospects for the future. It also notes that the paralysis within the CMEA is creating political and economic opportunities for the West which are already beginning to be explored.

I. INTRODUCTION

The Council of Mutual Economic Assistance (CMEA) was founded in 1949 as an instrument of Soviet control and domination over economies of the satellite East European states. Its influence, role and function changed over time. Today, the CMEA serves as a focus on trade and specialization and cooperation agreements in production and science and technology for its current members: U.S.S.R., Poland, East Germany, Czechoslovakia, Hungary, Romania, Bulgaria, Cuba, Vietnam, and Mongolia.

In response to the accelerating scientific and technological revolution in the West, the CMEA also became very involved in promo-

*Consultant, World Bank.

tion of applications of innovations to industrial production capacity and processes. In line with this new emphasis, CMEA cooperation in science advanced from contacts and specialization agreements to a creation of common infrastructure and support for extensive collaboration. This includes: common industrial standards, legal procedures and patent regulations; forecasting and planning of scientific activities; training of personnel; exchanging scientific and technical information; and undertaking common experiments with special equipment.

In 1971 the Complex Program to Intensify and Improve Cooperation and Development of Socialist Economic Integration was the first effort to combine the CMEA scientific and technical cooperation with economic planning. Instead of coordinating 5-year plans and individual scientific projects, the Complex Program defined comprehensive programs in particular areas and 5-year plans were drafted as stages within the Complex Program. This improved scientific and technical integration mechanism was accompanied by a growth of scientific institutes and international economic organizations, coordinating implementation of particular CMEA programs or conducting joint scientific and technical projects. Despite this greatly expanded level of effort, most of the ambitious plans of the Complex Program remained on paper.

In the early 1980's, the CMEA countries experienced an escalating political, military, economic, and technological crisis which was rooted in the inadequacy of their centrally planned economic system. Aside from such indicators as the Solidarity protest movement in Poland, severe backwardness in the computer and telecommunications industries, and an inability to respond to military challenges posed by the United States, the economic performance levels in the European CMEA countries became unacceptably low. This was a result of several overlapping long-term developments: the so-called extensive industrialization, depending on increased inputs of human and physical capital, exhausted itself; enforced low consumption which caused grave political crises; increasing unwillingness of the U.S.S.R. to depend on its exports of energy and raw materials; and a lack of supply of easy Western credits as in the 1970s.

This closure of political and economic options brought to the fore the permanently unsolved problems of the Centrally Planned Economies (CPE's): impossibility of central planning and suppression of innovation. It is argued that central planning is unworkable for two reasons. First, the economically relevant information is widely dispersed across the economy, much of it in the form of tacit or informal knowledge about production processes, market behavior and the organization and management of production. Second, it is impossible to compute, even with high-speed computers, the optimum production levels of all items in a complex economy. Further, in CPE's, there is a lack of accurate statistics about economic activities that make planning highly uncertain, and the emphasis on quantity distorts financial performance. (Jan Winiecki, *The Distorted World of Soviet-Type Economies*, University of Pittsburgh Press, 1988.)

The suppression of innovation is a fundamental feature of CPE's and it impacts heavily on their economic performance. Planning

assumes stability of products and prices. Most enterprises are not interested in innovation because they are not cost conscious, due to the soft-budget constraint (to use Kornai's term). At the same time, investment funds are centrally allocated toward predetermined targets, enterprises do not have the autonomy to engage in their own initiatives, and the introduction of technological innovation creates uncertainty and risk which is not compensated for by rewards to managers and enterprises. Furthermore, many state-owned enterprises have a virtual monopoly over their line of production and there is no domestic or international competition to motivate them to improve their products. In addition to generating competition, participation in the world economy allows access to new technological products and processes which are diffused through direct foreign investment and operations of foreign companies. The inward-looking character of CPE's, with a tendency toward autarky and unrelated price structure, is an additional explanation for a loss of technological edge of the CPE's. (Kazimierz Poznanski, *The Environment for Technological Change in Centrally Planned Economies*, The World Bank Staff Working Paper, No. 718).

In the middle 1980's, the increased pace of technological innovation in the West and a competition from the Newly Industrializing Countries (NIC's) of the Far East demonstrated the economic and technological weakness of the CMEA countries. Together with the assumption of power by a new Soviet leadership, it gave an impetus to far-reaching changes in the CMEA economies, methods of management, and attitudes toward technological innovation. They were designed to answer the two CPE principal weaknesses: detailed central planning and suppression of innovation.

II. MODERNIZATION OF THE CMEA ECONOMIES UNDER GORBACHEV

A. THE INTENSIFICATION STRATEGY

The strategy for dealing with the declining economic performance and scientific innovation was ratified at the CMEA Economic Summit Conference of June 1984. The goal of this intensification strategy was the increase in the overall efficiency of centrally planned economies. The first level of priority was the radical improvement in the exploitation of raw and other materials, fuel and energy. The second important goal was the improvement of technical standards and the quality of products. Related to that was a more efficient utilization of scientific and technological capabilities and their integration with industrial production. A greater role of investment in modernization of factories as well as a shortening of an investment cycle in the engineering industry were also deemed important.

In line with the changed goals, the CMEA Economic Summit Conference adopted a new set of guidelines designed to achieve desired changes. The foremost of these changes is the transition from production of individual machines to production of the automated systems for the whole technological cycle. "This would allow the complete mechanization and automation of each stage, in production, coordination of the optimum parameters of the individual products, facilitating the adoption of unified processes and ensure, on this basis, the acceleration of the technical renewal of the lead-

ing industries." (Genrikh Stroganov, Deputy Chairman of the State Planning Board of the Soviet Union, "Major Factor of Scientific and Technological Progress," p. 36, CMEA, 86/1.)

The second instrument of increasing efficiency within the CMEA is the new use of the specialization and production agreements instituted by the 1971 Complex Program of Integration. The most successful example of the past specialization and coproduction agreements is the Unified Computer Program, standardizing and dividing the production of computer components throughout the CMEA. The new feature of these agreements is supposed to be that instead of agreements on coproduction of goods, the focus will be on production of components and subcomponents. That way a greater benefit of specialization will be achieved.

The third new instrument of modernization is a change of focus for cooperation agreements to the whole science-technology-production-marketing cycle, designed to make up for a separation of research from production and sales. That would promote contact with a consumer and a greater satisfaction of needs of the market.

The fourth new instrument is the establishment of joint intra-CMEA research and production organizations. These organizations are becoming a standard in the West and are distinguished by a high level of technological innovation and high-quality production. Such integrated organizations are necessary for carrying out the strategy of technological modernization within the CMEA.

Thus, this new intensification strategy represents a unified response of heads of Communist countries to the obvious deterioration in their countries' economic and technological position vis-a-vis the West. This strategy deftly analyzes the new industrial trends in the West and proposes to implement them within the CMEA. At the same time, it is an indication that the Soviet Union would not allow the East European countries to solve their economic problems individually or in conjunction with the Western countries. The Soviet Union decided to intensify the economic exchanges and agreements within the CMEA and to force a certain amount of uniformity and cohesion on its allies to make them cooperate in the solution of problems of centrally planned economies.

B. COMPREHENSIVE PROGRAM FOR SCIENCE AND TECHNOLOGY PROGRESS UP TO THE YEAR 2000

The new modernization CMEA strategy involves a greater utilization of science and technology and their faster introduction into the production process and a greater utilization of potentialities involved in the international division of labor between the CMEA states. This division of labor involves a creation of a concerted, and in some fields also unified, scientific and technical policy, and for their practical introduction into production processes of all CMEA member countries.

The public and formal expression of this policy is the Comprehensive Program for Scientific and Technological Progress Up to the Year 2000, adopted in December 1985. The CMEA member states assumed the obligation of carrying out the Program and including it in their 1986-90 5 Year Plans. They were to assume agreements and contracts to carry out the priority areas of the Pro-

gram comprehensively through the whole "science-technology-production-marketing" cycle.

The five priority areas of the Comprehensive Program are: electronization of national economy, comprehensive automation (robotics and flexible production systems), nuclear power equipment, new materials and biotechnology. Within these five priority areas, there were 93 particular programs in which the CMEA states cooperate. For example, within the category of electronization of economy, there are projects on: new generation supercomputers; mass use computer systems and advanced software personal computers; a unified system of digital information transmission; high-speed fiber optic communications system; new generation satellite communication and telecasting systems, testing and measuring equipment; a unified and integrated system of electronic parts and items. Within the category of comprehensive automation, the aim is the development and introduction of flexible automated production units, rotor conveyor lines, industrial robots, automated equipment with built-in control systems, precision equipment, high-precision measuring equipment, automated means of control over manufacturing methods and production equipment (precision equipment), and extensive use of integrated systems. The nuclear power equipment cluster was a continuous program within the CMEA which was lifted from its old institutional setting and placed as one of the priority areas of the Comprehensive Program. Within the new materials priority area, new technologies are necessary which minimize the use of energy, and raw materials and other materials, and lead to high strength, corrosion and heat resistant composite and ceramic materials and plastics. In biotechnology, the main emphasis is on medical treatments and on production of food to better serve consumer interests.

The investment funds for these new programs are generated from the central funds of the CMEA participants, credits of the International Investment Bank and the International Bank for Economic Cooperation, and by joint funds set up by participant countries to finance major individual projects. ("Comprehensive Programme of Scientific and Technological Progress of the CMEA Member Countries up to the year 2000," CMEA, 86/1). In addition, the Bank for Foreign Trade of the U.S.S.R. can extend its own credit or it can authorize credit from foreign banks or financial institutions. Ivan Ivanov, "Restructuring the Mechanism of Foreign Economic Relations in the U.S.S.R.," *Soviet Economy*, No. 3, 1987.)

Each one of the 93 programs in the five priority areas mentioned above is guided by a "leading organization," a controlling enterprise advanced in a given technology area. The responsibility of leading organizations is to establish direct contacts, on a contractual basis, with other CMEA member organizations. They are responsible for the technical standard and quality of products and for utilization of products, resulting from cooperation in production. ("International Cooperation and Its Management Mechanism," CMEA, P. 88/1.) The Soviets decided that all leading organizations will be Soviet. (Alexei Antonov, Deputy Chairman of the Council of Ministers of the Soviet Union, Permanent Representative of the Soviet Union to the CMEA, "Revolutionary Changes Inspired by the Russian Revolution," CMEA, 88/1.)

The new mechanism for carrying out and enforcing the Comprehensive Program is direct industrial and technological ties between organizations in the CMEA member countries. So far, direct ties originated primarily through the international specialization and cooperation agreements within the CMEA. They involve cooperation not only in science and technology, which is most common, but also in production. Probably the best known example of such cooperation in the realm of the priority areas of the Comprehensive Program is the Unified Computer System.

The Comprehensive Program allows broader cooperation in science, technology, and production than direct ties through specialization and cooperation. The new tool to more effectively use the international division of labor is joint ventures in three specific organizational forms:

- (1) Joint ventures proper, organized on the basis of common property ownership by the partners;
- (2) International business associations, organized on the basis of separately owned national properties but under joint management; and
- (3) Joint organizations, established on the basis of common property ownership to manage and operate R&D projects.

By summer 1986, it became obvious that the new modernization effort expressed in the Comprehensive Program and its institutional arrangement of leading organizations was not bringing in the results that were expected. First of all, the important documents of the Comprehensive Program were published with considerable delay. Second, the leading organizations were not able to apply all the available economic levers with full effect. That is why it is hard to determine the technical and economic justification of the work. They are hardly involved in the commercial side of production and do not use their existing rights to actively carry out their work. It also seems that their authority should be further expanded, so they can manage work covering the whole science-technology-production-marketing cycle. Furthermore, the leading organizations do not define the end results of the work. The technical standard of the new product is often not analyzed in depth and it is not clear whether it attains the world standard. ("International Cooperation and Its Management Mechanism," CMEA, 88/1.) Often, it is indicated that planned technical standards of the joint development of a whole number of items are lower than world standards in the deadline planned for introducing the results into production. This means that the lists of long term development projects also frequently include those projects which have, in fact, already become outdated. Another obstacle is a lack of information or incorrect information about volumes of production and cooperation contract, about who is going to produce what after the R&D work is concluded. (FBIS, EEU, August 25, 1987, "Markov Interviewed on CEMA Cooperation Work.")

The Soviets also complained that the attempts to speed up the implementation of the Comprehensive Program by using already developed research were encountering difficulties. Parties in possession of such research who are not under contracts under the umbrella of the Comprehensive Program were demanding prices, deemed too high by the Soviets. And in the absence of contracts, it

was impossible to enforce conditions for the use of this research, such as price, fulfillment of obligations and the use of final results. ("International Cooperation and Its Management Mechanism," CMEA, 88/1.)

There is also dissatisfaction with the performance of the CMEA authorities, intergovernmental commissions and international economic organizations. The Soviets charge that they are passive in their realization of the Comprehensive Program. While they pay attention to some details, the problem as such remains unsolved. Part of the problem is that duties of different CMEA bodies are not clearly defined. Some of the scientific work is duplicated under different priority program areas. On some issues, such as how to divide the work on the electronization of economy, there is a lack of agreement among the CMEA governments. Further, there is a lack of intergovernmental agreements on how to utilize the results of joint developments in new materials, software and computer-aided design. In addition, different prices are charged for the same product supplied by the same manufacturer to different countries. A general method of pricing should be developed and a special pricing procedure should be adopted. ("International Cooperation and Its Management Mechanism," CMEA, 88/1.)

In summary, the traditional CPE system proved to be an imperfect tool for carrying out the third industrial revolution, exemplified by the Comprehensive Program. Despite the traditional concentration of resources in the priority areas of the Comprehensive Program, the results fell short of expectations. While blame was assigned to the bureaucratic methods of organizations involved in the Program, there was also a realization that success depends on voluntary compliance which can be assured by providing appropriate economic incentives. It became obvious that what is needed is the reform of the economic mechanism of cooperation within the CMEA.

C. THE NEW ECONOMIC MECHANISM: THE INTERNATIONAL SOCIALIST DIVISION OF LABOR, 1991-2005

The introductory period of implementation of the Comprehensive Program did not bring any anticipated results within the CMEA. It soon became obvious that resolutions and target programs are not enough, that what is needed is a new set of institutional arrangements and economic policies which are conducive to technological innovation and flexibility both within the Soviet Union and within the CMEA. Thus, this began a period of economic reforms in the Soviet Union itself and in the CMEA which resulted in some administrative decentralization and greater autonomy of the industrial enterprises as well as a greater role of economic criteria in decisionmaking. The program of the International Socialist Division of Labor, 1991-2005, adopted in October 1987, is the outline of economic reforms within the CMEA.

1. *The New Planning Mechanism*

Despite some movement toward decentralization and introduction of economic indicators into the economy, the basic instrument of integration is still the coordination of planning of the CMEA

member countries. It is stressed that building of socialism is only possible on a planned basis. (CMEA, 86/2, editorial, "A New Quality of Cooperation.")

Since planning remains the most important tool in the management of economic activity in the CMEA countries, the chief goal of reform is its significant improvement. This improvement is moving in several different directions. First, the "scientific" basis of plans must be raised, so that they consider consequences of their directives in all their technical, economic, social, and political dimensions. Second, while the number of centrally planned indices has been reduced or restricted, the responsibility of direct producers, in ensuring the satisfaction of demands of the economy for products in their area of manufacturing responsibility, is increasing. Greater autonomy of enterprises is assisting in that process.

Third, instead of imposing plans from above, now the enterprises are required to draft the plans "spontaneously" from the bottom up. Fourth, planning is increasingly based on a series of social, economic, scientific, and technical priority tasks and in several different time frames: 15 years, 5 years and 1 year. (CMEA, 86/2, editorial, "A New Quality of Cooperation.")

The new integration mechanism contains three interrelated parts. The first is coordinating national economic policies of the CMEA countries through a collective concept of the international socialist division of labour for the period 1991-2005. ("New Mechanism of Cooperation," an interview with Alexei Antonov, Deputy Chairman of the U.S.S.R. Council of Ministers, *New Times*, October 26, 1987.) The second level of cooperation involves bringing economic levers into greater play and using them in the development of direct links and joint ventures on the basis of full responsibility. "This policy is prompted by the logic of the development of the national economic mechanisms, and the need to democratize the entire system of cooperation and get the broad masses of the working people interested in it." (Ibid.)

The third factor in the new integration mechanism is a radical improvement in the system of collective management of the integration process, particularly the institutions and activities of the CMEA. (Ibid.) The 43rd (extraordinary) Session of the CMEA, held in Moscow in October 1987, adopted a resolution, concerning the release of the CMEA organization "... of the burden of operative functions, which are not characteristic of its activities, enabling it to concentrate on major problems of the strategy of cooperation and on the interstate management of intergration. . . . The functions of the CMEA should also include the improvement of the economic mechanism and the contractual and legal conditions of cooperation, among them those concerned with the development of direct relations." (Alexei Antonov, "Revolutionary Changes inspired by the Russian Revolution," CMEA, 88/1.)

The new principles of integration are being implemented in an elaboration of the concept of the international socialist division of labor. The plans are coordinated at three, interconnected levels. At the intergovernmental level, there will be a coordination of economic and scientific-technical policies, possible coordination of social and economic development, drawing up of large scale programs and agreements, requiring interstate efforts for their imple-

mentation, and articulation of planning, commodity-money, and legal principles of cooperation.

At the sectoral level, decisions will be taken on investment and technical policy of the countries in respect to projects of mutual interest, programs of specialization and cooperation in the technical modernization of production as well as the range of goods and volumes of mutual deliveries of goods manufactured under specialized and joint production agreements.

The coordination at the level of the basic economic unit—enterprise, association or scientific organization—is an entirely new feature of the reformed planning process. These basic economic units can now promote production and scientific-technical cooperation on a contract basis with a wide use of direct links and joint enterprises, international associations and scientific research organizations. This level of coordination requires changed economic, organizational and legal conditions in the CMEA member countries. (“New Mechanism of Cooperation,” interview with Alexei Antonov, Deputy Chairman of the U.S.S.R. Council of Ministers, *New Times*, October 26, 1987.)

Thus, direct relations are a means for a transition from traditional forms of cooperation, with the predominance of the exchange of goods, to modern, integrated cooperation, affecting all spheres of economic and social activities of the organizations involved. Such interaction can embrace not only foreign trade activities but also “scientific research, construction work, exchange of technologies, combination of available resources, the establishment and utilization of capacities, joint decision on marketing policy and sale, data processing, etc., including social and cultural spheres. Cooperation, so to speak, covers all the stages and embraces all the aspects of the process of reproduction.” Jaromir Matejka, “An Important Way of Deepening Integration,” CMEA, 87/1.)

Direct links between economic organizations manifest themselves in the following ways:

Agreements and contracts on international specialization and cooperation, the results of which are, as a rule, an improved division of labor and structural changes in the economies of the CMEA member countries, increasing the social productivity of labor and the saving of time;

Combination of the means for attaining common targets (in production, research, R&D, marketing, etc.) while maintaining the organizational forms and structure of the parties to the agreement; and

Establishment of new organizational units (for example, joint centers, institutes, working places, etc.) subordinated to the parties to the agreement, i.e., to the appropriate economic and scientific research organizations; the establishment of facilities with joint efforts or the foundations of international economic organizations (joint enterprises, association, and societies). (CMEA, 87/1, Matejka.)

However, currently there also exist serious obstacles to direct links, such as:

(1) Divergencies of the national economic management systems of the CMEA countries, using different criteria;

(2) The management systems themselves also have some elements retarding the establishment of direct links (no economic pressure);

(3) Integration and direct links are also hampered by a series of subsidies and the redistribution processes balancing a significant portion of the divergencies between wholesale and contractual prices, primarily in exports or creating different correlations of those prices in exports and imports;

(4) Problems in the integration mechanism itself: absence of real exchange rates, mutual inconvertibility, necessary for comparability of results; inadequate role of coordination of the balances of payments within the framework of the one-sided quantities approach of balancing bilateral payments and the inflexible control of mutual trade through quotas in which a considerable quantity of coordinated traded goods are expressed in natural quantities; and

(5) Unbalanced state of resources and demands; sometimes direct links are more important from the state point of view rather than economic enterprise; obligatory objectives of the state plan in conflict with the interests of the organizations of independent economic accounting. (CMEA, 87/1, Matejka.)

These obstacles must be overcome through an elaboration of the economic market mechanism which will promote greater economic efficiency and incentives for cooperation. Creation of the economic levers within the CMEA is designed to promote a new set of goals, decisively affecting cooperation:

Criteria of efficiency;

Means of economic stimulation; and

Economic interdependence in capital and foreign trade, taxes, deductions, prices, and credit facilities.

These will improve the integration mechanism.

2. Areas of Market Reform

The creation of the economic market mechanism at the level of direct links between enterprises involves five main concepts: autonomy of enterprises, price formation, convertibility of currencies, investment policy, and decentralization of foreign trade. Autonomy of enterprises involves not only a decentralization of authority in some matters to the enterprise level but also making enterprises economically interested in the results of their labor and economic efficiency. On one level, this implies forcing the enterprises to operate on the basis of full cost accounting and self-financing, without state subsidies. On the second level, it implies "incentives for more efficient and better work, both for the encouragement of activities of individual workers and production collectives, including the comprehensive and more complete consideration of their interests." (CMEA, 86/2, editorial, "A New Quality of Cooperation.") These incentives include team form of the organization of labor and wages, improvements of organizational forms of management (reduction of middle administrative levels, creation of interdepartmental and interterritorial links, more flexible organizational structures), and an elaboration and utilization of social forms of management (an involvement of the working people and their organizations in management of production). (Ibid.)

Determination of prices of jointly produced goods is an important problem in the new scheme of direct links between enterprises. This area, vital to cooperation, turned out to be very controversial so far. The Soviet method for setting prices turned out to be unacceptable to others. But the Soviets are maintaining that prices cannot be set according to profit considerations alone but must take into account the overall economic effect from a larger scale of production, a steadier rate of deliveries and a higher product quality standard. ("New Mechanism of Cooperation," an interview with Alexei Antonov, *New Times*, October 26, 1987.)

Another extremely vital area for reform is the entire financial mechanism of cooperation. Steps are beginning to be taken to develop monetary functions of the convertible ruble. At the beginning, development of convertibility will be geared toward requirements of direct links and other new forms of cooperation. In the future, it is expected that it will be convertible to the freely convertible currencies. As an experiment, national currencies of the CMEA countries will be used for payment of goods and services in the framework of direct links. (Antonov interview, *New Times*, October 26, 1987.)

Another important area of consideration in the development of direct links is the investment policy and a creation of a banking system which will allow investment decisions to be made at the level of enterprises rather than central authorities. With this requirement "the role of credit gains in strength, and the relations of enterprises and associations with the state treasury are improving. Funds have been granted for the financing of measures related to the extension of production capacities and for reconstruction and technical reequipment of production financed either by own means or be credit banks." (CMEA, 86/2, editorial, "A New Quality of Cooperation.") This means that while money for modernization will come from enterprises or banks, the state reserves the right to make investment decisions in new projects.

Decentralization of foreign trade was actually the first priority in reform of the CMEA integration mechanism. That was caused by a severe dissatisfaction with the effectiveness of foreign trade. The planning system was mainly oriented toward autarky, where import and export allocations for specific goods have been based on positive or negative "residuals" in their materials balances. There was no calculation of comparative cost advantages. Products have been consigned to exports without any regard to conditions abroad.

The change of focus toward foreign trade as a source of modernization of Soviet and CMEA economies required that much more be obtained from it and a more suitable mechanism for it had to be found. It was decided that large enterprises ought to engage in foreign trade on their own behalf and retain a part of their earnings, including those in convertible currencies. These earnings would be used to import suitable modern equipment for the plants. (Ivan Ivanov, "Restructuring the Mechanism of Foreign Economic Relations of the U.S.S.R.," *Soviet Economy*, No. 3, 1987.)

The goal of this new mechanism of CMEA integration is modernization of the economies of member countries and greater introduction of technological innovation into industrial production. "Direct links can play an important role in the reduction of the economic

dependence of the countries of the community on imports from capitalist countries and in assuring the necessary conditions for more rapid scientific and technical progress. . . ." (CMEA, 87/1, Ma-tejka.)

To reach this economic and technological invulnerability from the West, the Soviets are planning to create within the CMEA a common market with a free movement of goods, services, and production factors. That will also involve a creation of a zone of free trade and unification of the CMEA countries' customs procedures. (Antonov interview, *New Times*, October 26, 1987.)

At the same time, the Soviet Union and other CMEA countries are interested in establishing joint ventures with Western partners to obtain new technologies and management methods. They also allow investment of convertible currency and new equipment in the CMEA countries, without the necessity of paying back the loan from state funds. They promote a continuing relationship between Western and local enterprises, thus creating a constant learning process and access to Western technology and materials. Even though the form of Western joint ventures is more restrictive than within the CMEA, the immediate results suggest the possibilities of success in this area. (Ivan Ivanov, "Restructuring the Mechanism of Foreign Economic Relations in the U.S.S.R.," *Soviet Economy*, No. 3 1987.)

III. ASSESSMENT OF CMEA REFORMS

The Comprehensive Program for Scientific and Technological Progress Up to the Year 2000 represents a traditional Soviet approach of engineering a high-tech revolution and industrial revitalization by decree. Its basic model is taken from the Soviet defense industry and operates through a centralized assignment of resources into high-priority areas. The highest area of priority is assigned to computer technology and work is moving forward to create "an organic combination of electronics and industrial production and advanced forms of the organization of production and management." (Roundtable conference, "Computer Technology in the National Economy: Experience, Problems, Perspective," CMEA-Economic Cooperation, 87/1.) There are even some successes in this area. For example, U.S.S.R., East Germany, and Czechoslovakia have been moving strongly into Flexible Manufacturing Systems (FMS) technologies and exporting them to the West. (The Economist Intelligence Unit, *European Trends*, No. 2, 1986, p. 39.)

As of November 15, 1987, four CMEA joint ventures had been created with Soviet participation, and letter of intent had been signed for the establishment of an additional eight. On the whole, it is planned to form 28 such ventures, including 7 on the territory of the U.S.S.R. Already 12 international business associations are in operation, and 35 additional ones as well as 67 international organizations are to be established in the not too distant future. The Soviet-Hungarian Micromed Co. (medical electronics) is an example of a joint venture proper, while examples of international business associations are the Soviet-Czech Robot and the Soviet-GDR Assofoto. The Soviet-Bulgarian Interprogram for the Development of Software is an example of a joint organization. All three types of

joint venture organizations are initiated by ministries, by authorized agencies and Councils of Ministers of the constituent states. Following formal registration by the Ministry of Finance, they become legal entities under Soviet law with a right to pursue any business activity that is lawful within the U.S.S.R. (Ivan Ivanov, "Restructuring the Mechanism of Foreign Economic Relations in the U.S.S.R.," *Soviet Economy*, No. 4, 1987.) Thus, the great majority of joint ventures are initiated from above and the enterprises are ordered by higher authorities to enter into joint venture relationship. Only rarely and generally in the border regions are joint ventures initiated by the enterprises themselves.

While some Soviet officials are satisfied with this directive approach, others understand that diffusion of technological innovation throughout industrial production capacity can only be accomplished through a market mechanism:

The problem of incentives, especially of economic incentives to introduce new, highly efficient technologies is one that is . . . especially serious in the U.S.S.R. After much debate and study, the government promulgated a number of decrees intended to enhance such incentives by creating a market for products of scientific and technological origin. This is a complicated problem for our country due to the lack of a market for traditional products. . . . and while a market for scientific and technological products represents a major component of our economic reform, it seems to me that problems in this area are more severe than in other areas. (Valeriy Makarov, Central Economic Mathematical Institute, Academy of the Sciences of the U.S.S.R., "Panel on Growth and Technology in Perestroika," *Soviet Economy*, No. 4, 1987, p. 343.)

The reform of the CMEA through the Comprehensive Program and the International Socialist Division of Labor represents an effort to create a mixture of planning and market methods, more hospitable to technological innovation and high-tech production. At this point, it must be said that this effort has not been successful. First, the implementation of the new integration mechanism requires a certain uniformity of economic reforms in the CMEA member states. So far, the models and pace of implementation of reforms have been highly divergent.

Second, despite these reforms whose chief feature is autonomy and self-financing of enterprises and scientific organizations, command methods of management and bureaucracy still prevail and they are particularly inappropriate to the creative nature of work in scientific development organizations. Further, the new regulations on autonomy and self-financing sometimes only increase bureaucracy and uncertainty of follow-on funding from the state, while enterprises are still not interested in contracting for scientific research because of a lack of competitive pressures. (Krystyna Pawlowic, "Self-Financing and Autonomy in Science," *Zycie Gospodarcze*, April 10, 1988.)

Direct links, especially in the form of CMEA joint ventures, are not any more successful in promotion of technological innovation. Their aim is the creation and utilization of new technologies for new products to be sold in both countries. Usually, intergovernmental agreements are signed to create conditions for direct contacts. The ministries chose the projects and enterprises to engage in them. However, this approach was unsuccessful because none of the projects (in the Polish-Soviet case, except the "Miraculum" cosmetics company) passed the test of economic rationality and they

were paralyzed by disputes over prices and convertibility of currencies. (Jerzy Baczynski, "Optimistic Defeat," *Polityka Export Import*, February 1988.) These difficulties remain, though they have been circumvented in some particular cases. ("Poland-U.S.S.R.: More New Things," *Zycie Gospodarcze*, No. 28, July 10, 1988.)

The CMEA tried to solve these important issues of price formation and convertibility of currencies at the CMEA Executive Session in Moscow in September 1987, 43d CMEA General Session in Moscow in October 1987, and 44th Session in Prague in July 1988. The interim agreement was made to use national currencies to settle accounts, arising from direct ties. Otherwise, the sessions were deadlocked by a conflict between those who favor far-reaching market reforms, world market prices and a rejection of a transferable ruble as a multilateral currency, led by the Hungarians, and a traditional position, espoused by the U.S.S.R. (FBIS-EEU-87-203, Oct. 21, 1987, "Marjai Interviewed on CEMA Activities.") The last CMEA session in July 1988 did not resolve any issues of deficient integration mechanism because it is the traditional countries that determine the level of interaction. There is still no common CMEA policy and each country tries to solve its economic and technological problems on its own. (Jerzy Kleer, "44th CMEA Session: Limited Compromise," *Polityka*, July 16, 1988.)

One result of the paralysis within the CMEA is the possibility of a revival of economic relations with the West, particularly in view of a successful conclusion of the CMEA-EEC diplomatic recognition agreement of June 1988. It opens the way for the establishment of diplomatic relations between the EEC and individual CMEA member states. In July 1988, Hungary became the first CMEA state to establish diplomatic relations with the EEC and to sign a trade agreement that will eventually remove all quotas on Hungarian exports to the EEC. In return, Hungary has undertaken to improve access to its market for EEC firms and not to give preferential treatment to bartyer trade. (FBIS-EEU-88-127, July 1, 1988, "Major Trade Accord With EEC Initialed.")

The agreement with the EEC opens the way for a more permanent involvement of the CMEA countries in cooperation and trade with Western partners. It also opens important possibilities for scientific and technological cooperation that the CMEA has been demanding for a long time. If the economic reforms in particular countries advance far enough, the financial and institutional arrangements will also become less of an obstacle in relations with the West.

Thus, Gorbachev's reforms both in the U.S.S.R. and in the CMEA have moved further than skeptics have anticipated in the direction of a limited market mechanism. However, he is encountering stiff resistance in the CMEA from countries that want to go further than he does and from those which favor the traditional centralized command system. It will be a measure of Gorbachev's power and skill whether he can move the entire CMEA in the desirable direction. It might take a long time. In the meantime, partial solutions with certain CMEA and Western countries provide an attractive alternative. However, that will lead to the CMEA stagnation at the current level, if not disintegration in the long run.

BIBLIOGRAPHY

- "A New Quality of Cooperation," Editorial, *CMEA—Economic Cooperation*, Budapest, 86/2.
- Antonov, Alexei, "New Mechanism of Cooperation," interview, *New Times*, Moscow, Oct. 26, 1987.
- Antonov, Alexei, "Revolutionary Changes Inspired by the Russian Revolution," *CMEA—Economic Cooperation*, Budapest, 88/1.
- Baczynski, Jerzy, "Porazka Optymistyczna," (Optimistic Defeat), *Polityka Export-Import*, No. 4, February 1988.
- Baczynski, Jerzy, "Gora wyprzedzila dol," (Top Level Is Ahead of the Bottom), *Polityka Export-Import*, July 1988.
- Central Intelligence Agency and Defense Intelligence Agency report submitted to the Subcommittee on National Security Economics of the Joint Economic Committee, *Gorbachev's Economic Program: Problems Emerge*, Apr. 13, 1988.
- Crane, Keith, and Stoler, Deborah, *Specialization Agreements in the CMEA*, The RAND Corp., Santa Monica, 1988.
- Economist Intelligence Unit, *European Trends*, No. 2, 1986.
- FBIS-EEU-87-135, July 15, 1987, "CEMA Standards Commission."
- FBIS-EEU, Aug. 25, 1987, "Markov Interviewed on CEMA Cooperation Work."
- FBIS-EEU-87-203, Oct. 21, 1987, "Marjai Interviewed on CEMA Activities."
- FBIS-EEU-87-214, Nov. 5, 1987, "Weekly Lists CEMA Flaws, Calls for Remedies."
- FBIS-EU-87-215, Nov. 6, 1987, "Rude Pravo on CEMA Failure to Reach Agreements."
- FBIS-EEU-88-057, Mar. 24, 1988, "Session Ends; Document Adopted."
- FBIS-EEU-88-122, June 24, 1988, "Bloc Officials Speak on Current CEMA Tasks."
- FBIS-EEU-88-125, June 29, 1988, "Official Discusses CEMA Economic Cooperation."
- FBIS-EEU-88-127, July 1, 1988, "CEMA-EEC Economic Cooperation Viewed."
- FBIS-EEU-88-127, July 1, 1988, "Major Trade Accord With EEC Initialed."
- FBIS-EEU-88-130, July 7, 1988, "Debates Continue."
- FBIS-EEU-88-130, July 7, 1988, "News Conference Held."
- FBIS-EEU-88-130, July, 7, 1988, "Marjai Opens CEMA Economic Conference June 22."
- FBIS-SOV-87-184, Sept. 23, 1987, "Factors Curbing CEMA Science Program Noted."
- FBIS-SOV-184, Sept. 23, 1987, "Pravda Assesses CEMA Executive Session."
- Gajdeczka, Przemysaw, "Impact of Lower Oil Prices on Soviet-East European Trade," *Wharton Econometrics*, Vol. VII, No. 3, Jan. 21, 1987.
- Hare, Paul, "Economic Reform in Eastern Europe," *Journal of Economic Surveys*, Vol. I, No. 1, London, 1987.
- "Czechs Now Seek To Attract Capital and New Technology With Joint Ventures," *Radio Free Europe/Radio Liberty, Soviet/East European Report*, Vol. III, No. 30, Aug. 1, 1986.
- "International Cooperation and Its Management Mechanism," *CMEA-Economic Cooperation*, Budapest, 88/1.
- Ivanov, Ivan, "Restructuring the Mechanism of Foreign Economic Relations in the U.S.S.R.," *Soviet Economy*, No. 3, 1987.
- Kleer, Jerzy, "44 Sesja RWPG: ograniczony kompromis," (44th Session of CMEA: Limited Compromise), *Polityka*, July 16, 1988.
- Koves, Andreas, *The CEMA Countries in the World Economy: Turning Inwards or Turning Outwards*, Academia Kiado, Budapest, 1985.
- Main School of Planning and Statistics, Institute of World Economy, *Gospodarka Swiatowa i Gospodarka Polska w 1987 Roku*, (Polish and World Economy in 1987), Warsaw, 1988.
- Makarov, Valeriy, "Panel on Growth and Technology in Perestroyka," *Soviet Economy*, No. 4, 1987.
- Marer, Paul, *The Economies and Trade of Eastern Europe*, Center for Global Business, Indiana University, May 1988.
- Matejka, Jaromir, "An Important Way of Deepening Integration," *CMEA-Economic Cooperation*, Budapest, 87/1.
- Mozejko, Eugeniusz, "Szerokie spektrum reformy," (Wide Spectrum of Reform), *Zycie Gospodarcze*, Warsaw, Apr. 26, 1988.
- "Nastapil czas dokonania glebokich jakosciowych przemian: przemowienie premiera ZSSR Ryzkowa," (Time for Deep Qualitative Changes, speech by Ryzhkov, Premier of the U.S.S.R.), *Zycie Warszawy*, Warsaw, July 7, 1988.

- Nikolaev, Rada, "Zhivkov Playing Active Role in Campaign To Promote 'Restructuring' in Bulgaria," *Radio Free Europe/Radio Liberty, Soviet/East European Report*, Vol. IV, No. 28, July 10, 1987.
- Okolicsanyi, Karoly, "Impact of News Banks in Hungary Limited by Shortage of Capital, Numerous Restrictions," *Radio Free Europe/Radio Liberty, Soviet/East European Report*, Vol. No. 3, Oct. 20, 1987.
- Okolicsanyi, Karoly, "Hungarian Officials Hope New Stock Exchange Will Spur Economic Growth," *Radio Free Europe/Radio Liberty, Soviet/East European Report*, Vol. V, No. 21, Apr. 20, 1988.
- Okolicsanyi, Karoly, "Hungarian Party's Central Committee Favors Radical Measures To Improve Ailing Economy," *Radio Free Europe/Radio Liberty, Soviet/East European Report*, Vol. V, No. 31, Aug. 1, 1988.
- Pawlowicz, Krysna, "Samofinansowanie i samodzielność w nauce," (Self-Financing and Autonomy in Science), *Zycie Gospodarcze*, Apr. 10, 1988.
- Poznanski, Kazimierz, *The Environment for Technological Change in Centrally Planned Economies*, World Bank Staff Working Paper, No. 718.
- "Polska-ZSSR: Inna tresc stosunkow," (Poland-U.S.S.R.: A Different Relationship), *Zycie Gospodarcze*, Apr. 26, 1988.
- Schroeder, Gertrude, "Anatomy of Gorbachev's Economic Reform," *Soviet Economy*, No. 3, 1987.
- Shafir, Michael, "Eastern Europe," in Martin McCauley, *The Soviet Union Under Gorbachev*, St. Martin's Press, New York, 1987.
- Stroganov, Genrikh, "Major Factor of Scientific and Technological Progress," *CMEA-Economic Cooperation*, Budapest, 86/1.
- Swidlicka, Anna, "Polish Leadership Swinging Its Support Behind the Reforms Pushed by Gorbachev," *Radio Free Europe/Radio Liberty, Soviet/East European Report*, Vol. IV, No. 16, Mar. 10, 1987.
- Winiecki, Jan, *The Distorted World of Soviet-Type Economies*, University of Pittsburgh Press, Pittsburgh, 1988.

THE ROLE OF NUCLEAR POWER IN THE EAST EUROPEAN ENERGY BALANCE

By Judith Thornton and Robert Epplin*

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I. INTRODUCTION

It was almost as if the Chernobyl nuclear power plant accident had never taken place to an observer at the 16th Session of the CMEA Intergovernmental Commission in Bucharest in May 1987. It is true that nuclear safety was featured on the agenda of the CMEA Intergovernmental Commission on Specialization and Integration of Production for Nuclear Power Stations, but the main report, delivered by V.A. Legasov, Scientific Supervisor of the Intergovernmental Program and First Deputy Director of the Kurchatov Institute of Atomic Energy, reaffirmed the ambitious CMEA nuclear program. This program is scheduled to accelerate installation of nuclear capacity in Eastern Europe on the basis of the venerable Soviet VVER-440 and VVER-1000 designs at a pace that would "save 400 or 500 million tons of organic fuel."¹

Within the year, Valerii Legasov would take his own life on the anniversary of the Chernobyl plant accident, but the leadership of the nuclear program would still hold to the commitment to manufacture their own nuclear power capacity.² The continued emphasis on an indigenous East European nuclear option is their response to the dilemma of an energy imbalance that offers them few attractive options and foreign exchange constraints that put Western capacity beyond their means. However, a close look at the past record and future prospects of the CMEA nuclear program shows that investment in nuclear capacity will not resolve current imbalances

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¹ Tass May 18, 1987, published in FBIS U.S.S.R-Daily Report, May 20, 1987, p. BB3.

² Targets cited from TASS, July 15, 1988, and published in FBIS U.S.S.R-Daily Report, July 20, 1988, p. 7.

and is likely to generate economic, environmental, and political problems of its own.

II. THE ENERGY DILEMMA

Today, the East Europe nations are locked into a vicious circle. They rely on domestic coal resources and Soviet oil and gas to meet the needs of an energy intensive industrial structure. However, the burning of low quality lignites imposes a heavy environmental cost, while the necessity of paying for Soviet fuel with domestic equipment and manufactured goods imposes a heavy burden on the trade balance. The shift to a less energy-intensive industrial structure requires a major infusion of advanced Western equipment and technology, but such an investment program seems beyond the means of any of the CMEA economies so long as their foreign exchange resources are heavily committed to the fuel and raw materials imports of existing, inefficient producing sectors.

III. ENERGY OPTIONS

So far, efforts to reduce energy-intensity have been unsuccessful. For example, the current Polish 5-year plan called for a saving of 22 million tons of coal-equivalent fuel by 1990. The plan called for a reduction in the energy-intensity of national income annually by 1.9-2.3 percent, but bad weather in 1987 left energy-intensity not lower, but 1.6 percent higher than before; a similar scenario has been played out in other East European countries as well.³

Efforts to expand energy production from domestic resources raise serious problems as well. Except for Romanian oil and Polish hard coal, the CMEA countries all rely on domestic reserves of lignite. This soft coal is the main domestic energy resource of Bulgaria, Czechoslovakia, East Germany, Hungary, and Yugoslavia. These low-quality lignites are inefficient in combustion and harmful to the environment. Lignites with ash content as high as 60-62 percent are used in Bulgaria and Czechoslovakia where their abrasiveness damages thermal equipment such as steam generators and reduces the life of equipment.⁴ Further, as industry uses up the most accessible reserves, the cost of future supplies is rising even as average quality deteriorates.

In Romania and Yugoslavia, good hydroelectric power sites offer a modest alternative. However, hydroelectric power is capital-intensive and existing capacities have been operating well below expected loads since 1985 because of insufficient water.

The mining and burning of low-quality lignite can be dangerous. Many mines in Poland already reach below 1,000 meters, presenting risks of flooding and methane explosions.⁵ Nor have energy planners forgotten the January 1987 explosion at a lignite-burning thermal electric plant in Boxburg, East Germany. The resulting reduction in East German power capacity in combination with a

³ EIU Country Report, No. 3, "Poland," p. 13.

⁴ "Energy Alarms, Energy Hopes," an interview with Nikola Todoriev in *Otchestvo*, No. 21, 1985, pp. 8-11.

⁵ East European Energy Outlook through 1990," pp. 303-328, JEC, *East European Economies: Slow Growth in the 1980's*, October 1985.

severe winter led to a critical shortage of energy and forced the leadership to send troops to the mines to assist in production.⁶

It is the environmental consequences of burning lignite that concern East European planners most. Many thermal-fired plants in Eastern Europe do not have the filtering equipment necessary for the burning of lignites. In 1982 alone, power and heating plants in the GDR emitted 2.91 billion tons of sulfur dioxide and 0.18 million tons of nitric oxide.⁷ In the Karl Marx Stadt region of East Germany, experimental filtering systems were installed at the Kirchberg thermal station where waste gases were filtered of 95 percent of their sulfur and emission of dust and nitric oxide was reduced by 87 percent and 50 percent respectively through washing techniques. But the hard currency costs of such emission control equipment appear to be beyond the means of the East Germans. Recent West German estimates report that DM 10 billion would be needed to reduce sulfur dioxide emissions alone within the next 5 years.⁸ A similar Czech program to reduce sulfur dioxide emissions 30 percent by 1993 has been derailed by rising costs and delays in the installation of filtering equipment at major thermal power stations.⁹

Another option is increased purchases of Soviet oil and gas. The availability of Soviet oil at subsidized prices did, in fact, delay the large-scale introduction of nuclear power into Eastern Europe in the early seventies. Then, intra-CMEA energy prices gradually rose toward world levels, providing impetus to a multilateral program for nuclear power, implemented during the eighties.

Currently, lower world prices are again bringing CMEA fuel prices down. In 1987, a decline in the price of Soviet energy by roughly 10 percent made this option more attractive than before. The Soviet Union provides most of Eastern Europe oil and much of its natural gas. In 1987, the value of Soviet fuel exports to socialist countries totaled 21.147 billion rubles, which was just under half of total Soviet exports to those countries.¹⁰

Eastern Europe pays for this fuel with machinery, raw materials, labor, and even hard currency. Some of these fuel imports are linked to East European participation in Soviet energy investment, just as some Soviet export of electric power to Eastern Europe has been linked to participation in the construction of Ukrainian nuclear power capacity. In Hungary, where coal production is declining, imports of Soviet natural gas are to increase from 4.9 billion m³ in 1987 to 5 billion m³ in 1988 and 7 billion m³ during 1989.¹¹ These imports are linked to Hungarian participation in construction of the Tengiz oil pipeline and oil refinery complex. Hungary is contributing Western equipment, Hungarian equipment and a labor force of 5,000 workers in exchange for the delivery of 20 billion m³ of natural gas over a 10-year period. Western observers speculate that the agreement undervalues Hungarian workers by half, since it measures their contribution at Soviet, not Hungarian, wages. There is East European participation in Soviet construction at the

⁶ EIU Country Report, No. 2, 1988, "East Germany," pp. 12-13.

⁷ Meirer, R., *Technisch Gemeinschaft*, December, 1985, p. 27.

⁸ EIU Country Report, No. 2, 1988, "East Germany," pp. 12-13.

⁹ EIU Country Report, No. 3, 1988, "Czechoslovakia," p. 16.

¹⁰ PlanEcon Report, Vol. LV, No. 30-32 (Aug. 5, 1988), p. 4.

¹¹ EIU Country Report, No. 3, 1988, "Hungary," p. 15.

Yamburg, Soyuz, Progress, and Druzhba pipelines, the Karachaganak condensate gas field, and the Khelminitskiy' and South Ukraine nuclear power stations as well.¹² Table 1 below provides estimates of production and consumption of East European energy in 1985.

TABLE 1.—PRODUCTION AND CONSUMPTION OF ENERGY

Country 1985	Coal		Oil		Gas		Electricity	
	Production mn tce	Consumption	Production mn tons	Consumption	Production bn m ³	Consumption	Production tkwh	Consumption
Bulgaria.....	15.60	21.50	.....	13.40	0.02	5.20	41.60	44.00
CSSR.....	64.80	66.30	0.123	14.10	0.74	11.20	80.60	70.50
GDR.....	95.40	100.30	.....	15.30	13.00	20.00	113.80	114.00
Hungary.....	9.00	11.70	2.012	8.80	7.44	11.00	26.70	38.00
Poland.....	174.90	144.90	0.194	15.40	6.01	12.20	137.70	132.70
Romania.....	21.90	27.70	10.718	11.70	34.00	36.00	71.80	74.30
Yugoslavia.....	36.30	39.90	.....	12.10	2.40	6.30	75.50	77.50
Total.....	417.90	412.30	13.047	90.80	63.61	101.90	547.70	551.00

Sources: Handbook of Economic Statistics, 1987;

U.N. Annual Bulletin of Electric Energy for Europe, 1980-86;

U.N. Annual Bulletin of Coal Statistics for Europe, 1980-86;

IEU 1986/87 Energy Yearbook; and

Production data from Statisticheskii Ezegodnik Stran-chlenov Soveta Ekonomicheskoi Vzaïmopomoshchi, 1986, pp. 74-75.

IV. THE ROLE OF NUCLEAR POWER

As of 1988, CMEA has allocated substantial resources to the program for development of nuclear power. Initially intended to address both the foreign exchange and environmental costs of fossil fuels, the CMEA nuclear program now has taken on some of the appearance of a welfare program for producers of nuclear equipment.

The present pattern of specialization in production of nuclear power has involved the creation of a full complement of facilities for research, training, design, investment, and operation coordinated by two intergovernmental commissions, Interatomenergo and Interatominstrument. In 1977, the CMEA members signed a general agreement for development of a joint Unified Power System based on rapid expansion of nuclear power capacity and inter-CMEA transmission facilities. Then, in 1979, a CMEA agreement on multilateral international specialization in the production and exchange of equipment for nuclear power stations spelled out the complementary roles of each member country.

In the past decade, the CMEA program for construction of nuclear power capacity has fallen far behind original, ambitious targets, but it has allowed total installed nuclear capacity to grow to a credible level. At the end of 1987, the East European countries had 10,512 MW of installed nuclear capacity, which accounted for almost 10 percent of a total electric power capacity of 123,526 MW.¹³

¹² Epplin, Robert, "Development of Nuclear Power in Eastern Europe to 2000," Master's Thesis, University of Washington, 1988.

¹³ Epplin, Robert, "Development of Nuclear Power in Eastern Europe to 2000."

At first, the substantial gap between planned and actual completion of capacity reflected both the political function of the plan—its stated targets were not taken to be serious economic obligations by any of the participants—and the administrative difficulties of coordinating a multilateral effort. Today, the continued lag of implementation behind plan reflects both the inability of the participants to deliver components on schedule and the reluctance of some of the participants to move ahead with investment in an increasingly outmoded technology. The history of the CMEA nuclear program has been plagued by delays and complaints of poor quality machinery and construction. In retrospect, there seems to be a real mismatch between the sophisticated, precision equipment required for safe implementation of the VVER design and the outmoded industrial plant and poor quality industrial components available to firms responsible for completion of nuclear capacity.

V. THE CONSTRUCTION OF NUCLEAR CAPACITY

Current construction of nuclear capacity is defined by the terms of a specialization agreement, "International Specialization, Coproduction and Mutual Reciprocal Deliveries of Equipment for Nuclear Power Stations for the Period of 1981-1990." Under the original guidelines of that agreement, the Soviet firm, Atommash, was to supply a 1,000 MW pressurized water reactor, the VVER-1000, and the associated generating equipment. Czechoslovakia's Skoda and Vitkovice machinery plants were to produce the smaller VVER-440 reactor and its generating equipment. Other suppliers were Ganz-MAVAG of Hungary, transport and materials-handling equipment; Poland's Rafako, pressure equalizers and steam generators; Poland's Fakop, heat exchangers; Bulgaria, armatures and radiation safety equipment; East Germany, cranes, transport equipment and armatures.¹⁴ Each of the signatories to the original agreement (excluding the U.S.S.R.) received an allocated share of the planned output of 36 units totaling 23,000 MW that was to be constructed by 1990. In addition, the East European countries were to participate in construction of two large nuclear power plants in the Soviet Ukraine, Romania, and Bulgaria in construction of the South Ukraine plant and Poland, Hungary, and Czechoslovakia in construction of Khmel'nitsk.

The scope of each country's involvement reflects the impact of the specialization agreements on that country's industrial complex. Countries heavily involved in the construction of domestic nuclear capacity have invested more in equipment manufacture. Table 2 provides a list of the main items of equipment covered by the specialization agreement. Appendix A-2 provides an itemization of equipment produced by individual factories.

¹⁴ V. V. Sychev and Iu. N. Savenko, "Mnogostoronnee sotrudnichestvo stranchlenov SEV v oblasti elektroenergetiki," *Teplenergetika*, No. 4, pp. 2-7.

TABLE 2.—COUNTRY SPECIALIZATION IN PRODUCTION OF NUCLEAR POWER EQUIPMENT

	Bulgaria	Czechoslovakia	German Democratic Republic	Hungary	Poland	Romania	Yugoslavia
Main unit.....		X					
Transport.....	X	X	X	X	X		
Safety equip.....	X	X		X	X	X	
Generators.....		X		X	X		X
Valves.....	X	X					
Pumps.....		X			X	X	X
Piping.....		X			X		
Tanks.....	X	X					
Circuitry.....	X		X				
Filtration.....		X		X			
Constn equip.....		X	X	X		X	X
Training.....		X	X				
Fuel equip.....		X		X			
Comm equip.....				X	X		
Uranium.....							X

¹ See appendixes.

Czech production of the VVER-440 began with delivery of a unit to the Hungarian Paks plant in 1980. Subsequently, the Czech VVER-440 was used for most of CMEA nuclear capacity. However, delays in the completion of the Soviet Atommash plant and operation of that plant at less than planned levels left Eastern Europe without a supply of the larger VVER model. Consequently, the Czechs retooled the Skoda, Sigma, and Vitkovice factories to construct the VVER-1000 model themselves. In current plans, both the U.S.S.R. (Atommash) and Czechoslovakia (Skoda) are scheduled to deliver the VVER-1000 reactor to plants in Eastern Europe. In these plans, there are 140 specific items of equipment whose delivery is assigned to 50 different factories, with the Soviet Union responsible for approximately 50 percent of the total value of equipment. The Soviet Union also has responsibility to guarantee fuel supply for CMEA capacity.¹⁵

However, a review of past construction experience shows that equipment supply has been far more haphazard than plans indicate. As the responsibility for equipment supply has been dispersed among more and more firms, construction lags have increased. The experience of East Germany is a case in point. The initial Nord units (also called the Bruno Leuschner plant) and the Rheinsberg reactor were all completed near or within projected goals. For these plants, construction and part of equipment supply was provided domestically. The balance of the equipment was supplied by the Soviet Union. However, in 1988, the remaining Nord Units Nos. 6, 7, and 8 and the Stendal site at Magdeburg, all of whose construction is assigned to the specialization agreements, are delayed. It is hard to judge how much of the delay should be attributed to the complications of current specialization arrangements and how much is due to East German ambivalence about the VVER technology itself.

¹⁵ A. M. Petros'ianets, "Atomnaia nauka i tekhnika SSSR," pp. 292-296.

True, the VVER technology has been in widespread use for almost two decades, but reliance on it is hard to justify at a time when 23 small reactors are available from 17 different Western companies.¹⁶ The VVER-1000 uses light water as both moderator and coolant. Fuel and control rods are housed in a large cylindrical steel pressure vessel roughly 15 feet by 73 feet, weighing 321 tons which must be constructed onsite. There is a two-loop water circulation system containing 30,000 valves—a fact that explains the particular risk of a loss-of-coolant accident. Current units are much improved by sophisticated automatic management and safety systems and by the availability of specialized 5 meter-wide rolled steel from the Soviet Izhora factory which is used in fabricating the pressure vessels. However, the long run viability of East European nuclear power production requires introduction of new models embodying Western innovations in passive safety design.

VI. INSTALLED NUCLEAR CAPACITY

At the end of 1987, East European countries had 10,512 MW of installed nuclear capacity (excluding GDR's Nord 5) out of a total electric power capacity of 123,526 MW. This capacity was distributed among the countries listed in Table 3.

TABLE 3.—INSTALLED NUCLEAR CAPACITY

Reactor	Location	Megawatts	
		Net	Gross
BULGARIA			
Kozloduy 1-4.....	Kozloduy, Vratsa.....	1,620	1,760
Kozloduy 5.....	Kozloduy, Vratsa.....	953	1,000
CZECHOSLOVAKIA			
Bohunice A1.....	Jaslovske Bohunice.....	104	143
Bohunice 1-4.....	Jaslovske Bohunice.....	1,600	1,760
Dukovany 1-4.....	Dukovany.....	1,560	1,728
GERMAN DEMOCRATIC REPUBLIC			
Rheinsberg 1.....	Rheinsbg, Granese region.....	70	75
Nord 1-5.....	Rheinsbg, Granese region.....	2,040	2,200
HUNGARY			
Paks 1-4.....	Paks, Tolna.....	1,640	1,760
	Yugoslavia.....		
Krsko.....	Krsko, Croatia.....	632	664

Sources: World Nuclear Industry Handbook, 1988, pp. 44-46.
 Epplin, R., "Development of Nuclear Power in Eastern Europe to 2000."

VII. PROJECTIONS OF FUTURE INVESTMENT IN NUCLEAR CAPACITY

The grandiose plans of a decade ago for creating an East European nuclear power base have gradually been scaled down over time. Today, the capacity targets published in political documents, presented in Table 4, are only modestly higher than projections, presented in Table 5, based on an itemization of plants currently under construction and data on past duration of construction.

¹⁶ The Economist, Mar. 29, 1986, p. 73.

TABLE 4.—OFFICIAL CMEA PROJECTIONS

Country	February 1988		1990		1995		2000	
	Units	MW ¹	Units	MW	Units	MW	Units	MW
Bulgaria	5	2,760	7	4,760	8	5,760	8	5,760
CSSR	8	3,488	10	4,298	15	8,240	16	9,218
GDR	5	1,840	9	3,595	9	3,595	9	3,595
Hungary	4	1,760	4	1,760	4	1,760	4	1,760
Poland	0	0	0	0	4	1,860	4	1,860
Romania	0	0	2	1,358	2	1,358	2	1,358
Yugoslavia	1	664	1	664	1	664	1	644
Total	23	10,512	33	16,435	43	23,237	44	24,215
Index of increase over 1988				156		221		230

¹ Gross.

Source: Ibid.

TABLE 5.—OFFICIAL CMEA PROJECTIONS

Country	February 1988		1990		1995		2000	
	Units	MW ¹	Units	MW	Units	MW	Units	MW
Bulgaria	5	2,760	5	2,760	6	3,760	7	4,760
CSSR	8	3,488	8	3,488	10	4,352	12	6,352
GDR	5	1,840	6	2,280	9	3,600	9	3,600
Hungary	4	1,760	4	1,760	4	1,760	4	1,760
Poland	0	0	0	0	0	0	2	880
Romania	0	0	0	0	0	0	2	1,320
Yugoslavia	1	664	1	664	1	664	1	644
Total	23	10,512	24	10,952	30	14,136	37	19,336
Index of increase over 1988				104		134		184

¹ Gross.

Source: Ibid.

CMEA official predictions call for 56 percent increase in nuclear capacity by 1990; we project that only East Germany will complete new nuclear capacity by then, resulting in a 4-percent increase in capacity to 10,952 MW. Official projections call for an increase in capacity to 23,237 MW by 1995, a level that was originally planned for 1990; we project that nuclear capacity will reach 14,136 MW at most by that date. Some further addition to capacity would be feasible by 2000 in the sense that CMEA industry has the capability of supplying equipment at a sufficient rate; whether CMEA members would choose to continue adding units of current design is another matter.

Since the projections in Table 5 reflect the particular circumstances of individual countries, we will comment briefly on some individual cases. We project that neither Poland or Romania will add further nuclear capacity by 1995 but that plants now underway might be completed by 2000. Secure in her coal reserves and lacking the necessary foreign exchange, Poland has made desultory progress in constructing a first nuclear reactor at Lake Zarnowiec. Romania ostensibly has a VVER-440 plant underway at Olt, but plans for it are vague and we are projecting that it will not become operable. Some construction has taken place at Romania's Cernovoda site where Canadian CANDU reactors were to be installed.

These efforts are stalled by Romania's economic and foreign exchange difficulties, although negotiations are continuing.

Both Czechoslovakia and Bulgaria have constructed past nuclear plant regularly (although not within schedule) and have the capability of adding to capacity at past rates, although the shift to a VVER-1000 model may create delays. Czechoslovakia, in particular, has invested heavily in the power equipment industry. As interest in nuclear plant wanes on the part of other members of CMEA, Czechoslovakia might find it politically more attractive to self-supply power capacity rather than to bear the windfall losses of a major structural shift.

The East German projections reflect both the capability of their industrial complex and their less ambitious goals. The biggest uncertainty in the case of East German investment is their ambivalence toward the CMEA technology.

We posit no further additions to nuclear capacity in the cases of Hungary and Yugoslavia in spite of the recent agreement between France and Hungary for French supply of nuclear technology valued at \$380 million. This program also includes construction of nuclear heat reactors. In general, the Hungarians have been indecisive toward expansion of the Paks plant for several years. The Yugoslavian nuclear program was shelved as a result of public outcry after the Chernobyl plant accident. The Krsko nuclear reactor, a 664 MW unit purchased from Westinghouse by Croatia and Slovenia, remains in operation.

VIII. THE PACE OF CONSTRUCTION

Table A-2 in the Appendix details past construction lags. These data show a median time between the start of construction and actual completion of over 8 years—roughly 3 years longer, on average, than original plans. (These numbers compare favorably with both Soviet and recent U.S. experience.) Of course, half of the plants are under construction for more than 8 years. The CMEA effort at Zarnowiec, Poland is such a long-lasting effort. It was ordered 14 years ago and construction has been creeping along for almost 6 years with very little progress. Construction difficulties are reported immediately with site selection, clearing, and preinstallation pouring of concrete works. Virtually every plant reports problems with low-quality concrete. For example, when construction began at the Mochovce plant in Czechoslovakia, press reports termed it “the worst-prepared building project of its kind,” and projected that “mistakes in and modifications of the early stages of the project will probably take 10 years to rectify.”¹⁷ Construction of nuclear capacity in Eastern Europe is characterized by the same shortcomings as plant construction in the Soviet Union—shortages of specialized labor, design problems, low-quality construction, and delays in availability and transport of equipment and materials.

¹⁷ Kramer, John, “Chernobyl’ and Eastern Europe,” in *Problems in Communism*, November-December 1986.

IX. NUCLEAR HEAT FACILITIES

CMEA has drafted ambitious plans to draw on nuclear power for district and industrial heat, but actual implementation shows considerable caution.¹⁸ Concern centers on the location of heat supply plants, for, to be economical, district heating should be generated at a site close to its ultimate use. A 1985 agreement set up a joint research program to design nuclear cogenerating plants (ATET's), nuclear heat-supply stations (AST's), and nuclear plants for industrial heat (ASPT's).¹⁹ However, existing and projected installations are none of these; instead, they are modest technical ventures that retrofit existing nuclear condensing stations to "bleed" steam and provide heat in the form of hot water to buildings in the vicinity of the plant. It is this form of heat supply that is likely to dominate CMEA efforts for the next decade.

Although the planned program for utilization of nuclear heat projects a savings of fossil fuel in the amount of 1.6 million tons of standard fuel by 2000, this source of district heating is no panacea. First, nuclear heat, like nuclear power, will provide the base portion of the heat load, and peak loads will have to be covered by fossil fuels. Second, the costs of delivered heat rise sharply with distance, a consideration that is likely to influence choice of site. Third, siting decisions are a source of serious discord between fraternal socialist neighbors. For all these reasons, only three East European countries, Czechoslovakia, Bulgaria, and East Germany, are likely to make significant use of nuclear power for district heating, and these countries will be bleeding steam from their conventional nuclear condensing power plants. Hungary is reportedly negotiating with France for nuclear reactors.

Czechoslovakia has the most ambitious plans. Its Dukovany plant will supply heat (actually hot water) to Brno and the Mochovice plant to Levice, Nitra, and Tlamach.²⁰ All nuclear stations built in Czechoslovakia are now equipped with turbine assemblies for extracting heat which is delivered by heat mains to nearby industrial and urban areas. The first heat line was constructed from the Bohunice station to the nearby city of Trnava, in Western Slovakia. The line consists of two pipelines, 700 millimeters in diameter, with a length of 18.5 kilometers and a heat capacity of 250 megawatts.²¹ It was put into operation on December 7, 1987, and is scheduled to provide heat from a central heating system to about 1,200 apartments and a health center. Plans for the future of this line include extensions to other housing complexes and two factories in the region. Further lines of this type are planned to the cities of Glogovts and Pyeshtyani. The Temelin plant has planned supply lines to the city of Ceske Budejovice.

In Bulgaria, energy specialists project that 17 percent of heat supply will come from nuclear stations by 2000. Bulgaria intends to retrofit their Kozloduy plant for heat supply and to install a reac-

¹⁸ Panasenkov, A., "Development of Nuclear Heat Supply in CMEA Member Nations Discussed," in *Ekonomicheskoye Sotrudnichestvo Stran Chlenov SEV* March 1984, pp. 42-46.

¹⁹ Petrosyants, A. "CMEA Nuclear Energy Heat Production", in *Ekonomicheskoye Sotrudnichestvo Stran Chlenov SEV*, September 1985, pp. 12-16.

²⁰ Ibid.

²¹ "Czech District Heating Begun With Bohunice Plant," in *Nuclear News*, February 1988.

tor with bleeding capabilities at Belene. Bulgaria has also announced plans to install Soviet AST-500 district heating reactors near Sofia.²² This announcement was made before Soviet power industry planners shelved some proposed heat supply projects and announced that they were halting construction of their own Minsk nuclear cogenerating plant, so it seems unlikely that the Bulgarians would go ahead for the time being. In 1985, East Germany installed equipment to extract heat from the turbines at the Brno Leuschner plant and transport it 20 kilometers for district heating.²³ Their plans say they intend to modify remaining turbines similarly.

X. THE ROLE OF WESTERN CREDITS

The inability of CMEA members to use nuclear power as a quick fix to their energy problems leaves them in tight straits. Coal-fired plants will undoubtedly pick up the slack, particularly if the next decade is a period of low growth. However, facing severe foreign exchange constraints, they will still be running their power plants without needed environmental equipment and, thus, bearing heavy environmental costs. The foreign exchange demands to keep current inefficient industries running will leave insufficient resources to make the required investments in new technologies.

Western credits would be needed to finance investment in energy producing technologies that are less damaging to the environment, such as modern gas turbines; still more Western credits would be needed to speed the acquisition of energy-efficient consuming technologies and structural shifts out of energy-intensive industries. Unfortunately, the trade prospects and current levels of indebtedness of most members of CMEA still make them relatively unattractive borrowers for all but a small range of investments. It remains to be seen whether CMEA initiatives toward the European Economic Community and other international organizations and changes in the economic rules of the game at home will change commercial relationships between Eastern and Western Europe enough to set a process of adjustment in motion within CMEA.

APPENDIX A-1

PRODUCTION OF NUCLEAR EQUIPMENT BY COUNTRY ²⁴

Bulgaria

1. Biological Shielding (specialized varnishes, plating one-half meter thick doors). Factories are located in Radomir and Deblets.
2. Planned center for production of spare parts at Kozloduy.
3. Production of containers for transportation of spent fuel.
4. Remote control valves for work in radioactive environment.
5. Production of separator drums.

Czechoslovakia

1. Production of VVER-440 and VVER-1000 models at Skoda complex in Plzen.

²² Panasenkov, A. "Development of Nuclear Heat Supply in CMEA Member Nations," discussed in *Ekonomicheskoye Sotrudnichestvo Stran Chlenov SEV*.

²³ Several articles: Herman, D., *Energiyetechnika*, March 1985, pp. 87-89. Lehmann, R., *Energiyetechnika*, June 1985, pp. 201-204.

²⁴ Source: Epplin, R., "Development of Nuclear Power in Eastern Europe to 2000," pp. 57-61.

2. Production of steam generators, volume compensators, expansion tanks, semi-finished metal billets for production of reactor vessels, primary pipelines and main cutoff valves by Vitkovitse Machinery and Metallurgical Plant in Ostrava.

3. Production of feed and prefeed pumps (auxiliary for turbines and high-speed gate valves and piping at Sigma Company in Olomouc).

4. Production of tanks and apparatus for the secondary circuits of the primary section (from austenitic steels) and rust proof devices for the bubbler towers in emergency protection systems at the Hepos Company in Brno.

5. Production of de-aerators and feed tanks and the condensate equipment at the ChKD Dukla-Prague Enterprise.

6. Production of filtration equipment, air-heat exchangers and fans for nuclear stations at the Czechoslovak Fan Plant.

7. Production of primary and secondary loops for the VVER-440 at the Slovak Electric Power Machine Building Plant in Tlmach.

8. Production of ZFA²⁵ filtering equipment for filtration of radioactive aerosols in the ventilation systems at the Vzduchotechnika (Air Technology) factory in Nove Mesto Po Dvaheim.

9. Production of the K-155-80 calcinator for elimination of fluid-radioactive wastes at the Kralovopolske Machine Works in Brno.

10. Production of reinforced concrete blocks for nuclear stations at the bridge building plant of the East Slovak Ironworks in Kosice.

11. Production of assembly platforms for specialized work at nuclear stations (ex. decontamination program at Chernobyl'), by Slovacke Engineering Works of Uhersky Brod.

12. Other Czech enterprises reported to be involved in nuclear power equipment production: Prague Vodny Stavby Complex, Ceske Budejovice Surface Construction and Road constructors of Prague, Brno Ingstave Industrial Construction.

German Democratic Republic

1. Centers for training of technical personnel at Rheinsburg and for construction at Halle.

2. Production of automated overhead travelling cranes for servicing reactors.

Hungary

1. Production of specialized reactor repair equipment.

2. Production of turbine parts at the "Four April" factory.

3. Production of Mainframe computers and workstations (VAX compatible) and VT-32 computers for nuclear stations.

4. Production of fuel loading equipment.

5. Production of heat exchangers.

6. Production of water purification systems.

7. Production of loading machines by Cant Mavag Plant.

8. Hungarian enterprises reported to be involved in production of nuclear equipment: Khemimash Enterprise.

Poland

1. Production of Hindukusz system for measuring reactor cores.

2. Production of the Sejwal Radiation Control System for nuclear stations.

3. Production of the CAMAC Electronic Communication System for transmission of signals relating to rules of operation of various equipment, by Polon United Nuclear Power Equipment Plant.

4. Production of a system for measuring contamination levels and portable equipment for measuring contamination of personnel by Polon United Nuclear Power Equipment Plant.

5. Production of 600-ton condensers, two and four stage heater control devices and pumps by the Zamech Enterprise in Elblag.

6. Production of volume compensators, backup diesel engines and steam generators by Rafaco Complex.

7. Production of heat exchangers by Fakop Plant.

8. Production of fire detectors, isotope thickness gauges and electric charge neutralizers at Zelonia Gora under the auspices of the AEE.

9. Production of cooling water piping by Instal of Rzeszow.

10. Polish enterprises reported to be involved in production of equipment for nuclear sites: Megat Industrial Association, Lumel and Unitra Factories.

²⁵ Type not determined.

Romania

1. Production of main circulating pumps.
2. Production of overhead cranes, turbine housing and some equipment for emergency systems.

Yugoslavia

1. Production of pump units by MIN at the Jastrebac Plant in Nis.
2. Production of pump units by Djuro Djakovid in Slavonski Brod.
3. Production of specialized "PE" and "SPE" pumps and nuclear generators by Jugoturbina in Karlovac, Croatia.
4. Production of specialized cranes and fittings for reactor vessels.
5. Production of "yellow cake" uranium at the Zirovski Uranium mine in the Julian Alps of Slovenia.²⁶
6. Yugoslav enterprises reported to be involved in production of equipment for nuclear power sites: Yummel Association.

APPENDIX A-2

PACE OF CONSTRUCTION OF CMEA REACTORS

Reactor	Supply	Stage	Order	Start construction	Completion	
					Original	Actual
Bulgaria:						
Kozloduy 1	AEE	100	1967	1970	1970	Dec. 1974
Kozloduy 2	AEE	100	1967	1970	1970	Dec. 1975
Kozloduy 3	AEE	100	1972	1973	1978	Dec. 1980
Kozloduy 4	AEE	100	1972	1973	1979	Aug. 1982
Kozloduy 5	AEE	100	1979	1980	1985	Dec. 1987
Kozloduy 6	AEE		1981	1982	1986	
Belene 1	AEE		1983	1984	1992	
Belene 2	AEE		1985	1986	1995	
Czechoslovakia:						
Bohunice A1	SKODA/AEE	(1)	1956	1958		Dec. 1972
Bohunice 1	AEE	100	1973	1974		Dec. 1978
Bohunice 2	SKODA	100	1973	1973	1979	Mar. 1980
Bohunice 3	SKODA	100	1970	1976	1982	Aug. 1984
Bohunice 4	SKODA	100	1970	1976	1983	Aug. 1985
Dukovany 1	SKODA	100	1971	1974	1982	Mar. 1985
Dukovany 2	SKODA	100	1971	1978	1983	Mar. 1986
Dukovany 3	SKODA	100	1976	1978	1983	Dec. 1986
Dukovany 4	SKODA	100	1974	1978	1984	1987
Mochovce 1	SKODA		1982	1983		
Mochovce 2	SKODA		1982	1983		
Mochovce 3	SKODA		1982	1985		
Mochovce 4	SKODA		1982			
Temelin 1	AEE/SKODA		1982	1984		
Temelin 2	AEE/SKODA		1982	1985		
Temelin 3	AEE/SKODA		1982	1985	1995	
Temelin 4	AEE/SKODA		1982	1985	1998	
German Democratic Republic:						
Rheinsberg 1	AEE	100	1956	1960	1960	May 1966
Nord 1	AEE	100	1966	1967	1974	Dec. 1973
Nord 2	AEE	100	1967	1969	1975	Feb. 1975
Nord 3	AEE	100	1972	1972	1977	June 1978
Nord 4	AEE	100	1972	1972	1978	Nov. 1979
Nord 5	SKODA		1978	1980	1988	
Nord 6	SKODA		1978	1980	1988	

²⁶ The mine is located about 2-4 kilometers away from the village of Gorenja Vas on the slopes of the Julian Alps. Yugoslavia estimates that the mine can produce enough sufficient fuel for replacement of the fuel assemblies at the Krsko station. Initial capacity projections are 160,000 tons of ore per year. Completion of the processing plant next to the mine will yield 120 tons of uranium concentrate or "yellow cake" which after enrichment leaves about 16.6 tons of fuel for the element of the reactor. The Yugoslavs are also investigating signs of uranium in the hills of Macedonia and the Kalnik, Bilo and Gora mountains of Croatia.

PACE OF CONSTRUCTION OF CMEA REACTORS—Continued

Reactor	Supply	Stage	Order	Start construction	Completion	
					Original	Actual
Nord 7	SKODA		1978	1981	1989	
Nord 8	SKODA		1978	1981	1990	
Stendal 1			1983	1984		
Stendal 2			1983	1984		
Hungary:						
Paks 1	AEE/SKODA	100	1966	1973	1975	Aug. 1983
Paks 2	AEE/SKODA	100	1966	1975	1976	Sept. 1984
Paks 3	AEE/SKODA	100	1977	1977	1983	Dec. 1986
Paks 4	AEE/SKODA	100	1977	1979	1984	Oct. 1987
Paks 5	AEE	0	1987	1989	1989	?
Paks 6	AEE	0	1987	1989	1991	?
Poland:						
Zarnowiec 1	SKODA	20	1974	1983	1985	
Zarnowiec 2	SKODA	20	1974	1983	1986	
Zarnowiec 3	SKODA		1974		1994	
Zarnowiec 4	SKODA		1974		1995	
Kujawy 1					1996	
Kujawy 2					1998	
Warta 1					1996	
Warta 2						
Romania:						
OLT	AEE	0	1970	1975	1980	
Cernavoda 1	AECL	50	1978	1980	1986	
Cernavoda 2	AECL	30	1981	1982	1990	
Cernavoda 3	AECL	15	1983	1984	1991	
Cernavoda 4	AECL	10	1984	1985	1992	
Cernavoda 5	AECL	5	1985	1986	1993	
Yugoslavia:						
Krsko	WEST	100	1973	1974		Nov. 1982

¹ Shutdown.

Source: World Nuclear Industry Handbook, 1988, pp. 44-46.

CONFLICTS IN CMEA SCIENCE AND TECHNOLOGY INTEGRATION POLICY

By Steven W. Popper¹

The Soviet leadership has set a course of increased integration as a means to increase the capacity of CMEA to generate substitutes for Western high-technology imports. This has been given form in "The Comprehensive Program for the Scientific and Technological Progress of the CMEA Member Countries Through the Year 2000," adopted in December 1985.

The Program is intended to address the shortcomings of earlier attempts at science and technology (S&T) policy integration in CMEA. The Soviets suggest that the current Program differs from its predecessors in the stress laid on the interconnections between the various research tasks.² Rather than merely laying out an agenda of discrete development projects, the goal is to achieve systematic integration between tasks leading to advances in broadly defined major areas of leading technology. The code phrase most distinguishing the Program is "direct links." It connotes direct economic ties between specific production and science-production associations, enterprises, and research and design bureaus on a bilateral and multilateral basis, rather than coordinating their interactions through ministerial level bodies. It also covers the establishment of new, joint venture entities specifically established to carry forward tasks under the Program.

At present, the Program does not appear to have been implemented in as full a fashion as originally intended. This article explores conflicts inherent in the mechanisms of CMEA and in the relations between member states which could explain the slow process of implementation.

Causes for East European Concern.—The response of the East European members of CMEA to the Comprehensive Program has been equivocal and has varied between countries. There appears to be reticence, particularly by the East Germans, Romanians, and perhaps Hungarians, in accepting the full Soviet reading of the final agreement.

One reason, hinted at by former Hungarian Premier Lazar Gyorgy, for some of the East Europeans to be less enthused about the Program is that it is to be funded "by the interested states."³ To the extent that the Program is multinational and directed by Soviet organs, this implies a reduction in national sovereignty over major budgetary decisions. One would postulate a greater reluc-

¹ The RAND Corp., 1700 Main St., Santa Monica, CA 90406.

² See the interview with G.I. Marchuk, Chairman of the CMEA Committee for Science and Technology Cooperation in *Pravda*, Dec. 29, 1985. Marchuk is now the President of the U.S.S.R. Academy of Sciences.

³ Broadcast report in FBIS East European Daily Report, Dec. 18, 1985.

tance on the part of the more advanced countries. They are least likely to benefit from the technical contributions of their partners, and since they possess the most developed facilities for undertaking the individual Program tasks, they are likely to provide a greater share of the funding. At the same time, it will be difficult to retain a proprietary stake in the results. It may be that the emphasis on the direct links, joint venture approach is intended to alleviate some of these anxieties. But, there must also remain concern over the prospect that the Program will increase the possibility for the East Europeans of being dragooned into more longrun joint investment programs with uncertain outcomes. All the states of CMEA face a need for increased investment in domestic infrastructure. They are unlikely to willingly contribute to projects designed to raise the technical level of Soviet, or even other East European, industrial sectors.

This raises a problem at the root of many CMEA failures to integrate more fully and reduce redundancies. Foreign trade has always played a different role in CMEA than in a more typical customs union like the EEC. While the EEC was designed as a means to promote exports, CMEA is, in practice, an institution to ensure the adequacy of supply in economies characterized by chronic shortage. In this light, even if the Comprehensive Program succeeds fully in its intentions for CMEA as a whole, it threatens individual CMEA members with a decrease in the ability to protect the supplies of vital inputs. Again, this presents a greater problem for those countries currently best able to provide for themselves. (For example, the East Germans would not view favorably the prospect of having an important component required by its industry produced solely in a joint enterprise located in Poland or Romania.) Successful integration would mean fewer alternatives over input choice and further loss of control over the quality and timeliness of goods delivered.

These considerations call attention to the Western connection. Some East European members of CMEA have reason to feel that they can do better by maintaining their current technology contacts with the West than by reorienting in the direction of CMEA. This is a mirror image of the problem presented to the Soviets by the existence of *de facto* differential access to Western technology with CMEA. The East Europeans might fear, on the one hand, adverse Western reaction to the formation of a technology bloc that could make Western partners less confident about their ability to control the spread of borderline or dual use technologies, or fear increasing the scope for Soviet interference on the other.

It is the concept of cross-national direct links between lower level production and R&D bodies that seems to be among the most troublesome for the East Europeans. There is annoyance over the prospect of having specific enterprises and scarce resources bound into a cross-national consortium, thus reducing national control over domestic resources and tying the success of domestic efforts to increase productivity to those of other economies with varying technological levels. Even if the Comprehensive Program succeeds fully in its intentions for CMEA as a whole, by its nature it threatens individual CMEA members with a loss of control over national resources.

Institutional Barriers to S&T Integration.—The institutions of CMEA and of its member states are not well suited to supporting the Program's S&T integration efforts. Differences in economic systems between CMEA countries lead to different patterns of behavior at the enterprise level. There will be no real incentive for spontaneous cooperation without the true chance of mutual gain from such activities. The intensity and nature of this interest varies between countries. While the object of promoting direct links is to reduce the role of the state apparatus, in most cases it is only state prodding that would cause two enterprises to enter into such a relationship. Further, in order to operate as efficiently as intended, the partners would need to be able to exchange materials and components freely, based upon mutual agreement. This would conflict directly with the foreign trade monopolies enjoyed by most CMEA states as well as with the basic process of national plan formation. Joint tasks under the Program are to be specifically included in each nation's annual plans. If cross-national coordination of annual plans, including the tasks of joint venture enterprises and those involved in direct links, is to be achieved, these plans would have to be recast on some basis other than the traditional balancing of supply and delivery if such enterprises are to achieve the flexibility they would require to fulfill their intent. The alternative is an even greater degree of case-by-case administrative intervention. It has proven difficult to remove state bureaucracies from the realm of direct link cooperative decisionmaking.

Perhaps the greatest difficulties are raised by the fact of international cooperation itself. These are the complications caused by pricing problems and currency inconvertibility. Subassemblies and components transferred to an external partner will be expensive compared to the domestic price if the usual formula for price formation is to be applied. Any formulation based upon observed world prices will make these goods more expensive since the price at which they are actually sold on the market is greater than when just transferred internally or between partners. So an entirely different price formation scheme must be used to arrive at a reasonable and efficient price. Surely, special arrangements can be made to suit particular instances without resorting to a general reform in pricing. Such agreements are not unknown within CMEA. The problem will, however, reduce the wide scope for direct links envisioned by the Soviets. Special arrangements will only preserve the bilateral barter relations between participating enterprises and limit their extent. In the case of joint ventures this would still leave the major problem of repatriation of profits and the convertibility of one CMEA currency into another. This is a problem that lies at the heart of the institutions forming the pattern of economic relations within CMEA and is not amenable to a quick fix solution.

Possible Unilateral Benefits to the Soviet Union.—The equivocal response to the Program by the non-Soviet members of CMEA may be due to a perception that the Program apparatus itself, due to its comprehensive character and the emphasis on a more intimate form of integration, might serve the Soviet side to further its own particular interests at the expense of the East Europeans. By its nature, a discussion of conflict along these lines must remain spec-

ulative. There are, however, several aspects of the Program that could raise the concerns of the non-Soviet members of CMEA.

At root, the Comprehensive Program may be viewed by the East Europeans as a mechanism for instituting an effective Soviet control over national R&D policies and technology choice. Each of the head organizations charged with overseeing the 93 main tasks of the Program is a Soviet entity. The objective may be efficiency, but the net effect is to give Soviet entities a leading role in the R&D activities of the European CMEA. Given the central importance that all states of the region attach to technological advancement as a means of solving the economic problems facing them, East European sensitivities on this point are acute.

One goal of the Program is to set a range of technical standards for common parts to ensure compatibility. This can be seen as a response to an unfavorable situation in several industries in CMEA where the technologies in use have originated from a number of different sources. Further, one of the problems retarding more rapid change in the technical base of production is that there often appears little purpose in raising the standards of quality or performance for a component that will be combined in final assembly with others of less exacting manufacture. While this problem is genuine, the formal setting of standards could also provide a means for the Soviets to guarantee that the output of high technology products from East European industry is most suitable to meet the needs of Soviet industry, to the detriment of potential technological sophistication and wider export possibilities. Further, if the standards that are accepted are markedly different from those prevailing in the West the effect could be to reduce Eastern European options for technology acquisition.

The Comprehensive Program could conceivably serve a unilateral Soviet purpose in providing a much improved ability to monitor the quality of potential East European deliveries to the Soviet Union. Since 1984, the Soviet side has openly expressed its desire to redress a perceived imbalance in trade with its CMEA partners. If the Soviets continue the past level of raw material deliveries this means that manufactured goods of a higher qualitative and technical standard will need to be exported to the Soviet Union. In the CMEA environment where price is not a meaningful indicator of quality, the emphasis on expanding a set of standards for emerging technologies, coupled with closer formal association between primary producers, would also make it easier to monitor the quality of goods available to be shipped to the Soviet Union in exchange for deliveries of more homogeneous commodities like energy and raw materials.

Due to the wide range of technologies the Program encompasses, the mechanism of its implementation may also put the Soviets in a better position to oversee Eastern Europe's existing and future technology contacts with the West. Clearly, the Program is intended to promote self-sufficiency in those technologies and applications subject to COCOM export controls. However, it is not clear that the intention to reduce reliance on the West for such goods also implies a desire to reduce technology flows for noncontrolled commodities as well and to form a self-contained technology bloc. To limit or restrict such contacts could place in jeopardy the renovation strategy

upon which the General Secretary has staked his political program. Therefore the dominant theme with respect to West-East technology deliveries may be less one of restriction than of control.

In part, the purpose behind this control is well intended. The apparatus established to enact the Program could serve to actively moderate the flow from the West of higher technology goods purchased by countries in CMEA in order to rationalize the acquisition process and ensure that opportunities and scarce resources are not squandered as they sometimes have been in the past. There is also concern that dependence on technology deliveries from the West increases the risk of application of political pressure. But beyond this, the Soviets may have less concern about a Western technology embargo applied against CMEA as a bloc than over the fact that some East European states have a greater access to Western technology than others. If differential contacts with the West are capable of increasing the technological level of East European industry, the Soviet Union could be placed in a potentially awkward position. An increasing technology gap between itself and its CMEA partners reduces Soviet leverage in an era when it is less well placed to provide its former levels of cheap energy deliveries to Eastern Europe. This could make the economic relationship a bit more equal than the Soviets might prefer. The Program ensures that the Soviet Union will be functionally linked to the technological development of its more advanced trading partners and the countries best able to rely upon domestic and Western sources for increased productivity.

Prospects for S&T Integration.—The discussion suggests that because of inherent conflicts the Comprehensive Program is unlikely to effect greatly CMEA's ability to increase technological self-sufficiency over the short term. This is exacerbated by the complex and interconnected character of modern technology. As has been frequently demonstrated by past development efforts, the question is not whether some machine can be developed and put in place within CMEA, but rather whether the constituent technology embodied in the machine can be successfully applied. Even if a capacity is developed within CMEA for producing specific advanced technologies, problems may well persist in providing the appropriate infrastructure for their utilization. Often the more difficult tasks are to provide the support for the operation of new technology, tailoring it to specific production problems, maintaining it, and readying the next generation in time. The two tests of the CMEA Comprehensive Program will be how successfully it allows a pooling of resources to support today's technology and how well it does in producing the goods of tomorrow.

To the extent that the current incarnation of CMEA S&T cooperation places emphasis on extensive interactions at the lower levels of the production hierarchy, complete with jointly operated enterprises, it would seem to require some major reforms in the apparatus of CMEA. These reforms would include, but are not limited to:

A need for direct export rights for enterprises involved in cooperation. Current contracting formalities greatly hinder development of technologies and applications.

A pricing system that better reflects the qualitative differences in CMEA machinery in comparison to world standards.

A means for repatriation of profits in the case of joint ventures. This would require a fundamental change in domestic currency—ruble exchange rates and some meaningful form of convertibility.

A more flexible approach to plan coordination, particularly in the case of annual plans.

Taken together these amount to nothing less than a complete overhaul of the institutions of CMEA. These may be possible to effect but are unlikely to be forthcoming in the immediate future. There is unlikely to be a fully successful functioning of the Comprehensive Program as originally intended in their absence.

SPECIALIZATION AGREEMENTS: AN EFFECTIVE CMEA POLICY TOOL? ¹

By Keith Crane and Deborah Skoller ^{1a}

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The Council for Mutual Economic Assistance (CMEA) provides an institutional framework in which the Soviet Union and its East European allies conduct their economic relations. One of the goals of this organization has been to increase economic integration among the member states. An important policy instrument employed in the pursuit of this goal has been specialization agreements. This article assesses the efficacy of this instrument in promoting economic integration.

DEFINITION

Specialization¹ and cooperation agreements are the primary policy instruments employed in the CMEA to implement specialization in the production of manufactured goods, especially machinery and chemicals. Specialization agreements are treaties under which one of the participating countries agrees to satisfy the needs of the group for a particular product and the other (nonspecializing) countries agree to either limit or stop production of the product. Cooperation agreements involve two enterprises from different countries in the production of a single commodity. One enterprise usually supplies the other with components. Specialization and cooperation agreements differ in that cooperation stresses direct relations between producers, whereas specialization does not. Nonetheless, the two types of agreement are frequently intertwined. References in the East European press tend to lump the two into the same phrase, "specialization and cooperation agreements," with no attempt to distinguish between them. For this reason, we generally do not differentiate between the two below.

Specialization agreements are designed to encourage countries to develop a comparative advantage in the production of particular commodities by constructing plants that exploit economies of scale, developing technical expertise through learning by doing, and con-

¹ This comment draws on material in: Keith Crane and Deborah Skoller, *The Effectiveness of Specialization Agreements Within the CMEA*, R-3518, the Rand Corp., Santa Monica, February 1988.

^{1a} Analysts, Rand Corp.

centrating research and development in the industry of specialization. They were created to surmount barriers to specialization arising from the system of trade in CMEA. Because the CMEA does not trade in convertible currencies, trade is conducted under a quasi-barter system. Because prices are determined administratively, not by markets, the relative values of different traded goods are not reflected in prices. Consequently, CMEA members, especially the East Europeans, try to balance trade flows by commodity group so as not to suffer losses from trading goods in high demand for less valuable commodities. This system leads to wide product assortments and little specialization. Policymakers hoped that by signing agreements designating countries as specialized producers, greater specialization could be encouraged.

Specialization agreements stipulate the types of products and direction of trade among the participants, but they do not set down detailed trade arrangements. These are incorporated in the annual trade accords. Items included in specialization and cooperation agreements appear as separate items in the long-term and annual trade accords.² Somewhat surprisingly, the provisions of agreements are legally binding on the enterprise only if incorporated into the annual trade accords.³

Specialization agreements usually are signed for 5 years or 5-year increments (10 years, 15 years, etc.), coinciding with 5-year plan periods.⁴ This permits the participating countries to implement investment decisions made on the basis of the specialization agreement and to recoup investment costs, but it also allows the importing country to revoke an unsatisfactory agreement.

In general, specialization agreements are separated into two classes: intergovernmental agreements that are signed by representatives of the central government, up to and including the premier, and intersectoral or interdepartmental agreements that are usually signed by industrial branch ministers. Intergovernmental agreements cover specialization and cooperation measures that affect the design and manufacture of new types of products of great economic or technological interest. For example, the Long-Term Agreement on Multilateral Specialization and Cooperation in the Production and Mutual Deliveries of Equipment for Atomic Power Stations (June 28, 1979) is an intergovernmental agreement.⁵ Such programs involve very large investments by the participating countries and may lead to the creation of new industries.

Intersectoral or interbranch agreements cover more mundane articles, such as tractors.⁶ They involve exchanges between the same industrial branch in two or more countries. For example, in the Zetor tractor agreement between Poland and Czechoslovakia, tractors are exchanged for tractor components or other types of trac-

² Dezzo Soky, "The Results, Directions and Problems of Industrial Cooperation and Specialization," *Vilaggazdasag*, Sept. 17, 1976, pp. 1-3.

³ Yelena Lyakina-Frolova and Vladislav Kuvshinov, "Legal Aspects of Direct Ties," *Foreign Trade*, November 1985, pp. 9-13.

⁴ Economic Commission for Europe, *Analytical Report on Industrial Cooperation Among ECE Countries*, United Nations, Geneva, 1973, p. 54.

⁵ Lyakina-Frolova and Kuvshinov, 1985.

⁶ Lyakina-Frolova and Kuvshinov, 1985.

tors, not for raw materials or other types of machinery.⁷ These types of agreement are of lesser institutional importance because they are concluded by the branch and foreign trade ministers.

HISTORICAL DEVELOPMENT

Specialization agreements first appeared in CMEA in the early 1950's. Two were made in ferrous metals and bearings in 1956. However, specialization agreements did not become important policy instruments until the late 1960's. In 1968, shortly after the opening of its Volga automobile plant, the Soviet Union signed a series of bilateral agreements with Hungary, Bulgaria, and Poland whereby these countries agreed to manufacture parts for automobiles produced in the new plant. In 1969 one of the most important agreements, the Multilateral Governmental Agreement on the Development, Production and Application of Electronic Data Processing Equipment, was signed, leading to the creation of an integrated CMEA computer industry.

A major campaign to sign specialization agreements began after the signing of the Complex Program on Intergration in CMEA in 1971. The number of agreements has risen from a few tens in 1970 to several hundreds in 1977 to over a thousand in 1986. (See Table 1.) Trade in products falling under specialization agreements increased from less than 1 percent of total intra-CMEA trade in 1970 to more than 20 percent by 1976.

TABLE 1.—NUMBERS OF SPECIALIZATION AGREEMENTS IN CMEA, BY COUNTRY

Country	1975 ¹	1976 ¹	1977 ¹	1986 ²
Bilateral agreements:				
Bulgaria.....	8	64	121	150
Czechoslovakia.....	156	180	180	430
GDR.....	305	305	362	243
Hungary.....	114	161	162	194
Poland.....	156	160	220	267
Romania.....	39	63	106	124
U.S.S.R.....	76	105	123	330
Subtotal.....	419	519	637	888
Multilateral agreements.....	57	89	98	331
Grand total.....	476	608	735	1,219

¹ Jozef Kowalkewski, "Wspolpraca przemyslowa krajow RWPG," *Handel Zagraniczny*, November 1980, pp. 16-25.

² Crane and Skotler, 1988, p. 26. These figures were tallied from references to specialization agreements in the commercial literature. Some errors and omissions were inevitable in this tally. We believe our figures for Czechoslovakia, Hungary, Poland, Romania, and the U.S.S.R. are most accurate because we were able to obtain commercial publications for these countries. We believe that our numbers for the GDR are probably underestimated because we were unable to obtain a trade journal from this country.

The Intergovernmental Commissions on Economic, Technical and Scientific Cooperation play the primary role in drawing up and implementing specialization agreements. These bilateral commissions exist between every pair of countries in CMEA. The organs of CMEA also play an important role in the elaboration of agreements. For example, the Standing Commissions, organized by in-

⁷ Budnikowski, Adam and Marek Kulczycki, "Wspolpraca produkcyjna krajow RWPG a system kierowania gospodarkas," *Handel Zagraniczny*, No. 9, 1977; Irena Cieniuch, Barbara Durka, and Jerzy Marciszewski, "Wspolpraca produkcyjna Polski z krajami RWPG," *Handel Zagraniczny*, No. 8, 1977.

dustry, work out concrete recommendations concerning specialization in particular industrial sectors and facilitate necessary additional investments.

DISTRIBUTION

The pattern of agreements by country tells an interesting story. In 1977, the Soviet Union participated in 90 percent of all multilateral agreements, almost as many as any other country in CMEA, but the smaller, more industrial countries participated in many more bilateral agreements. The GDR participated in nearly three times as many bilateral agreements as the U.S.S.R.; and Czechoslovakia, Hungary, and Poland all participated in more agreements than the Soviet Union. Although these ratios have changed in recent years, our own tally continues to show Czechoslovakia participating in substantially more bilateral agreements than the Soviet Union. (See Table 1.)

In the case of multilateral agreements such as those on computers, robotics, and nuclear power, the Soviet Union is the driving force. These programs often involve products that fall under COCOM restrictions and are of strategic importance. Other such agreements are in areas such as energy or food that had high priority in the Soviet Union at the time of signing. The Soviets have reportedly discouraged multilateral agreements solely among East Europeans for political reasons.

The figures indicate, however, that the Soviet Union is not the driving force behind most bilateral specialization agreements. The smaller countries appear to use bilateral specialization agreements at the interbranch level to a greater extent than does the Soviet Union. A possible explanation for the popularity of bilateral agreements among these countries is that because of their limited domestic markets, they may be less able to exploit economies of scale. In an effort to eliminate inefficient production lines, they initiate more agreements. Many of these specialization agreements cover small product ranges of specialized machinery. For example, the GDR, Czechoslovakia, and Poland have extensive bilateral and trilateral agreements for the production of different types of construction equipment, agricultural machinery, and even railroad track-laying equipment. These intersectorial, bilateral agreements allow the participating countries to stop the production of small series of complicated equipment at which they are not particularly efficient.

EFFECTIVENESS

If specialization agreements have led to an increase in economic integration, their introduction should have been followed by changes in the allocation of goods. The percentage of production sold to the partner country or the percentage of total consumption imported from it should have risen following the conclusion of an agreement.

In many cases, however, the participating countries may have been increasing trade before signing a specialization agreement. Thus, increases in the percentage of production exported to or consumption imported from the partner country are not sufficient evidence to prove that a specialization agreement has increased eco-

conomic integration. More telling would be a shift in the trend toward increases in these percentages. For example, if Romania had doubled the rate of increase in the share of total output of locomotives exported to CMEA after the conclusion of the specialization agreement on diesel locomotives in 1976, it could be argued that the agreement was a success.

Using a simple model, we have attempted to test the hypothesis that specialization agreements induce such changes. We assume that integration (the percentage of production exported or consumption imported) follows a time trend. After a specialization agreement is signed, this trend should shift upward if the specialization agreement has been effective. We assume that any shift (change in the slope) would be picked up by a multiplicative dummy variable equaling zero before the signing of the agreements and following a time trend after signing. If the coefficient of this variable is positive and significantly different from zero, we reject the hypothesis that the specialization agreements did *not* increase economic integration. If it is negative and significantly different from zero, we reject the hypothesis that the specialization agreement *increased* economic integration. Other results are indeterminate.

The mathematical form of the model is

$$Y = A + B_1 \times \text{TIME} + B_2 \times \text{DUM} + e \quad (1)$$

where Y is a univariate transformation of the percentage (P) of output exported to the partner, namely $\arcsin (P/100)^{1/2}$,⁸ TIME is equal to the year minus 1969; DUM is a multiplicative dummy variable for time, taking the value of zero before an agreement was signed and TIME afterwards; and ϵ is the error term (the usual assumptions are made concerning its distribution). The coefficient of DUM , B_2 , captures changes in the time trend in Y following the agreement and was used to test for increases in the rate of change in Y .

Because specialization is a two-way process—the importing country pledges to rely on the exporter for more of its consumption of the product—we also tested for increases in economic integration in importing countries. The regression model in Eq. (1) was used to characterize integration in terms of imports as a percentage of national consumption. In this regression, Y is the arcsin of $(C/100)^{1/2}$, where C is the percentage of total consumption imported from a partner in a specialization agreement.⁹ The variables on the right-hand side of the equation are the same.

Because CMEA countries record trade flows in deviza currencies whose value bears little relation to domestic currencies, we confined ourselves to testing for increases in integration in trade in commodities given in physical units—i.e., motor vehicles, railroad equipment, agricultural equipment, machine tools, and some chemicals. The data generally extended from 1960 to 1985 and were

⁸ This transformation is commonly applied to proportions to stabilize variance (S. Weisberg, *Applied Linear Regression*, 2d ed., John Wiley & Sons, New York, 1985, p. 134). If the dependent variable is not transformed, hypothesis tests involving parameter estimates are distorted.

⁹ Consumption = production - exports + total imports.

taken from the statistical yearbooks of the CMEA countries. Statistical data published by these countries were very uneven, and there were substantially more series from Czechoslovakia, Hungary, and Poland than from the other countries. This problem of bias is partially mitigated by the use of mirror trade statistics. For example, Polish data on locomotive imports from Romania were used to test for the effects of a specialization agreement on Romanian exports of locomotives to Poland.

Our analysis provided little evidence that specialization agreements have contributed to economic integration. In 103 products, the trend toward exporting a higher percentage of output or importing a larger share of consumption increased in only 11 cases after the signing of a specialization agreement. In 32 cases, it actually decreased; export and import shares frequently declined. In view of these results, it is very difficult to argue that specialization agreements have significantly contributed to economic integration in CMEA. Although in some cases the percentage of output traded or consumption imported increased after the signing of specialization agreements, trade flows fluctuated widely. Participating countries have often been quick to reduce imports or exports during periods of austerity despite the existence of agreements.

We also found that specialization agreements do not appear to have induced marked increases in the share of components in CMEA trade. They often act as a drag on technological innovation despite the technical superiority of many specialized products over the domestically produced goods they replace. Finally, specialization agreements have not contributed to the multilateralization of trade flows. Countries continue to tie trade under specialization agreements to offsetting deliveries of components or products produced by the same industry, because no effective price system has been introduced permitting trade negotiators to compare the value of products produced by one industry with those produced by another. We have concluded that specialization agreements have not been successful in achieving many of the policy goals for which they were designed.

COMPUTING TECHNOLOGIES IN EASTERN EUROPE: THE IMPACT OF REFORM ¹

By A. Tomasz Jarmoszko, Gary L. Geipel, and Seymour E. Goodman ²

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1. SUMMARY

Eastern Europe's poor performance in developing and applying computer technology—which acts as a drag on overall productivity and growth in the region—has for more than a decade fueled arguments for economic reform. Though they remain seriously deficient by Western standards, the computer industries of some East European countries are benefiting from national computerization programs, recent organizational changes, and greater involvement with the West. It is unlikely, however, that current reforms go far enough in addressing the systemic causes of the region's technological backwardness.

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2. INTRODUCTION

"The gist of perestroika is to make Soviet society safe for the scientific-technological revolution."—Silviu Brucan, former Romanian Ambassador to the United States and ex-editor of the Romanian Party newspaper.

Brucan, like a growing number of officials and intellectuals in Eastern Europe, recognizes that the success of economic reforms in the Soviet Bloc will hinge on their ability to develop and absorb modern technologies. Mikhail Gorbachev's strategy has gained a following, but it is by no means viewed as the sole path to a reformed economic system. In Romania, for example, Brucan was under house arrest when he endorsed perestroika.¹

Nowhere is the failure to promote technological development more pronounced and the need for recovery strategies more acute than in the computing technologies. While most countries of the developed world are now economic beneficiaries of the information revolution, the six East European members of CMEA (CMEA-6) continue to struggle with basic innovation and application problems. The leaderships of Eastern Europe recognize that computing development is at the same time a prerequisite for international competitiveness and a fundamental challenge to the existing economic, political and even ideological orders in their countries. This dilemma has prompted differing assessments of the severity of economic crisis and the need to contemplate change. In this paper, we explore the approaches being employed in Eastern Europe to develop and apply computing, at the domestic level as well as through regional and international cooperation.²

3. DOMESTIC POLICIES

3.1 GOALS AND STRATEGIES

The CMEA-6 countries instituted a variety of national level programs, to promote innovation, production and use of the computer-related technologies. Since the early 1970's, different programs for computerization, electronization, robotization and informatization have been announced.³ The East German leadership, for example, pursues a broad strategy of economic "intensification"—the progressive improvement of industrial efficiency and productivity—for which computing technologies are described as playing the key role. Fearing unreliable suppliers among its CMEA allies, and the effects of export controls in the West, East Germany has demonstrated an obsession with technological independence. Since the mid-1970's, it has invested more in the development of information technologies than any other East European country,⁴ in an effort to build broad capabilities in microelectronics production, hardware manufacture and software development.

¹ [Bruc88].

² This study builds on a decade-long research effort at the University of Arizona on Soviet and East European computer-related technologies. For background on CMEA integration efforts in computing technologies see [Mund81; Good82; Good85i; Good86c; Stap85b; Stap88]. For analyses of related issues in the Soviet context, see [Mche85; Good86i; Mche86i; Good87b; Stap88f].

³ [See for example: Hyno88; Onic88; Pal87b; Neps86; Szen86b; Revi86b; Vyin85].

⁴ In the current Five Year Plan, the GDR is devoting 9 percent of all state investments to the computing sector; significantly more, for example, than Czechoslovakia's 3.5 percent [Brat88b].

With virtually no technological tradition, Bulgaria has developed an electronics base that purportedly creates 18 percent of Bulgarian national income and 30 percent of all Bulgarian exports⁵—placing the country in third place globally in electronics production per capita.⁶ Whether or not these claims are true, Bulgaria clearly has made the most progress in improving its electronics industry in the last 20 years. There are several reasons for this. Unlike other CMEA-6 countries, Bulgaria did not possess a strong heavy industry sector which might have lobbied against investment in the new technologies.⁷ In addition, Bulgarian General Secretary Todor Zhivkov reportedly provided constant support to the country's budding computing industry as exemplified by the large microcomputer production complex in Zhivkov's native town of Pravets. Probably more than any other CMEA-6 country, Bulgaria also has benefited from CMEA integration, mainly through coproduction arrangements with and market access to the U.S.S.R.⁸

Poland was once at the forefront of promoting computing in CMEA but its position has clearly deteriorated. In looking for a way to "fix" a malfunctioning economic system, Poland's leaders, in the early 1970's, decided to inject a large dose of computing technology. Grandiose projects were announced and the computing industry received large amounts of money (including hard currency) to finance systems-development projects that were to create a countrywide information system.⁹ Most of these ambitious projects either never were completed or never gained the acceptance of their intended end-users. Following these disappointments, the computer industry in Poland went from riches to rags as investment capital dried up. Today, the state electronics industry constitutes only 3 percent of Polish industry, the same as 12 years ago.¹⁰

As in Poland, policymakers in Hungary recognized the potential of computing technologies early on. Unlike the Poles, however, the Hungarians have been more consistent and innovative in applying policies to promote those technologies. In addition to centrally administered programs, competitions have been announced to produce the most needed computing products—such as local area networks, teleprocessing services¹¹ and professional personal computers.¹² In response to these announcements, Hungarian firms submit descriptions of proposed projects and price bids for finished products. The most attractive bids receive state resources. Although the competitions sometimes are criticized for not being competitive enough and for fostering less-efficient domestic production when prices of the same products in the West have been declining,¹³ they also are expected to regulate and standardize the

⁵ [Prze86b.]

⁶ [Tryb87m.]

⁷ [Ivan88b.]

⁸ Over 80 percent of Bulgarian exports go to the Soviet Union [Klee88]. Of the TR25 billion planned for 1986-90 CMEA trade in computing technologies [Ekon87], Bulgarian electronics exports to the Soviet Union are expected to account for TR7 billion [Ale88].

⁹ [Bozy83.]

¹⁰ [Tygo87b.]

¹¹ [S85.]

¹² This is a term used often in Eastern Europe to describe larger microcomputers suitable for engineering applications.

¹³ [Vert87c.]

private Hungarian computing markets. For example, the competition for professional personal computers is likely to shift the production of microcomputers from some 100 small producers of often incompatible equipment¹⁴ to six firms selected for their best bids.

Romania and Czechoslovakia have been the least active in promoting computing technologies on the national level. The autarkic policies of President Nicolae Ceaucescu show no concern about the effects of falling behind. A Romanian initiative to promote computer-aided research and design (CAD) applications in industry is part of the program for the "Introduction of Technical Progress in the 1986-1990 Period," but seems to have made little progress.¹⁵ In Czechoslovakia, policy makers apparently are beginning to appreciate the dangers of continuing on the rather lethargic course they have followed. In 1987, the country's leaders allowed the formation of a high-technology production association called "Mikroelektronika"—a loose joining of some 120 enterprises involved in the research, manufacture or servicing of computer technology. The association has set high production targets for microcomputers and appears to be moving fairly quickly to improve coordination among its constituent bureaucracies.¹⁶

3.2. ORGANIZATIONAL STRUCTURES FOR COMPUTER PRODUCTION

Most of the CMEA-6 have shown a recent willingness to undertake organizational reforms in the pursuit of improved computer production. Only East Germany and Romania officially disavow a need for change.

East German computing enterprises are integrated into the country's combine system, developed in the 1970's to improve linkages between R&D organizations, manufacturers and foreign trade outlets in similar product categories. The GDR's Ministry for Electronics Technology oversees 17 combines. Those most prominently involved in computing production are Robotron, East Germany's principal computer hardware producer; Carl Zeiss Jena, which manufactures high-end microprocessors and microelectronics-production equipment, and Mikroelektronik, which produces 64K RAM chips and low-end microprocessors. Each of these combines consists of as many as 40 subsidiary firms with separate managements subordinate to the combine's general director. Research links between these subsidiaries and East Germany's major universities are common. Though benefiting from the economies of scale created by their size, East Germany's electronics combines suffer from the constraints on innovation and entrepreneurial management inherent in their hierarchical structures.¹⁷ Only recently, for example, were combine general directors given limited authority to invest the hard currency earned by their exports. They still lack genuine control over state investment in their combines, product assortment and the setting of wages and prices.¹⁸ Despite pressure

¹⁴ [Impu87.]

¹⁵ [Revi86; Revi86b.]

¹⁶ [Bula88.]

¹⁷ [Klin87.]

¹⁸ [Bayl87.]

from management ranks for greater decentralization, however, the East German Politburo clings to its attitude that the development of the combine system was all the "reform" needed in the country.

Similarly in Romania, the leadership has rejected any need for structural reform, arguing that it instituted major changes in 1978 by allowing enterprises to make their own production and sales decisions.¹⁹ Computer production in Romania remains highly centralized in the Electronic Computer Enterprise, which was established in 1972 and produces the country's outdated "Felix" line of computers. The Computer Technology Research Center, which designs computers and does some software development, and the peripheral manufacturer Feper round out Romania's "Electronics and Computer Technology Industrial Center" near Bucharest.²⁰

The remaining East European countries recently have made at least some effort to improve on existing organizational structures. Czechoslovakia's computing production takes place in two large electronics concerns and numerous smaller-scale state enterprises—including more than 60 agricultural combines.²¹ The Tesla organization, with plants throughout the country, designs and manufactures microprocessors, electronic consumer goods and telecommunications components, while the firm ZVT builds many of Czechoslovakia's finished computer systems. Though Tesla and ZVT remain highly centralized and hierarchical in structure, the country's new production organization, Mikroelektronika, operates under the oversight of the agricultural cooperative Agrokombinat Slusovice, which has earned a reputation for productivity with its profit-oriented management style and incentive systems for workers.²² Formed in 1949 as an ordinary collective farm, Slusovice evolved into a quasi-capitalistic enterprise in which some 6,500 well-paid workers raise cattle, tend corn and assemble personal computers (PC's) almost side-by-side, Slusovice manufactured its first 40 PC's in 1982, and this year is expected to produce some 20,000, making it the largest microcomputer manufacturer in Czechoslovakia.

In contrast to Czechoslovakia where the Ministry of Electrotechnical Industry still issues directive plans, Hungary has eliminated direct state supervision of the electronics branch. However, national planning and coordination in computing technologies remains the responsibility of three central organizations: the Ministry of Industry, the National Technical Development Committee (OMFB) and the National Materials and Price Office. These three cooperate in formulating and administering the competition programs discussed above. Hungary's largest state producers of computing technologies are Videoton, Orion, MEV, Medicor, BGH, and MOM.²³ In addition, the Hungarian-West German joint venture "Selectronic" is the third largest Hungarian producer (after Videoton and Orion) of applied electronics.²⁴

¹⁹ [Tag187d.]

²⁰ [Broc84.]

²¹ [Cero87.]

²² [Prik88.]

²³ [Szam87.]

²⁴ [Male88.]

An innovative type of organization in both the Polish and Hungarian computing industries is the domestic joint venture. In Poland, the "Mikrokomputery" cooperative is a venture of 15 state enterprises to produce microcomputers.²⁵ In Hungary, Ministry of Industry and OMFB have actively supported the creation of associations of key Hungarian computing enterprises to jointly take part in the competition programs. The PerComp Association, for example, created to take part in the competition for professional personal computers, is made up of six cooperatives and a trading firm.²⁶

Poland and Bulgaria recently have reorganized the central bureaucracies supervising their electronics industries. Following the example of Hungary, Poland merged four industrial ministries—including the former electronics overseer, the Ministry of Metallurgy and Machine Industry—into one Ministry of Industry.²⁷ In Bulgaria, the new Ministry of Economics and Planning is responsible for strategic management of the whole industrial economy.²⁸ Below the ministerial level, in both countries, new organizations were created to coordinate electronics production—in Bulgaria the electronics Association (EA), and in Poland the Elpol ("ELEktronika POLska") cooperative.

The Bulgarian EA functions with a novel branch and interbranch structure. The key organizations of the Bulgarian computing industry are regrouped into a number of economic trusts and combines responsible for different production tasks. To complete the research-production-marketing complex, a research institute and an investment organization are subordinated to EA as well.²⁹ Interbranch coordination is accomplished through electronization centers that are to be members of both EA and of some other branch association.³⁰ This dual membership is intended to promote more effective utilization of new technologies in all branches of the economy.

Poland's Elpol is a cooperative of some 96 electronics organizations, most of which belong to one of the three electronics associations—"Mera," "Cemi," or "Tekom." Membership is voluntary and some of the heavyweights of Polish electronics thus far have refused to join.³¹ Following the announcement of plans to set up Elpol, a heated debate ensued in Poland's media.³² Critics fear that Elpol could become a giant monopoly, with the primary function of eliciting tax breaks and subsidies. Polish reforms of the early 1980's and more recent reforms were aimed at eliminating precisely such bastions of economic power that dictated conditions of operation to the central planning bodies. The backers of the cooperative claim that Elpol will not become a monopoly, because foreign firms

²⁵ [Szac86.]

²⁶ [Sztc87c.]

²⁷ [Zyci88g.]

²⁸ [Durz88; Klee88; Cram88.]

²⁹ [Vese88; Durz87.]

³⁰ The whole Bulgarian economy has been reorganized into 10 associations of which EA is 1 [Vese88].

³¹ [Jezi87.] Despite lobbying by management, the workers' councils of Poznan's Unitra-Cemi and Wroclaw's Elwro voted down the proposals of management to enter Elpol.

³² [Zuko88; Komp88c; Bacz87; Nowa87b; Kowa87c.]

will compete with it,³³ and argue that concentration of capital is essential to successful research and development in electronics.³⁴

Many of the past reform attempts in CMEA were aimed at breaking up branch centers of economic power in order to improve innovation, product quality and the pricing mechanism, and to create at least a semblance of market-induced competition. These attempts were by and large unsuccessful in reaching their objectives. The recent organizational changes in the computing industries of CMEA point to a reemerging branch concentration, although not of a traditional, centralized, ministry-led nature. Even though in Poland and Bulgaria several industrial ministries were eliminated, new organizations emerged to coordinate the electronics branches in both countries. The creation of the Polish Elpol, the Bulgarian EA and also the Czechoslovak Mikroelektronika is indicative of industrial concentration in the computing branches. The supporters of EA and Elpol claim that the new organizations will not reemerge as ministries under a different name because they will not have enough personnel to be involved in detailed supervision of their branches. EA, for example, is limited to 70 employees.³⁵ The Hungarian experience with decentralizing reforms, however, shows that the authority of the center does not disappear easily and in fact can reemerge if persistent decentralization pressure is not applied.³⁶

The organizational changes in Poland and Hungary also imply that, at least in the electronics branches, the leaderships have for the time being given up on attempts to promote domestic competition within the state sector. The goal now seems to be to coordinate domestic production. Elpol and Mikroelektronika are likely to channel resources and to manage the supply chain for their branches. Coordination of production seems also to be the goal of the new Hungarian associations. In the strict sense, this strategy hinders a market-oriented economic interaction, because the newly formed organizations are likely to become monopolies. To keep such monopoly powers in check, the governments are likely to continue playing a major directive role in the economy.

3.3. THE PRIVATE SECTOR

In Poland and Hungary at least, officials have encouraged private computing initiatives. Private or semi-private computing firms, cooperatives or work units have proliferated in both countries in the 1980's. There are no precise statistics on the numbers of such firms, but estimates suggest several hundred exist in Poland and a couple of thousand in Hungary.³⁷ The great majority of these firms are very small, with only two to five employees and with low capital bases. They are involved primarily in microcomputer trade, software development, and computer repair and services—all of which require small initial investments.

³³ [Zyci87v.]

³⁴ [Zolk87; Sowi87.]

³⁵ [Vese88.]

³⁶ [Toke84; Mare86b.]

³⁷ There may be as many as 500 of such firms in Poland and 2,000 in Hungary.

Private firms began appearing in the early 1980's in Poland, in the form of joint ventures using the capital of Polish emigres ("Polonia" firms) and in Hungary as economic work associations (GMK's). The impetus was the very large profit margin that could be obtained on the resale of Western microcomputers. Liberal hard currency regulations, or habitual failure to enforce existing laws, made it possible for individuals to travel to the West to buy computer equipment or simply to order it via mail-order firms. With a general shortage of microcomputers and worsening economic conditions at home, both Polish and Hungarian authorities removed many of the traditional restrictions on private imports of computer equipment. As the number of suppliers grew, market economics began to take effect and prices declined substantially.³⁸

The relationship of state organizations with the private computer firms thus far has been good. State enterprises have been the primary buyers of expensive microcomputer systems in Poland.³⁹ In Hungary, the economic work associations often obtain contracts from state organizations for software development or servicing.⁴⁰ Thus far, Poland and Hungary have not needed to protect domestic state-run microcomputer industries. This, however, may change in both countries as plans are realized to increase microcomputer production by state enterprises.

To date, the remaining CMEA-6 countries have not allowed significant private-sector involvement in computing development or manufacture, but signs of change are evident. Czechoslovakia's official media have begun to discuss the importance of "individual entrepreneurship"⁴¹ and according to a Czechoslovak customs official, the country's recent removal of import duties on microcomputers is "unequivocally oriented toward as many of our people as possible getting their hands on computer technology."⁴² Whether or not this stimulates private computing ventures will depend on changes in laws regulating the establishment of private firms.

In East Germany, though the country supports a small private service sector, we have found no evidence of computing enterprises not owned by the state. Robotron, the country's largest computer manufacturer, contracts with private individuals for the writing of software, but not on a large scale. Despite the country's comparative success in computer manufacturing, personal ownership of computers in the GDR appears to be at one of the lowest levels in Eastern Europe—probably an indication of the current leadership's fear of the kinds of information access and free expression that would be made easier by widespread PC use. Outside of "showcase" stores in East Berlin, not even the simplest domestic PC's can be found for sale in substantial quantities and prices for Western-made machines such as the Commodore 64 exceed 5,000 marks, almost an annual salary for the average citizen. East Germans are allowed to receive computers as gifts from abroad, but face severe fines and jail terms for attempting to resell such gifts.⁴³ Those

³⁸ [Tomp87; Szau87.]

³⁹ [Newm87.]

⁴⁰ [Kocs85b; Vert87.]

⁴¹ [Rude88b.]

⁴² [Brat88c.]

⁴³ [Dpa88.]

East Germans who do gain access to computers as hobbyists, either privately or at one of the country's state-run computer clubs, are enthusiastic about their use; the country's relatively numerous computing journals have seen dramatic increases in their subscription rates. East German citizens who develop computer programs on their own time are free to share their work through a computer journal or through a central program archive in Dresden.

Although Bulgaria has recently allowed private taxis, restaurants and hotels, and official pronouncements speak of equality between the different sectors of the economy,⁴⁴ a significant private market in computing technologies does not yet exist there. The private import of microcomputers is not profitable, because the state industry produces a large number of fairly respectable microcomputers and because the import duty on consumer goods is set at 100 percent.⁴⁵ The existing constraints notwithstanding, it is likely that in Czechoslovakia, East Germany and Bulgaria, some private activity, probably involving software development, eventually will be allowed. The potential benefits of such activity are too great to justify current restrictions.

3.4. PROGRESS IN KEY COMPUTING TECHNOLOGIES IN THE 1980'S

Computing technologies have grown more complex and comprehensive in the 1980's. To examine, in a circumscribed way, the performance of the CMEA-6 we focus on three computing technologies that have come into prominence in the last decade: microcomputers, industrial automation, and data communications.

Globally, the most notable computing hardware development in the 1980's has been the appearance of a broad range of microcomputers, ranging from low-end machines suitable only for simple electronic games to machines based on the powerful Intel 386 microprocessor that rival minicomputers in performance. This microcomputer revolution caught most CMEA countries by surprise.⁴⁶ Domestic production in the early 1980's was miniscule. Recently, production has picked up, but it still does not begin to approach the volumes common in the West or even in the newly industrialized countries of Asia.

FIGURE 1: ANNUAL DOMESTIC MICROCOMPUTER PRODUCTION

Country	Production total	Year
Bulgaria	24,863	1987
Czechoslovakia	5,000	1986
East Germany.....	33,505	1986
Hungary	4,000-5,000	1987
Poland	3,000	1986
Romania.....	300	1985

Sources: [Pres86; Adn86c; Delo88b; Impu87; Komp87b; Stan87f.]

The interest in applying computing technologies to industrial processes was greatly intensified in CMEA in the 1970's, a likely

⁴⁴ [Cram88; Klee88.]

⁴⁵ [Zrob88.]

⁴⁶ For an indepth view of personal computing in CMEA, see [Stap8787].

result of the natural bias that Soviet-type economies have toward improving the "means of production." By 1985, some 200 robot models already were being manufactured in CMEA.⁴⁷ Several of the CMEA-6 countries have been somewhat successful introducing various CAD/CAM systems and FMSs'.⁴⁸ This is true particularly of East Germany and Bulgaria where automation efforts have been pursued most consistently.⁴⁹ However, serious problems have emerged that stem from broader systemic difficulties. Industrial automation is expensive and allows a positive return on investment only if labor is relatively expensive and gains from improved quality are significant. In CMEA, labor is fairly inexpensive, putting into question many an automation project even if product quality is improved. On an even more basic level, the financial mechanisms in CMEA do not provide for viable methods of evaluating investment. Which factory should be automated often is a political decision, on some level, leading to inefficiencies.

Of the computing technologies that came into prominence in the 1980's, data communications has received the least attention in Eastern Europe. This lack of progress is analogous to the consistent neglect of telephone network development in the CMEA countries. (See Figure 2.) Telephone lines are still of insufficient quality to support reliably even low-speed data transmission. Fiber optic lines, dedicated data networks and even local area networks are largely in experimental stages.⁵⁰

The lack of innovation push, deficient trading arrangements and the absence of financial incentives all have contributed to the poor performance of the CMEA-6 computing industries. There is, however, another reason more specific to the technologies of our focus. Computing technologies are increasingly more complex and "interdisciplinary" in their composition. The range of know-how incorporated in modern computers spans several fields, from chemicals through the intellectual output of systems analysts and programmers. In the West, the market mechanism forces producers of final products to establish horizontal links with producers of diverse inputs. In CMEA, industries are organized vertically and coordination among suppliers and manufacturers of final products has proven to be a very difficult task.

FIGURE 2: NUMBER OF TELEPHONES PER 100 INHABITANTS

Country	1975	1980	1985
Bulgaria	8.9	14.1	20.0
Czechoslovakia	17.6	20.6	22.6
East Germany	15.2	18.9	21.1
Hungary	8.9	11.8	13.4
Poland	7.5	9.5	11.8

⁴⁷ [Sido85b.]

⁴⁸ FMS—Flexible Manufacturing Systems; CAD/CAM—Computer-Aided Design/Computer-Aided Manufacturing.

⁴⁹ Bulgaria boasts of being fifth in the world in per-capita production of robots; East Germany claims that by the end of 1988 there will be 57,000 CAD/CAM workstations in operation in the country [Mitt88; Neue88b].

⁵⁰ Hungary has done the most in developing data communications technologies, as is evidenced by its circuit-switched, data network called NEDIX and several implementations of local area networks.

FIGURE 2: NUMBER OF TELEPHONES PER 100 INHABITANTS—Continued

Country	1975	1980	1985
Romania.....	5.6	7.2	13.0
U.S.S.R.....	6.6	8.9	10.2
United States.....	69.5	78.8	78.9
Japan.....	38.4	46.0	53.5

Source: [Rutk88].

4. COMPUTING TECHNOLOGIES AND CMEA INTEGRATION

CMEA integration in computer-related technologies in the 1970's was at least partially successful.⁵¹ The presence of computers and peripheral equipment from different CMEA countries in the computer centers of Eastern Europe is proof that something was done right. That is not to say that all plans were actually realized, or that the current integration framework is satisfactory. Progress in computing integration has clearly decelerated in the last several years, exposing many weaknesses of the existing CMEA structures and underscoring the need for reform.

Although the ES and the SM⁵² programs remain the backbone of CMEA ties in computing, new areas of cooperation have emerged. In this section we summarize existing CMEA arrangements and discuss new developments.

4.1 WHITHER THE ES AND SM PROGRAMS

In their initial stages, both the ES and the SM programs were modestly successful.⁵³ Throughout the 1970's and the early 1980's substantial numbers of ES mainframes and SM minicomputers were produced and distributed in Eastern Europe. One of the main reasons for this partial success was the decision to copy successful Western computer architectures. Most computers produced as part of both programs functionally duplicated or only slightly modified International Business Machines (IBM), Digital Equipment Corporation (DEC) or Hewlett-Packard (HP) architectures. Following the West in hardware not only saved development costs but also made it possible for Eastern Europe to use the large body of software available for the existing Western systems. Furthermore, adherence to Western standards made it easier to transfer technology within the Soviet Bloc and to produce compatible equipment and computers that could be traded as part of CMEA arrangements. Each East European country has focused on a subset of computing technologies, the products of which it sells to other CMEA countries. For example, Bulgaria specializes in disk memory devices; Poland in printers and teleprocessing equipment; Czechoslovakia in microelectronics components and upper-end SM computers; Hunga-

⁵¹ For a comprehensive review of CMEA integration efforts through the early 1980's see [Good84]. This section extends part of that analysis to the present.

⁵² ES stands for Unified System (Edinnaya Sistema) and SM for System of Small (Sistema Malykh) computers. Each of the CMEA-6 countries uses different acronyms for these two programs. We use the Russian acronyms, which are most commonly seen in the West.

⁵³ For comprehensive reviews of the two programs, see [Davi78] and [Hamm84].

ry in monitors and printers; and East Germany in midrange ES mainframes and microelectronics components.

After CMEA's initial successful functional duplication of IBM 360/370 architectures, the progression of the ES program toward subsequent IBM mainframe lines in the 1980's has been painfully slow. Several of the third-generation ES machines have some characteristics of the IBM 43xx line, but the vast majority of mainframes produced in CMEA is still based on technology that is around 10 years old. To be sure, some innovative developments have taken place,⁵⁴ but these were not world class innovations but for the most part corrections of existing problems.

Plagued by reliability problems, lack of peripheral devices and the slow pace of innovation, the SM program has been much less successful than its ES companion. The newest SM architectures appear to be based on the popular VAX architecture, developed by DEC. Three VAX-like machines already have been identified in CMEA⁵⁵ and their production is likely to be expanded. Still, even if series production of VAX-like computers is just under way in CMEA, that implies an 8 to 10-year lag behind the introduction of those machines in the West.

The poor progress of both ES and SM integration continued with the development of microcomputers. Despite plans to develop 40 different types of PC's under the auspices of MPKVT,⁵⁶ no joint integration program for this technology was ever articulated. All CMEA countries are producing their own, mostly IBM PC-compatible microcomputers and there is little cooperation or specialization.⁵⁷ Save for the Program to the Year 2000, an overall strategy for CMEA computing integration no longer seems to exist.

4.2 PROGRAM TO THE YEAR 2000

The Comprehensive Program for the Scientific and Technological Progress of the CMEA Countries until the Year 2000 (P-2000) attempts to address both the complexity and interbranch nature of computing technologies. P-2000 consists of five priority areas, two of which—electronization and comprehensive automation of the national economies—encompass computing technologies and one of which—new materials and technologies of their production—is related to them.⁵⁸ The program is detailed and wide ranging in its coverage. Virtually all worldwide trends in computing technologies are mentioned—supercomputing, artificial intelligence, electronic components, microcomputers, new telecommunications technologies (fiber optics, satellite communications, and digital networks), robotics and flexible manufacturing systems, software, CAD and others.

⁵⁴ For example, the operating system for the ES line has been expanded to drive a broader range of peripheral devices.

⁵⁵ The Soviet SM-1700, the Czech SM-52/12 and the East German K-1840. The K-1840 is clearly a VAX-like machine but has not been given an SM designation. See [Snyd88j] for more information on these machines.

⁵⁶ MPKVT stands for Intergovernmental Commission on Computer Technology [Ekon87].

⁵⁷ In what could be a curious ploy to hide the shortcomings of integration in personal computers, some of the CMEA-6 PC's have, in addition to their domestic names, ES or SM designations [Stap88]. The ES microcomputers are all IBM-compatible clones, implying perhaps an extension of the IBM-based ES equipment to microcomputers.

⁵⁸ [Maje86].

Although a few goals of the Program are specific,⁵⁹ most are broad and general. P-2000 is designed to focus attention on the new technologies, not to provide a full plan of action.

Specific tasks are to be designed and carried out through the established forms of CMEA cooperation and specialization—agreements, direct links and joint enterprises—and through the work of the leading organizations in each of the program's 93 "problem groups."⁶⁰ These organizations are supposed to not only coordinate work within the problem group but also to conclude contracts with CMEA firms or institutes to begin series production.⁶¹

4.3. RESULTS AND PROBLEMS

The growing media openness in the Soviet Union and other East European countries has brought many of CMEA's problems to light. Although there are reports of successful developments of individual products,⁶² the general assessment of progress on P-2000 is fairly negative. The director of research for the new materials priority area, for example, has complained that the leading organizations do not have any real means to influence manufacturers, even in the Soviet Union itself. Like many other CMEA officials, the director believes that reform is sorely needed in the organization.⁶³

Real change, however, has been very slow in coming. The 44th CMEA Session, held in July 1988 in Prague, did not significantly modify the current operating mechanism, though it promised the much needed legal and currency reforms. Only organizational tinkering has taken place. For example, a new CMEA Committee on Electronization is supposed to coordinate all 34 electronization problem areas within P-2000.⁶⁴ The Committee will take over the P-2000 work of MPKVT, will replace the CMEA Permanent Committee for Radio Engineering and Electronic Industries and will oversee the work of the CMEA Committee on Scientific and Technical Cooperation.⁶⁵

The central goal of the current reforms in CMEA is to eliminate layers of bureaucracy that coordinate economic relations among member countries. The hope is to directly link lower level organizations and thereby improve communications and increase profitability and performance. Ministries and foreign trade organizations would be significantly scaled back or eliminated.

A significant number of CMEA enterprises involved in computing have established direct links such as inter-enterprise agreements, joint enterprises and international research and production associations (MNPO's). We have identified five joint enterprises dealing with some aspect of computing technologies: a Hungarian-Soviet joint enterprise called *Internos*, to produce integrated cir-

⁵⁹ An example of a precise task is the development of a supercomputer capable of more than ten billion operations per second (MOPS).

⁶⁰ All of the leading organizations are Soviet [Maje86.]

⁶¹ [Svet86.]

⁶² [Prav87130.] For example, a computer capable of 5 MOPS, personal computers, and a programmable robot reportedly have been introduced into series production as part of P-2000.

⁶³ [Manu87.]

⁶⁴ [Przt88c.]

⁶⁵ It is not clear whether the ES and SM programs will be transferred to the new Committee or will remain as part of MPKVT.

cuits;⁶⁶ a Polish-Soviet joint enterprise called Polsib, to develop micro- and mini-computer systems and software;⁶⁷ a Hungarian-Soviet joint enterprise called Mikromed, to sell computer-based systems for medical applications;⁶⁸ a Bulgarian-Soviet joint enterprise called Avtoelek, to develop electronic systems for automobiles,⁶⁹ and an East German-Soviet joint venture Robotron and Tsentrprogrammssystem (Kalinin) for the design of software.

Five MNPO's exist with a focus on computing technologies—four with an orientation toward robotics and computer-aided manufacturing and one specializing in software development. MNPO's differ from joint enterprises in that they share no common capital; their main function is to coordinate economic activity, technological development and foreign trade.⁷⁰ Three MNPO's are Soviet-Bulgarian, one is Soviet-Czechoslovak and one, Interrobot, is international (all European CMEA countries are members, except for the GDR and Romania).

It is still too early to pass judgment on these joint undertakings. However, some problems already are apparent. The lack of an exchangeable currency, which necessitates the continuation of bilateral barter trade, is a serious constraint. Another difficulty is structural. Most Soviet organizations with rights to conduct foreign trade (there are 76 of them) are large,⁷¹ and prefer to deal with large East European firms such as Videoton or Robotron, which can usually command needed component supplies. Smaller producers suffer from such ongoing coalitions between the giants.

4.4. COMPUTING TRADE AND INTERDEPENDENCE

CMEA trade in computing technologies follows the pattern for CMEA trade generally, in its focus on the Soviet market. Seventy-two percent of ES computer trade involves the Soviet Union,⁷² which is not surprising given the size of the Soviet economy. The Soviet leadership has repeatedly pressed Eastern Europe to supply increasing quantities of high-technology products, in exchange for energy supplies the East Europeans need to survive. The Soviets eagerly purchase East European computing technologies, since similar purchases in the West or even from Asia would consume hard currency and are often limited by CoCom restrictions. East European computing firms have tried to oblige, particularly since exports to the Soviet market are often more profitable than sales at home, and since the low quality of East European computing products makes their sale in the West rare.

Intra-CMEA trade covers a broad range of computing products, from electronic components to mainframe computers. Poland chiefly sells monitors, printers, microcomputers, and teleprocessing equipment for the ES line, and its share in computing turnover within CMEA is 10 percent.⁷³ Hungary's CMEA portfolio is similar

⁶⁶ [Varg87.]

⁶⁷ [Alek88.]

⁶⁸ [Neps87.]

⁶⁹ [Przt88f.]

⁷⁰ [Przt88f.]

⁷¹ [Bacz88.]

⁷² [Racz86.]

⁷³ [Alek88.]

to Poland's, which is probably why Polish-Hungarian trade in computing products has dropped off considerably in recent years.⁷⁴ Bulgaria trades primarily in disk memory devices, microcomputers and numerically controlled (N/C) machine tools. East Germany's strengths are the ES-105x mainframe line, microelectronic components and N/C machine tools. Czechoslovakia sells microelectronic components, minicomputers and teleprocessing equipment.

Signals on trends in computing interdependence with CMEA are mixed. On the one hand, intra-CMEA trade in computer-related equipment has been growing. The value of planned CMEA turnover in these technologies for 1986-90 is TR25 billion—15 percent larger than the turnover in 1981-85.⁷⁵ On the other hand, particularly in the newer computing technologies, there seems to be an autarkic tendency for each country to develop its own capability. For example, despite past agreements on specialization and cooperation in the production of electronic components, most CMEA countries are trying to develop an indigenous capacity to produce what are often the same types of integrated circuits. As noted above, the same go-it-alone trend also has emerged in the production of microcomputers. Because of the defective CMEA trade mechanism and past experience with unfulfilled deliveries, the CMEA-6 countries apparently try not to rely too much on their partners in the Bloc.

The Soviet Union remains more interested in furthering CMEA interdependence in computing technologies than its East European partners. Figure 3 shows that the Soviets have participated in more bilateral specialization and cooperation agreements than any other East European country. All 93 leading organizations for the P-2000 problem areas are Soviet, and all of the joint enterprises and international research and production associations in computing technologies established thus far have a Soviet partner.

The dependence of the Soviets on Eastern Europe for computing technologies is more a matter of lagging production capacity than technological deficiency. Much of what is produced in Eastern Europe either is or could also be produced in the Soviet Union. Soviet industry simply has not been able to fill the country's demand for most computing technologies, and the quality of Soviet products, as compared for instance to East German products, is low. Many Soviet end-users prefer East European to Soviet-made equipment.⁷⁶

The East European countries depend on Soviet-made computing products to a much lesser degree. The most important computing items that the Soviets sell to Eastern Europe are ES mainframes and microprocessors. While those are important in computerization efforts, there are indications that Soviet supplies of ES mainframes have leveled off and that the Soviets—themselves in the midst of a major push to produce microcomputers—have not been very willing to sell microprocessors.

⁷⁴ [Smul87.]

⁷⁵ [Ekon87.]

⁷⁶ Equipment service is also a factor. Sales of computer equipment now include service contracts, and most East European computer makers maintain service networks in the Soviet Union.

FIGURE 3: COMPUTING RELATED BILATERAL SPECIALIZATION AGREEMENTS

Product	Total	BU	CZ	GC	HU	PL	RO	UR	YU
Automated production systems and robots subtotals	20	1	4	3	1	2	2	7	0
Automated production systems.....	4	0	0	1	0	1	1	1	0
Automated control equipment.....	8	0	2	0	1	1	1	3	0
Robots.....	8	1	2	2	0	0	0	3	0
Electronics subtotals	124	14	20	18	15	21	5	30	1
Microelectronics	16	1	6	3	2	0	0	4	0
Other electronics	54	5	11	7	7	13	3	7	1
Computers.....	30	5	2	6	2	4	2	9	0
Communications equipment.....	24	3	1	2	4	4	0	10	0
Optoelectronics and optical equipment.....	10	0	0	4	2	0	3	1	0
Televisions.....	15	2	4	2	2	2	0	1	2

Source: [Cran88] pp. 23-25.

5. COMPUTING TECHNOLOGIES AND EAST EUROPEAN ECONOMIC RELATIONS WITH NON-CMEA COUNTRIES

5.1. CONSTRAINTS ON NON-CMEA ECONOMIC RELATIONS

Four factors exert the strongest influence on high-technology relations between the CMEA-6 and the nonsocialist world. First, on the export side, an East European country's obligations to the Soviet Union may limit the goods it has available for sale to the West. For example, in East Germany more than 65 percent of Robotron's production is exported to other CMEA countries; even if the combine were to achieve greater competitiveness on Western markets, it would still face enormous Soviet demands in exchange for the raw materials the GDR depends on.⁷⁷ Second, the country's ability to produce needed technology domestically or obtain quality components from CMEA partners will influence its trade decisions. Third, the country's available stock of hard currency and its creditworthiness will influence its ability to purchase significant quantities of computing technology in the West. Finally, Western export control restrictions sharply limit the types of products that a CMEA country can legally purchase.⁷⁸

5.2. COMPUTING RELATIONS WITH THE DEVELOPED COUNTRIES

Recent political developments have increased the likelihood of high-technology cooperation between Eastern Europe and the West. In June 1988, CMEA and the European Community established formal relations, following several years of negotiations. Soon thereafter, most of the East European countries moved to seek bilateral relations with the EC and have expressed the desire for what a Czech commentator called "systematic economic and scientific-technical cooperation" between CMEA and the EC, "as the foundation stone for the construction of a 'common European home'."⁷⁹

⁷⁷ [Kra87.]

⁷⁸ For a review of issues in computing and export controls, see [Nrc88].

⁷⁹ [Alst88.]

The optimism notwithstanding, very little computing technology is traded between Eastern Europe and the developed Western countries. Only East Germany is making a concerted effort to develop a market in Western Europe for select information technology products. The hope of significant hard-currency revenues may have helped motivate East Germany's huge investments in computing production since the mid-1970's. Thus far, actual exports have been minimal. In IC chips, for example, the GDR typically manages to begin mass production only when Western and Asian manufacturers have already recouped their initial development costs for the same type of chip and are selling it at bargain prices. East Germany is left with the choice of running a subsidy business to generate some hard currency, or foregoing sales in the West due to its inability to compete. It has generally followed the second course.⁸⁰ A similar problem plagues sales in the West of finished systems by East Germany's Robotron. Even if the combine could divert a significant share of its production away from CMEA trade and domestic application, the price and quality of Robotron systems would render them largely uncompetitive in the West.

As a result of this recurrent lag in East German computing production, Robotron has managed to sell little more than computer printers and typewriters to the West on a regular basis. In 1987, those items accounted for most of Robotron's 25 percent increase in sales to West Germany, to about \$22 million. Due in large part to the favorable conditions under which intra-German trade is conducted, about half of Robotron's trade with the West involves the FRG.⁸¹ Still, West German officials recently have begun to express concern that the overall growth of intra-German trade will stall unless East Germany institutes reforms and adopts less orthodox credit and investment policies to halt the growing disparity in the technological capacities of the two countries.⁸²

Other East European countries have had some success in marketing software products in the West. Hungary sold a version of the Prolog programming language to the Japanese and reportedly earns more than \$13 million per year in software sales mainly to Western Europe.⁸³ Recently, the Hungarians set up two software marketing firms in the West: Proper, based in Paris and selling to all of Western Europe; and VT Computer, a joint venture between Videoton and a British firm.

Most of the East European countries have shown a considerable interest in importing computing technology from the West, though this trade has been limited by Eastern Europe's hard-currency shortage and by Western export controls. Defined broadly to include electronic measurement and control instruments, Western sales of computing technology to all of Eastern Europe amounted only to about \$410 million in 1986.⁸⁴ Nevertheless, the share of

⁸⁰ The example of the 64K RAM chip is telling. The Japanese introduced it in 1982 and sold it for \$125 per chip. The East Germans developed it by 1986 at which time the price dropped to 30 cents [Maie86].

⁸¹ It also regularly exports low-end computing items to France, Britain, the Benelux countries and Austria [Hand88; Busi87].

⁸² [Wilm88; Info88.]

⁸³ [Szak85; Tomp86; Worl88.]

⁸⁴ The authors wish to thank Leyla Woods of the U.S. Department of Commerce for access to the trade figures cited in this paragraph.

total Western exports to Eastern Europe accounted for by computing products has increased steadily, from 1.8 percent in 1980 to almost 3 percent in 1986. The chief Western exporters of high technology to Eastern Europe are West Germany, Switzerland, Japan, France and Britain. Though U.S. computing trade with Eastern Europe is not large overall, individual companies such as Honeywell, Atari and Commodore are finding CMEA markets.

5.3. JOINT VENTURES

Current interest in high-technology joint ventures with Western firms is unprecedented in most of East Europe. For example, Hungary and Czechoslovakia have adopted and Poland is considering new laws eliminating the requirement that the state retain a 51-percent share of any joint venture. Hungary and Poland may grant tax advantages to such enterprises—especially in the high-technology sectors. In Poland, joint ventures soon may no longer need to have a Polish director, and may retain their earned capital.⁸⁵ Czechoslovakia recently approved legislation liberalizing its joint venture criteria.⁸⁶

The West German government and business community are particularly interested in improving the conditions for joint ventures and trade with Eastern Europe. As a prime Western lender to Eastern Europe, the FRG has a vested interest in the region's economic health. Already Eastern Europe's largest Western trading partner by a significant margin, West Germany is moving toward even closer economic relationships. In 1987, for example, a West German bank and the Bulgarian Foreign Trade Bank established a "trade bank" to facilitate the setting up of joint ventures. The 1987 pact on scientific-technical cooperation between East and West Germany has improved the chances for significant intra-German computing ventures as well. A West Berlin-based research center already has received West German funding to design a finished Computer-Integrated Manufacturing (CIM) system, adapted to East German organizational structures, which will then be offered to firms in the FRG and GDR. Cooperation in the software field exists between researchers of at least two GDR universities and small West German computer firms.

Examples of computing joint ventures with Western firms can be found in each of the East European countries, with the exception of East Germany. For example, Britain's ICL and Polish computer and furniture manufacturers have formed a firm that will sell Polish furniture for hard currency and use the earned money to buy ICL computers for resale to Polish customers in zloty.⁸⁷ In Bulgaria, the American firm Honeywell in 1984 created a firm called Systematics to train users and service personnel in the maintenance of Honeywell process control and automation equipment, both in Bulgaria and abroad.⁸⁸ Several Hungarian-Western joint ventures exist, including a software company with Britain and a subsidiary of the West German computer giant Siemens.⁸⁹ Recent-

⁸⁵ [Luky88; Tygo87j.]

⁸⁶ [Stat88.]

⁸⁷ [Ples88b.]

⁸⁸ [Male88b.]

⁸⁹ [Loss88; Monk88; Busi88.]

ly, Hungary began a series of software R&D projects funded by the World Bank.⁹⁰ The Dutch corporation Philips set up a joint venture with the Czechoslovak Tesla to produce video recorders.⁹¹ And in Romania, the U.S. firm Control Data has since 1974 held 45 percent ownership in a joint enterprise, called ROMCDC, that produces peripheral equipment such as printers and disk drives under license.

Thus far, despite its clear interest in gaining access to Western technology, East Germany has shown little willingness to enter into joint ventures with foreign firms. Fearing undue foreign influence over its economic decisionmaking that could result from joint ventures, the East German leadership simply has sought to improve its trade ties to Western countries in the computing field. East German resistance to joint ventures likely would soften under a younger leadership less fearful of economic dependence than the current Politburo.

Significant obstacles remain in the way of joint ventures between Western computing firms and East European enterprises. From the Western perspective, the absence of a unified market or even currency convertibility in Eastern Europe makes it difficult for firms to be assured of a CMEA-wide market for goods they might produce in any one country. From the East European perspective, the fact that Western firms generally prefer hard-currency payments rather than countertrade deals in exchange for licenses limit Eastern Europe's potential for significant profits on what for the most part already are outdated technologies.⁹² That Western firms seek to maximize access to new markets in Eastern Europe while CMEA enterprises seek to maximize hard-currency earnings from sales in the West are opposing conceptions that can block joint-venture agreements from the start, or seriously disappoint their participants later.

Despite the difficulties, computing relations between the CMEA-6 and the West are likely to improve for two reasons. First, the results of CMEA integration efforts in computing, as described in Section IV, are falling well short of expectations—leading some East European countries to seek Western technology without waiting for it to be developed independently in the Soviet Bloc. Insofar as the reform efforts of individual East European countries are not uniform, they erode CMEA's ability to carry out long-term integration plans and contribute to disputes within the organization over currency convertibility and the assignment of specific development tasks.⁹³

Second, most of the East European leaderships are realizing that their inability to obtain significant quantities of personal computers—either from domestic production or intrabloc trade—is seriously hampering efforts to streamline other industries and develop the minimal popular computer literacy needed for economic modernization. They are turning increasingly to Western suppliers. Czechoslovakia's Kovo foreign trade enterprise has expressed its desire to

⁹⁰ [Worl88.]

⁹¹ Poland and Czechoslovakia had an agreement to cooperate on VCR production [Debi85] but reportedly abandoned it in favor of separate deals with Philips [Tryb.86z].

⁹² [Geip88d.]

⁹³ [Busi88.]

import as many as 90,000 IBM-compatible PC's by the end of 1989. The U.S. firm Atari has already delivered some 100,000 8-bit PC's to Eastern Europe, and recently won an order from East Germany for an unspecified number of 16-bit PC's.⁹⁴ The Commodore firm is selling an estimated 15,000 PC's to East Germany this year, and perhaps twice that number if gifts to East German citizens by their West German relatives are counted.⁹⁵

5.4. COMPUTING RELATIONS WITH NEWLY INDUSTRIALIZED AND THIRD WORLD COUNTRIES

In an apparent attempt to obtain quality computing products without the constraint of export controls, the East European countries are showing an increasing interest in purchases from emerging exporters of computing products such as South Korea, Taiwan, and Brazil. Despite the potential for political conflicts with North Korea and the People's Republic of China, several of the CMEA-6 countries were receptive in the past year to the opening of South Korean trade representations in their capitals and to a trade mission by the Taipei Computer Organization.⁹⁶ During a visit in 1988 to Brasilia, Czechoslovak Premier Lubomir Strougal discussed imports of computers from Brazil, which in recent years has developed an independent computing industry and has shown a growing interest in both the Soviet and East European markets.⁹⁷

Eastern Europe's computing trade with the Third World remains minimal, since the CMEA countries generally do not have surpluses of high-technology goods that are not already allocated to intra-bloc trade or domestic modernization. Cuba purportedly sells IC chips to Eastern Europe—some 1 million to East Germany alone in the past several years—but it is not known to what use these circuits are put, other than to fuel rhetoric on socialist integration.⁹⁸ Several East European countries also have signed computing research pacts with Third World partners, though again their purpose is largely symbolic.

6. TRENDS AND PROSPECTS

The development and implementation of computing technologies is and will remain one of the highest economic priorities of the East European countries. Most of the CMEA-6 governments have focused large human and material investments on the computing sector, in an effort to secure the increased managerial efficiency and industrial productivity that automation can bring. Thus far, some results of these investments could be judged modestly successful, but most have missed the goal of catching up with the developed world or even of not falling further behind. The quality and quantity of CMEA computing devices lag Western levels by between 5 and 15 years, a condition that has not changed very much in the last decade.

⁹⁴ [Busi88b.]

⁹⁵ [Econ88b.]

⁹⁶ Chin88.]

⁹⁷ [Fuji86; Bras87.]

⁹⁸ [Hava87.]

Looking to the future, improvements in computing among the CMEA-6 will hinge on several key factors closely linked to the process of reform. First, the success of the private computing sector in Poland and Hungary may have shown the rest of CMEA that private firms can contribute significantly to the technological performance of a country. Even though the private computing sector is likely to remain small in all of Eastern Europe for the foreseeable future, the appearance of private computing firms in other CMEA-6 countries can be viewed as a litmus test of reform intentions among policy makers in Eastern Europe.

Second, the recent organizational changes in the CMEA-6 point to a concentration of state-owned firms involved in computing. In Poland, Czechoslovakia, and Hungary, the conclusion seems to have been reached that production quality and quantity can be improved more quickly through vertically integrated monopolies that command significant resources than through smaller firms that establish ad-hoc horizontal links among themselves. While the concentration of resources is also a tendency in international computing markets, the danger of monopoly excesses is probably greater in CMEA than in markets open to international competition. The extent to which governmental bodies of the CMEA-6 move to control the monopoly powers of new computing conglomerates, such as Poland's Elpol or Czechoslovakia's Mikroelektronika, will be an indication of how much power the state bureaucracies can still wield following the elimination of a number of industrial ministries.

And third, political and economic conditions in Europe as a whole will exert a strong influence on the technological development of the CMEA-6. The recent Common Market-CMEA pact, reduced perceptions in Western Europe of a Soviet military threat, and the passing in Eastern Europe of a generation of leaders that feared excessive economic ties to the West all bode well for more R&D ties, computing joint ventures and trade between two halves of Europe that increasingly view themselves as having common interests. Microcomputer trade has steadily increased between East and West Europe and is likely to expand to other technologies, such as data communications. Working against this trend, however, are the competing expectations that policymakers in Eastern and Western Europe continue to have regarding cooperation, ongoing Western export controls on high-technology transfers to CMEA, and the possibility that independent movement toward integration in the Common Market (the 1992 goals) and internal trade reform in CMEA could actually increase the insulation of the two Blocs from each other.

The effect of these factors on Eastern Europe's performance in computing will be evident in several areas, to which close attention should be paid in the West: (1) The development or lack thereof in the CMEA-6 countries of computing niches in which the quality and production levels begin to approach Western norms, (2) the amount of East European computing technology that finds a market outside of CMEA, either as stand-alone products or as components in Western systems, and (3) the diffusion of computing technology in East European societies—not only to satisfy the demand for industrial automation and management information systems but also as a technology accessible to private citizens.

REFERENCES

- [Adn86c] ADN International, East Berlin (May 25, 1986).
- [Aleks88] Aleksandrowicz, Piotr, "In Midstride: Metronex Has Reached Sakhalin, Siberia, and the Transcaucasus, but the Soviet Market Is Still Waiting To Be Discovered," *Przeegląd Tygodniowy* (Warsaw) 17 (Apr. 17, 1988), p. 3.
- [Alst88] Alster, Ladislav, "Cooperation is the Foundation Stone," *Rude Pravo* (Prague) (June 11, 1988), p. 7.
- [Bacz87] Baczynski, Jerzy, "An Integrated Circuit," *Polityka* (Warsaw) 35 (Aug. 29, 1987), p. 3.
- [Bacz88] Baczynski, Jerzy, "The Top Overtook the Bottom," *Export-Import Polityka* 13 (July 1988) pp. 17-18.
- [Bay187] Baylis, Thomas A., "East Germany's Economic Model" *Current History* (November 1987), pp. 377-381, 393-394.
- [Bozy83] Bozyk, Pawel, *Dreams and Reality or the Anatomy of the Polish Crisis*, Państwowy Instytut Wydawniczy, Warsaw, 1983.
- [Bozy87] "Hungarian Interest in Brazilian Computers," *Brasil Ciencia* (Brasilia) (Apr. 11, 1987), p. 4.
- [Brat88b] "On the Development of the Czechoslovak Electrotechnical Industry," *Rude Pravo* (Prague) (Mar. 12, 1988), p. 3.
- [Brat88c] *Smena* (Bratislava) (Jan. 15, 1988), p. 1.
- [Broc84] Broczko, Peter, "Production of Mini, Microcomputers in Romania," *Szamitastechnika* (Budapest) (Mar. 4, 1984), p. 5.
- [Bruc88] Brucan, Silviu "The Independent" (London) (May 19, 1988), p. 25.
- [Bula88] Bulan, Jiri, "The Swallow Is Already Spreading Its Wings," *Obrana Lidu* (Prague) (Mar. 5, 1988), p. 4.
- [Busi87] "GDR Launches Sales Drive for its Technical Goods," *Business Eastern Europe* (May 25, 1987), p. 164.
- [Busi88] "U.S. Firms Strategy Succeeds in Hungary," *Business Eastern Europe* (Geneva) (July 18, 1988).
- [Busi88b] *Business Eastern Europe* (Geneva) (April 18, 1988), p. 126.
- [Cero87] Cerovska, Kveta, "For Accelerated Application of Electronics in the CSSR," *Svet Hospodarstvi* (Prague) (Dec. 1, 1987), p. 2.
- [Chin88] "Taiwan: Computer Group Seeks East Europe Direct Trade," *China Post* (Mar. 3, 1988), p. 7.
- [Cram88] Crampton, Richard J., "Stumbling and Dusting Off or an Attempt To Pick a Path Through the Thicket of Bulgaria's New Economic Mechanism," *Eastern European Politics and Societies*, v. 2, 2 (Spring 1988), pp. 333-395.
- [Cran88] Crane, Keith and Deborah Skoller, "Specialization Agreements in the Council for Mutual Economic Assistance," RAND Corporation Report R-3518 (February 1988).
- [Ctkr88] "L. Strougal's Interview on his Visit to Brazil," *Rude Pravo* (Prague) (May 17, 1988), pp. 1, 7.
- [Davi78] Davis, N.C. and S.E. Goodman, "The Soviet Bloc's Unified System of Computers" *Computing Surveys* (ACM) v. 10, 2 (June 1978), pp. 93-122.
- [Debi85] Debinski, Janusz, "Electronics Cooperation with Czechoslovakia," *Rzeczpospolita* (Warsaw) (October 1985), pp. 1-2.
- [Delo88b] "Production and Activities" *Robotnickesko Delo* (Jan. 27, 1988).
- [Dpa88] Deutsche Presse Agentur in German (June 14, 1988).
- [Durz87] *Durzhaven Vestnik* (Sofia) (Jan. 20, 1987), pp. 2-4.
- [Durz88] "Decree on New Ministries: Tasks, Subordinate Units," *Durzhaven Vestnik* (Sofia) (May 20, 1988), pp. 1-5.
- [Econ88] "Business This Week: Going East," *Economist* (Apr. 2, 1988), p. 53.
- [Ekon87] "On the Path of Electrization," *Ekonomicheskoye Sotrudnichestvo Stran-Chlenov SEV* (Moscow) 1 (1987), pp. 40-43.
- [Fron88] Fronczak, Krzysztof, "Technology Worthy of a Medal" *Zycie Gospodarcze* 16 (Apr. 17, 1988), p. 11.
- [Fuji86] Fujii, Hiroshi, "U.S. Blocks Exports to the USSR," *Data News* (Nov. 25, 1986), pp. 20-22.
- [Geip88d] Geipel, Gary, "Conference on International Information Flows Between Eastern and Western Europe," Amoldshain, West Germany (February 1988).
- [Good82] Goodman, S.E., "The Partial Integration of the CEMA Computer Industries," Report 624-13b, The National Council for Soviet and East European Research, Washington, D.C. Aug. 16, 1982.
- [Good84] Goodman, S.E., "Socialist Technological Integration: The Case of the East European Computer Industries," *The Information Society* v. 3, 1 (1984), pp. 39-89.

- [Good85i] Goodman, S.E., "Core High Technology Industries in the USSR and Eastern Europe," in *Adaptability to New Technologies of the USSR and East European Countries: Colloquium 1985*, Philip Joseph, ed., NATO, Brussels, 1985, pp. 123-133.
- [Good86c] Goodman, Seymour E., "The Partial Integration of the CEMA Computer Industries: An Overview," in *East European Economies: Slow Growth in the 1980s. Volume 2. Foreign Trade and International Finance*, John P. Hardt and Richard F. Kaufman, eds., Joint Economic Committee, Congress of the U.S., U.S. Govt. Printing Office, Washington, D.C. March 28, 1986, pp. 329-354.
- [Good86i] Goodman, S.E., and W.K. McHenry, "Computing in the USSR: Recent Progress and Policies," *Soviet Economy* v. 2, 4 (Oct.-Dec. 1986), pp. 327-354.
- [Good87b] Goodman, S.E., "The Information Technologies and Soviet Society: Problems and Prospects," *IEEE Transactions on Systems, Man, and Cybernetics* v. SMC-17, 4 (July-August 1987), pp. 529-552.
- [Hamm84] Hammer, C., A.G. Dale, M.B. Feldman, S.E. Goodman, W.K. McHenry, J. Schwartz, S.T. Walker and S. Winograd, "Soviet Computer Science Research" FASAC-TAR-2020, Washington, D.C. July 31, 1984.
- [Hand88] "Robotron Makes Presentation at Hannover Fair in FRG," *Handelsblatt* (Duesseldorf) (Apr. 25, 1988), p. 15.
- [Hava87] Havana Radio (July 21, 1987).
- [Hyno88] Hynowski, Bronislaw, "Informatics in 8 Years," *Przegląd Techniczny* (Warsaw) 5 (1988), p. 16.
- [Impu87] "More Services, Sixty Percent Cheaper," *Impulsus* 5 (Mar. 7, 1987), p. 12.
- [Info88] "Business Deals Concluded at Spring 1988 Leipzig Fair," *Informationen* (Bonn) (Mar. 31, 1988), pp. 6-8.
- [Ivan88b] Ivanova, Ina, "Bulgaria's Growing Technological Importance to the USSR," *Radio Free Europe Research* (July 27, 1988).
- [Jezi87] Jezioranski, Tomasz, "Arab Marriage," *Zycie Gospodarcze* 49 (Dec. 6, 1987), p. 5.
- [Klee88] Kleer, Jerzy, "Reconstruction in Bulgaria—Impeded Haste," *Polityka* (Warsaw) 7 (Feb. 13, 1988), p. 11.
- [Klin87] Klinger, Fred, "The Crisis of Progress in the GDR, Innovation Problems and Microelectronics," *Das Parlament* (Jan. 17, 1987), pp. 3-19.
- [Kocs85b] Kocsis, Kristof G., "Software Competition, SZAMALK and the SZKI Weigh it Soberly: A Small Undertaking Does Not Pay; Extra Burdens on GMK Not Advantageous for Export," *Magyar Hirlap* (Budapest) (May 4, 1985), p. 6.
- [Komp87b] "We Are Computerizing," *Komputer* (Warsaw) 9 (September 1987), p. 13.
- [Komp88c] "We Are Computerizing," *Komputer* (Warsaw) 5 (May 1988), p. 7.
- [Kowa87b] Kowalska, Marzena, "The Organized Mimicry," *Zycie Gospodarcze* 30 (July 26, 1987), pp. 1,4.
- [Kowa87c] Kowalska, Marzena, "A Good Thing—Cooperative," *Zycie Gospodarcze* 46 (Nov. 13, 1987), pp. 1,6.
- [Krak87] Krakat, Kalus, "Also the CMEA Countries Have CIM in Sight," *Compu-terwoche* (Munich) 21 (May 22, 1988), pp. 39-40, 42-43.
- [Loos88] Loos, Ludwik, "Foreign Shares in Hungary," *Trybuna Ludu* 143 (June 21, 1988), p. 7.
- [Luky88] Lukyanov, F., "Joint Enterprises—1988," *Izvestiya* (May 5, 1988), p. 5.
- [Maie86] Maier, Harry, "Big Brother Is Not a Model—the GDR Leadership Intends to Master the Economic Crisis Without Basic Change," *Die Zeit* (Hamburg) v. 41, 49 (Nov. 28, 1986), pp. 25-26.
- [Maje86] Matejka, Karel, "A Critical Task for Us: Comprehensive Program for R&D Progress for the CEMA," *Hospodarske Noviny* (Prague) 26 (1986), pp. 1,4.
- [Male88] Malecki, Marian, "Foreign Capital, Part I," *Przegląd Techniczny* (Warsaw) 16 (1988), pp. 20-21.
- [Male88b] Malecki, Marian, "Foreign Capital, Part II," *Przegląd Techniczny* (Warsaw) 17 (1988), pp. 25-26.
- [Manu87] Manucharova, Ye., "Restructuring and the Economic Mechanism: Science, Industry and the Market," *Izvestiya* (June 2, 1987), p. 2.
- [Mare86b] Marer, Paul, *East-West Technology Transfer. Study of Hungary 1968-1984*, OECD, Paris, 1986.
- [Mche85] McHenry, William K., "The Absorption of Computerized Management Information Systems in Soviet Enterprises," Ph.D. Dissertation, University of Arizona.
- [Mche86i] McHenry, W. K. and S. E. Goodman, "MIS in USSR Industrial Enterprises: The Limits of Reform from Above," *Communications of the Association for Computing Machinery* v. 29, 11 (Nov., 1986)

- [Mitt88] ADN International, East Berlin, (March 10, 1988).
- [Mlad88] "CSSR: Computer Imports from Brazil Planned," *Mlada Fronta* (Mar. 11, 1988), p. 3.
- [Monk88] Monkiewicz, Jan, "Transborder Data Flows In East-West Relations," Section 3, Proceedings of a Conference on International Information Flows Between Eastern and Western Europe: Towards Confidence, Mutual Understanding and Cooperation, Arnoldshain, West Germany (February 1988).
- [Mund81] Mundie, D. A. and S. E. Goodman, "The Integration of the COMECON Computer Industries: Selected Semi-Technical Appendices," an intermediate report prepared for the National Council for Soviet and East European Research, Washington, D.C., July 1981.
- [Neps86] "The Use of Electronics in Hungary Will Be Accelerated—Press Conference of the National Technological Development Commission in Parliament," *Nepszabadsag* (Budapest) (May 16, 1986), p. 5.
- [Neps87] "First Mikromed Products Sent to Moscow," *Nepszabadsag* (Budapest) (July 30, 1987), p. 5.
- [Neue88b] "Report of the State Central Administration for Statistics on the Implementation of the 1988 National Economic Plan During the First Half of the Year," *Neues Deutschland* (East Berlin) (July 15, 1988), pp. 3-6.
- [Newm87] "High Tech Leak: Astute Poles Purchase Capitalist Computers, Sell Them to the State," *Washington Post* (January 7, 1987).
- [Nowa87b] "I Have Doubts," *Przegląd Techniczny* (Warsaw) 48 (1987), p. 8.
- [Nrc88] Committee to Study International Developments in Computer Science and Technology, National Research Council, National Academy of Sciences, "Global Trends in Computer Technology and Their Impact on Export Control," forthcoming.
- [Onic88] Onichimowski, Grzegorz, "Computer—All the Best to You!," *Bajtek* (Warsaw) 2 (1988), p. 4.
- [Pal87b] Pal, Laszlo, "Electronization of the National Economy of Hungary," *Ekonomicheskoye Sotrudnichestvo Stran-Chlenov SEV* (Moscow) 5 (1987), pp. 19-24.
- [Ples88b] Plesinski, Krzysztof, "'Furnel'," *Zycie Gospodarcze* 10 (Mar. 6, 1988), p. 7.
- [Prav87b] "The Community: a Green Light to Priorities—the Comprehension Program: Success, Problems, Inquiry," *Pravda* (Nov. 30, 1987), p. 5.
- [Pres86] "The Combines—Mainstay of the Socialist Planned Economy," *Presse-Informationen* (East Berlin) 47 (Apr. 24, 1986).
- [Prik88] Prikzsky, Vratislav, *Nase Cesta* (Slusovice) (Feb. 3, 1988), pp. 4, 5.
- [Prze86b] Przeczek, Michal, "Modern Technology the Spring of Progress," *Trybuna Ludu* 206 (Sep. 4, 1986), p. 2.
- [Przt87d] "Effects, Defects," *Przegląd Techniczny* (Warsaw) 21 (1987), p. 2.
- [Przt88c] "Electronization," *Przegląd Techniczny* (Warsaw) 16 (1988), p. 23.
- [Racz86] Racz, Margit, "On the Intra-CMEA Relations of Some Hungarian Manufacturers of Electronics-Intensive Products," in *The Hungarian Enterprise in the Context of Intra-CMEA Relations*, Andras Inotai, ed. (Budapest) (1986), pp. 69-78.
- [Revi86] Badea-Dinca, Nicolae, Tibuleac, Dumitru, "Wide Access to the Achievements of Science and Technology Through Data Processing: Computer-Aided Research and Design," *Revista Economica* (Bucharest) 24 (June 13, 1986), pp. 10-11.
- [Revi86b] Stanciu, Lucia, Vlad, Luminita, "Computer-Assisted Research and Design, Instrument for Introducing Technological Progress," *Revista Economica* (Bucharest) 46 (Nov. 14, 1986), pp. 161-167.
- [Rude88b] Marek, Vaclav, "Is Individual Entrepreneurship Impeded Only by Regulations?," *Rude Pravo* (Prague) (Apr. 15, 1988), p. 3.
- [Rutk88] Rutkowski, Jerzy, "World Telecommunications on the Doorstep of the XXI Century," *Przegląd Telekomunikacyjny* (Warsaw) 3 (1988), pp. 76-81.
- [S85] S., A. C., "OMFB Competition Evaluation; Who Will Get Support?," *Szamitastechnika* (Budapest) (Oct. 1985), p. 3.
- [Sido85b] Sidorov, Ivan, "Serving Industrial Robotics," *Ekonomicheskoye Sotrudnichestvo Stran-Chlenov SEV* (Moscow) 2 (Jan. 22, 1985), pp. 22-24.
- [Smul87] Smulska, Grazyna, "In the Mirror of the Trade Fair," *Zycie Gospodarcze* 23 (June 7, 1987), p. 13.
- [Snyd88j] Snyder, Joel M., "East European Attempts to Clone the VAX," University of Arizona MIS Department Working Paper CMI-WPS-88-10, (Tucson, Arizona) (September 1988).
- [Sowi87] "Integration of Electronics," *Trybuna Ludu* 278 (Nov. 27, 1987), p. 7.

- [Stan87] Stan, Anghel, "The Romanian Electronic Industry," *Revista Economica* (Bucharest) 42 (Oct. 17, 1986), pp. 9,16.
- [Stap85b] Stapleton, Ross Alan, Seymour Goodman, "Microcomputing in the Soviet Union and Eastern Europe," *Abacus* (NY) v. 3, 1 (Fall 1985), pp. 6-22.
- [Stap88] Stapleton, Ross Alan, "Personal Computing in the CEMA Community: A Study of International Technology Development and Management," Ph.D. Dissertation, The University of Arizona, (In Progress).
- [Stap88f] Stapleton, Ross A., Seymour E. Goodman, "The Soviet Union and the Personal Computer Revolution," Chapter 5 *The Future Information Revolution in the USSR*, Staar, Richard F., ed., Crane Russak & Company, New York, NY, 1988, pp. 61-83.
- [Stat88] U.S. Department of State, "Commercial Activities Report: Czechoslovakia" (February 1988).
- [Svet86] Svetlov, O., "The Course of Scientific-Technical Progress," *Planovoye Khozyaystvo* 3 (March 1986), pp. 46-53.
- [Szac86] Szaczkusowa, Irena, "On the Initiative of the Party," *Trybuna Ludu* 236 (Oct. 9, 1986), p. 5.
- [Szak85] Szakonyi, Peter, "Computer Technology in Future Tense," *Otlet* (Budapest) 47 (Nov. 21, 1985), p. 4.
- [Szau87] Szauer, Peter, "The PerComp Opinion," *Heti Vilaggazdasag* (Budapest) 9 (Feb. 28, 1987), pp. 4-6.
- [Szen86b] Szentgyorgyi, Zsuzsa, "Computerized Information Processing in Scientific Research," *Informacio Elektronika* (Budapest) 3 (1986), pp. 167-170.
- [Sztc87c] "PerComp Steps on the Scene," *Szamitastechnika-Computerworld* 5 (Mar. 11, 1987), pp. 1,32.
- [Tagl87d] Tagliabue, John, "Rumania, Ever the Maverick, Resists Soviet Spirit of Change," *New York Times* (Dec. 2, 1987), p. 10.
- [Toke84] Tokes, Rudolf L., "Hungarian Reform Imperatives," *Problems of Communism* (Sept.-Oct. 1984), pp. 1-23.
- [Tomp86] Tompe, Zoltan, "Nine Myths; Suppositions Concerning Software," *Heti Vilaggazdasag* (Budapest) 8 (Feb. 22, 1986), pp. 50-52.
- [Tomp87] Tompe, Zoltan, "A Simulated Market; Competition for Computer Import *Heti Vilaggazdasag* (Budapest) 9 (Feb. 28, 1987), pp. 4-6.
- [Tryb86z] A photo in *Trybuna Ludu* (Aug. 12, 1986), with a comment, p. 1.
- [Tryb87m] "Bulgarian Informatics: Computers for Each Season," *Trybuna Ludu* 73 (July 28, 1987), p. 3.
- [Tygo87b] "The Picture of the Week," *Tygodnik Powszechny* 14 (Apr. 5, 1987), p. 1.
- [Tygo87j] "The Picture of the Week," *Tygodnik Powszechny* 51-52 (Dec. 20-27, 1987), p. 1.
- [Varg87] Varga, Andras, "Intermos Microelectronics Ltd.: At First To Contract Production, Later Its Own Plant," *Figyelo* (Budapest) 12 (Jun. 18, 1987), p. 17.
- [Vert87] Vertes, Janos Ander, "How Did The Boots Get On The Table?," *Szamitastechnika-Computerworld* 7 (Apr. 8, 1987), p. 9.
- [Vert87c] Vertes, Janos Ander, "The Separate Opinion of a Vendor—I Consider the Forcing of Domestic Manufacture a Mistake" *Szamitastechnika-Computerworld* 12 (Jun. 3, 1987), p. 9.
- [Vese88] Veselov, S., "Associations Instead of Ministries," *Ekonomicheskaya Gazeta* (May 1988), p. 17.
- [Vyin85] "Long-Term Electronization Viewed," *Vyber Informaci z Organichni a Vypocetni Techniky* (Prague) 3 (1985), pp. 309-313.
- [Wilm88] Wilms, Dorothee, "Minister Concerned about GDR Economic Development," *Deutsche Presse Agentur* (June 7, 1988).
- [Worl88] "Hungary-Technology Development Project", World Bank Report, 1988.
- [Zolk87] Zolkiewicz, Jerzy, "On the Matter of 'Elpol' the Voice of the 'Middle'" *Zycie Gospodarcze* 45 (Nov. 8, 1987), p. 7.
- [Zrob88] "Korekom' Dictates the Prices," *Export-Import Polityka* 14 (July 1988), p. 19.
- [Zuko88] Zukowska, Bogda, "A Dangerously Integrated Circuit," *Export-Import Polityka* 3 (Feb. 1988), p. 19.
- [Zyci88g] "Last Week: At Home," *Zycie Gospodarcze* 10 (Mar. 6, 1988), p. 2.

IV. U.S. TRADE POLICY

OVERVIEW

By Richard F Kaufman*

In light of the formidable economic problems confronting Eastern Europe, and the rapid changes taking place in the region, what is the appropriate role for the U.S. Government? This question is explored by Stuart S. Brown and the three European authors who comment on Brown's paper.

Brown puts U.S. commercial relations with Eastern Europe in perspective by pointing out that United States East European trade is not of great consequence to the United States, totaling less than 1 percent of worldwide U.S. exports and imports. (For statistics on U.S. trade with the countries of Eastern Europe see the paper by Leyla Woods, "East European Trade With the Industrial West," in section II of this volume.) Eastern Europe does somewhat more of its hard currency trade with Western Europe than with the United States, but the amount of trade is small and in the 1980's Eastern Europe's trade with the United States, Western Europe, and the industrialized West as a whole stagnated. The trade figures reveal how marginal is the U.S. share of the East European market and how little potential leverage or influence the United States has in the region.

A premise of Brown's paper is that the United States should want to increase its trade and influence in Eastern Europe, that it has interests in helping to encourage liberalization of economic policy and greater competitiveness, and that this would likely lead to an expansion of political pluralism and democratization. He argues that favorable trends create a unique opportunity for achieving these objectives. The Soviet Union, worried about its own economic decline and those of its allies, has become more tolerant of autonomy in Eastern Europe. Several East European countries seem committed to integration with Western economies, and the realization is growing that systemic economic reform is necessary. The time is therefore right to reexamine the current U.S. policy of differentiation in the region.

Brown proposes sweeping changes in current policies and a new policy of differentiation for the 1990's. He urges that the U.S. "depoliticize" elements of its approach. U.S. commercial policies toward Eastern Europe have been employed in the past to achieve political objectives, without notable effect and sometimes counterproductively. He maintains that export controls and most-favored-nation poli-

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cies "have sowed confusion within Western as well as Eastern Europe." The restrictions of dual-use technology based on foreign policy rather than national security have been costly to the United States and a source of irritation to U.S. business. At the same time, most-favored-nation policy "poisons the East-West climate" when it is used selectively against Communist countries "and not at other nations with equally or more deplorable human rights records."

The author suggests easing up on the laws concerning unfair trade practices by centrally planned economies and he would like the United States to entertain a plan of partial debt forgiveness for Eastern Europe, similar to those being advocated for Latin America and other regions. He also recommends that both the United States and the international lending institutions liberalize credit policies toward Eastern Europe provided certain conditions are met. The United States would provide government-supported credits on liberal terms to those countries who achieve the most progress in structural and systemic reform. Influence would be exerted on the International Monetary Fund and the World Bank to substitute economic for political conditions, emphasizing increased output and longrun growth rather than reduced production and austerity.

The United States could support private enterprise in Eastern Europe by funding projects to be managed by private groups, and it could expand cultural, educational, and cultural exchanges to promote normal relations. More importantly, "resumption of U.S. Government loan guarantees would serve to reactivate many private banking channels for East Europe." But Brown cautions that expectations should be realistic. The underlying constraints on East-West trade are mostly in the East where export industries and underdeveloped and noncompetitive. Further, the Soviet Union will not relinquish its interests in the region and market principles are not likely to completely supplant central planning.

Carlo Boffito's comment emphasizes the need for Western governments to promote industrial cooperation with Eastern Europe as well as to increase the supply of credit. He notes that tensions between the state and private sectors in the region will persist for some time but that the governments themselves are inviting joint ventures with western firms. One way for the West to undermine the rigidity of the state and promote competition is to encourage industrial cooperation through such vehicles as joint ventures.

Marie Lavigne raises objections to proposals for attaching to expanded Western credits conditions related to systemic reforms. She argues that, except for Poland, Eastern Europe does not need such help. In some countries, East European banks have recently increased their bank-to-bank borrowing from the West on favorable terms. Others want to limit or avoid new borrowing.

The United States, she suggests, might better be concerned about the consequences for East-West trade of the single European market scheduled to come into being in 1992. It is maintained that the approach of the Coordinating Committee for Multilateral Export Controls (Cocom) will then become obsolete. Presumably, the more relaxed attitude toward political or national security considerations in Western Europe, where the "propensity to develop trade relations with given countries is linked with historical and

cultural reasons," will lead to pressures to drastically reduce export controls.

A single European market, Lavigne writes, will also lead to a dramatic change in the European Community's (EC) commercial policy toward the East. If the quantitative restrictions now imposed by the EC on a country-by-country basis are eliminated, fears of "commercial disarmament" in Western Europe could lead to the establishment of antidumping of the type used in the United States. It might be added that the ability of Eastern Europe to export to Western Europe may also be interfered with if the countries of Southern Europe—some of whose products compete with those of the East—are given favorable access to the unified EC market, as appears likely.

Heinrich Vogel makes several important points that reinforce Brown's call for depoliticizing commercial policy towards the East. Official propaganda in the East and political rhetoric in the West shape public opinion that profoundly effect East-West trade relations. The hostile image of Eastern Europe in the U.S. helps explain the wide swings in U.S. policy and the reluctance of the private sector to base decisions on purely commercial factors.

There is another intangible factor that influences U.S. policy. Some of the issues raised in American debates about East-West trade, Vogel states, cannot be resolved by clear evidence and thereby contribute to endless ideological arguments. Whether economic leverage can be used effectively to support foreign policy aims such as political and economic change in Eastern Europe cannot be measured or proven. The justification of denying militarily relevant technology to Eastern Europe on grounds that it will be transferred to the Soviet Union is also problematic in view of the difficulties of diffusing and absorbing such technology. These and other "bones of contention" reduce the chance for consensus.

Not everyone will agree with these assessments of U.S. policy or the reasons for depoliticizing. For example, Brown asserts that there is little hard evidence that the improved prospect of receiving most-favored-nation treatment explains relaxation of Jewish emigration from the Soviet Union during the 1970's. He suggests that the rationale for linking commercial normalization with improvement in emigration performance is flawed. Many would argue just the opposite, that the dramatic increase in Jewish emigration from the Soviet Union in the late 1980's, if not in the 1970's, is directly related to the U.S. denial of most-favored-nation treatment and the hope in Moscow that it would be extended if emigration was increased. Also, the absence of "hard evidence" about the reasons for policy changes is common in international relations and especially where the Soviet Union and other undemocratic states are concerned.

All the same, the ideas presented in this section are imaginative and thought provoking, and present useful viewpoints for considering the range of options available to policymakers.

U.S. COMMERCIAL POLICY TOWARD EASTERN EUROPE

By Stuart S. Brown*

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SUMMARY

A confluence of recent trends offers the United States a propitious opportunity to regain some influence in Eastern Europe. Among these favorable developments is an apparent relaxation by the Soviet Union in the autonomy it tolerates in Eastern Europe. An additional important factor involves the renewed emphasis in parts of Eastern Europe on expanded integration with the world economy, and an apparent willingness in some cases to embrace structural and systemic reforms that will facilitate such integration. These and other developments make it opportune for the United States to reconsider the assumptions underlying prior commercial policy initiatives toward the region and its traditional posture of differentiation among individual East European states.

This paper outlines the parameters for a viable policy of differentiation toward Eastern Europe for the 1990's. The paper begins with an overview of traditional and prospective determinants of East-West trade. This is followed by an analysis of various alternatives for U.S. export control policy and a reevaluation of its most-favored-nation status and credit policies in Eastern Europe. We then examine current changes in U.S. import legislation toward the region in the context of traditional concerns with market disruption and "unfair" trade by centrally planned economies.

In conclusion, the paper argues for depoliticizing elements of U.S. commercial policy toward Eastern Europe. In particular, U.S. policymakers need to reassess the premises underlying selective denial of most-favored-nation status as well as strategic export con-

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trol polices based on foreign policy as opposed to national security objectives. Furthermore, changes in unfair trade legislation targeted at East European modified centrally planned economies are recommended. In addition, the paper advocates that the United States apply a graduated scale of government-supported credits, extending the most liberal terms to those East European countries demonstrating greatest progress in implementing structural and systemic economic reforms. Such reforms remain the key to renewed competitiveness for Eastern Europe. The United States can support gradual progression toward export competitiveness through a realistic handling of East European debt repayments and a graduated policy of renewed lending. Moreover, placing in motion such a program likely will encourage political evolution including expanded pluralism and democratization.

U.S. commercial policy toward Eastern Europe embodies both broad American trade concerns and the unique economic, political, and strategic dimensions of East-West relations. For instance, trade with Eastern Europe can remain immune neither from a concerted effort to reduce the U.S. current account deficit nor renewed preoccupation with global competitiveness. At the same time there remains a three-pronged specificity to U.S.-Eastern European relations: (a) The use of commercial instruments to foster (discourage) favorable (adverse) political developments; (b) strategic export control policy toward Communist states; and (c) definition puzzles with alleged unfair trade practices raised by the peculiarities of centrally planned economies.

This paper explores prospects for a viable policy of differentiation vis-a-vis Eastern Europe. That is, should the United States continue to fashion a commercial policy specific to Eastern Europe including a varied posture toward individual East European countries? If so, what should the parameters be for such a policy in the 1990's? The paper is organized as follows: Section I evaluates the constraints on prospective East-West commercial expansion. In Section II we examine the rationality of a differentiated approach on technology transfer and credit policy. Section III analyzes current changes in U.S. import legislation toward centrally planned economies in the context of traditional U.S. concerns with market disruption and "unfair" trade. Finally, the case for an activist differentiated commercial policy in East Europe is sketched in Section IV.

I. TRADITIONAL AND PROSPECTIVE DETERMINANTS OF EAST-WEST TRADE

In terms of total trade turnover U.S.-East European trade is trivial, accounting for well under 1 percent of total U.S. imports and exports.¹ Although the East Europeans attach importance to the U.S. market, their predominant trading partners among the industrial market economies currently are West European.

Among the major constraints on expanded U.S.-East European commercial relations in the 1990's are the following traditional fac-

¹ For details on East-West Trade Trends, see Leyla Woods; paper in this volume.

tors: (a) The flow of official and private export credits to Eastern Europe (EE); (b) inelastic EE export supply; (c) laggard EE responsiveness to foreign market demand including deficient marketing effort and service support; (d) deficient product quality and the relatively low-price elasticity of demand for EE goods; and (e) outstanding external debt in EE. Additional constraining factors include discriminatory import protection and inadequate resolution of unfair trade disputes involving EE products, outstanding bottlenecks to expanded industrial cooperation arrangements including joint ventures, and a hardened Soviet demand for greater and superior quality EE manufactures. Furthermore, politically motivated actions involving economic sanctions or widespread controls over dual-use technology exports may well overshadow the impact of primarily economic limitations to expanded commercial intercourse.

Most of Eastern Europe continues to grapple with the legacy of a debt crisis. Besides a recession-induced decline in Western import demand and the climb in real interest rates on convertible currency-denominated paper during the early 1980's, a flawed development strategy and inappropriate sectoral investment policies explain East European indebtedness. The East sought to borrow large sums from international capital markets on favorable terms with which to purchase advanced machinery and equipment and cutting-edge technology. These imported capital inputs were to raise productivity in exportable industries whose final products could be sold in large quantities in world markets as well as within CMEA, thereby retiring debt and simultaneously placing these economies on a higher growth trajectory. The strategy's downfall reflects the persistent structural rigidities and obstacles to innovation endemic to the East European economies. Furthermore, the interbranch allocation of Western technology was often mistaken and foreign markets were lost after long delays in installing equipment. To operate the new capacity complementary, higher quality materials had to be imported given the scarcity of such items within CMEA.¹² This dependency on Western imports of technology and key components, the inability to generate timely exports of competitive manufactures owing to adverse external developments, poor investment decisions and persistent systemic deficiencies, and a gradual deterioration in East European terms of trade with the Soviet Union combined to generate a vicious cycle of balance of payments pressures and ballooning debt.

The results include lowered effective demand for Western intermediate goods and depressed growth. Meanwhile, the need to suppress domestic absorption below current output has fallen disproportionately on investment. This combined with the steady erosion of raw material and labor resources delimit the medium-term prospects for exportable production and growth.

Given this legacy, a vital parameter for expanding U.S.-East European trade will involve how forthcoming U.S. banks are in providing short- and medium-term credits. The severity of the requisite balance of payments adjustment in Eastern Europe was in no

¹² See, for example, Paul Marer, "The Economies and Trade of Eastern Europe." Discussion Paper No. 6. Indiana Center for Global Business. Indiana University, 1988, p. 36.

small part due to the sudden curtailment of credit to the entire region as it became clear that several countries were experiencing serious debt-servicing problems.² While various Western financial intermediaries have resumed lending to Eastern Europe, some on rather favorable terms, recent experience will surely dictate supreme caution on the credit front.

Besides perennial export supply obstacles and limited access to Western capital markets, short-term East European (EE) export performance depends on Western (U.S.) price and income elasticities of demand for EE goods. It is not encouraging that EE price elasticities have been estimated to average less than one, suggesting difficulty in expanding sales through price reduction.³ Although these estimates are for the 1970's, little fundamental has changed in terms of EE competitiveness in Western markets to justify a more positive assessment. If anything, EE has come under increasing pressure in its competition for the markets of the industrial market economies from certain developing countries, most notably the so-called Newly Industrializing Economies.⁴ At the same time, it faces increasing pressure to divert higher quality goods from hard currency markets to the Soviet Union at inferior terms of trade relative to the 1970's. While relaxation of discriminatory import controls combined with robust U.S. growth may alleviate some pressure, the only factor capable of significantly altering the basic equation is systemic and policy reform in East Europe.

II. U.S. POLICY TOWARD EASTERN EUROPE: GOALS AND CONCERNS

Two overriding objectives have conditioned the postwar U.S. posture toward Eastern Europe: First, successive American administrations have advocated progressive independence from Moscow and an evolution to Western-style representative government. Simultaneously, U.S. policymakers have (with varying intensity) challenged the ruling Communist parties to improve their human rights records. Second, the United States has encouraged a transition to market methods of economic coordination. The latter is presumed both to reinvigorate the forces favoring political liberalization and accelerate East European integration into the world economy. Also envisioned is progress toward bridging the systemic gaps which have impeded trade between market-type and centrally planned economies.

In general, two opposing perspectives influence the commercial strategy by which U.S. policy promotes these twin objectives. One position, which regained influence early on during the Reagan Administration, sees a Soviet stranglehold on Eastern Europe as precluding liberalization. This implied that the region and all countries within it (excepting Yugoslavia) should be treated on a par

² "The credit squeeze on Eastern Europe was comparatively more severe than that on the developing countries. Whereas Eastern Europe suffered an outright reduction in credit lines, banks continued to provide a net flow of loans to developing countries, albeit at a much slower annual rate of increase. . . ." (Analysts of the Central Intelligence Agency, "Eastern Europe Faces Up to the Debt Crisis," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*, vol. 2, pp. 155-156.

³ Jan Vanous, "Soviet and Eastern European Foreign Trade in the 1970's: A Quantitative Assessment." Joint Economic Committee, *European Economic Assessment*. Part 2, 1981, p. 706.

⁴ See, for example, Kazimierz Poznanski, *Technology, Competition, and the Soviet Bloc in the World Market*. University of California, Berkeley, 1987.

with the Soviet Union. Rekindled by the Soviet invasion of Afghanistan and martial law in Poland, this position recommends reliance on sanctions to destabilize these countries "irrespective of whether they depart from Soviet domestic patterns (as Hungary does) or from Soviet foreign policy positions (as Romania does)."⁵ However, the predominant posture toward East Europe in the postwar period remains one of differentiation. According to this perspective the United States should recognize and support progressive liberalization efforts in the economic, political, or foreign policy spheres. U.S. approval of specific developments in individual countries should be signaled through concessionary economic policies. In contrast, the United States should express its disapproval of unfavorable developments in other Eastern countries through commercial "sticks."

A. EXPORT CONTROLS: A POLICY OF DIFFERENTIATION?

Few U.S. policymakers would question imposing strict controls on exports with direct military application to East European members of the Warsaw Pact. The NATO allies concur that the Coordinating Committee on Export Control (COCOM) list should incorporate all such products and vigilant efforts be made to deter any East European nation (except possibly Yugoslavia) from acquiring such items. Hence, the following perspective probably would meet broad if not universal approval:

. . . We in the Defense Department know of no evidence that supports the view that any of the Eastern European nations can be trusted to protect United States technology from Soviet access or, for that matter, from employing it in their own military economies which are, in fact, part of the Soviet military economy. We believe, therefore, that United States strategic concerns must remain paramount. In short, we support country differentiation in terms of trade, insofar as it does not negatively impact on our defense posture.⁶

Once one considers technologies with dual use capability or remote military application the sensible policy becomes less certain. One view is that any export of goods or technology that potentially enhances the growth prospects of East European (including Warsaw Pact) nations should be controlled. This perspective fails to adopt an appropriate cost/benefit calculus: First, ignored here are the enhanced profits accruing to American business as commercial opportunities in the East multiply. Eastern Europe represents a potentially lucrative battleground for intra-advanced market economy competition for global sales, particularly in technology-intensive products and services. The proposed sale of commercial aircraft to Eastern Europe is a good example. The more this country broadens its concept of "national security" to incorporate economic prowess and vitality, the increasingly serious becomes the opportunity cost of losing markets to noneconomic objectives. This consid-

⁵ Charles Gati, "Polish Futures, Western Options." *Foreign Affairs*. Winter 1982-83, p. 305.

⁶ Talbot Lindstrom, Deputy Director, Defense Technology Security Administration, Department of Defense, in "United States Trade Relations With Eastern Europe and Yugoslavia." Hearing before the Subcommittees on Europe and the Middle East and on International Economic Policy and Trade of the Committee on Foreign Affairs, House of Representatives, on H. Con. Res. 186, Oct. 28, 1987, p. 12.

eration is strengthened where the product or technology is available from competing foreign business concerns.⁷

Second, as recent experience attests, the United States sacrifices influence when it assumes a unilateral posture on East-West relations, threatening intra-alliance cohesion. The Urengoi pipeline controversy highlights the differing perspectives among the NATO countries over the efficacy of wielding "sticks" in our relations with the East and underscores the varying intensity of commitments to East-West commercial interchange. Unilateral U.S. restrictions and extraterritoriality initiatives can incur unacceptable political and enforcement costs while impeding U.S. competitiveness. Thus, U.S. efforts to build a differentiated East European policy based on foreign policy factors contains a threat of American self-differentiation from its allies.

Third, this antitrade view exaggerates the impact of Western technology and capital equipment imports on East European economic performance. The critical advantage of imported technology is its potential to furnish key design and manufacturing know-how. For technology transfer to succeed, however, the recipient must be able to absorb, diffuse, and generate its own technological breakthroughs based on the imported technology. Neither the East European nor Soviet experience with exploiting the potential of foreign technology is particularly encouraging, especially if one realizes that from a strategic perspective the absolute impact of imported technology is less important than the evolving gap between military potential and economic results in East and West.⁸

Vitally important is whether U.S. policymakers should consider relaxing current restrictions on dual-use technology for specific East European countries. An obvious objection to a differentiated policy toward equipment and technology sales is the view that Eastern Europe represents a "conveyor belt" to the Soviet Union. From this perspective effective differentiation is self-defeating as anything sold to any member of the Warsaw Pact automatically becomes the property of other members. An alternative view is that East Europeans seeking to secure long-term access to Western (U.S.) design and technical know-how would be reluctant to risk U.S. detection of technology diversion. Besides, the Soviets might very well support such a differentiated technology policy, especially if it redounds to their advantage through the enhanced quality of East European product shipments to the U.S.S.R.⁹

The amendments to the Export Administration Act contained in the Omnibus Trade and Competitiveness Act of 1988 appear to continue the overall trend since the 1969 Export Control Act of accord-

⁷ For the relevant references see Gary K. Bertch, "U.S. Policy Governing Economic and Technological Relations With the U.S.S.R." Joint Economic Committee, *Gorbachev's Economic Plans*, vol. 2, 1987, pp. 442-43.

⁸ See Thane Gustafson, "Selling the Russians the Rope? Soviet Technology Policy and U.S. Export Controls." Rand Corp. R-2649-ARPA, April 1981.

⁹ U.S. statistics suggest that an *ad hoc* differentiation policy may already exist vis-a-vis the region as a whole as well as among individual countries. U.S. high technology exports as a percentage of total exports for all Communist countries were 4.5 percent during the 1970's in contrast to 18.7 percent for the World. Within Eastern Europe these percentages range from 2.8 and 2.9 for Poland and the GDR respectively to just over 20 percent for Hungary. (John Martens, "Quantification of Western Exports of High-Technology Products to Communist Countries," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*, vol. 2, table 10, p. 109.)

ing greater priority to export competitiveness in its conflictive relationship with national security controls.¹⁰ Previous U.S. initiatives to extend its controls from "national security" to "foreign policy" objectives appear to be moderating under the Act's enhanced provisions on foreign availability. For example, in situations where the technology is available to the East from other countries and where U.S. unilateral controls would be ineffective "a validated license for the export of such goods or technology during the period of such foreign availability" may not be required unless the President regards this as "detrimental to the national security." The legislation also provides that except for specific goods like supercomputers, nuclear equipment, and certain other technologies, permission from the United States for reexport may not be necessary for countries cooperating with the United States in maintaining export controls on such items. In response to the diversion of technology and equipment to the U.S.S.R. by Toshiba and Kongsberg, however, higher penalties for violations of controls were enacted.

B. MOST-FAVORED-NATION STATUS AND CREDITS: THE CASE FOR DIFFERENTIATION

The Jackson-Vanik and Stevenson Amendments to the 1974 Trade Act deny most-favored-nation (MFN) status, official credits and government credit and investment guarantees to countries with unduly restrictive emigration policies. Within Eastern Europe, Hungary, Romania, and Poland have received MFN on an annual waiver basis. The latter applies Column 1 of the U.S. tariff schedule to imports from such countries, while the Stevenson Amendment to the Export-Import Bank Act places a ceiling on credits to targeted countries.

Although econometric results on the impact of MFN denial are mixed, few would argue that MFN represents a principal explanatory variable in predicting the level of U.S.-East European trade.¹¹ Nevertheless, the latter has acquired symbolic significance for Eastern Europe as the most visible manifestation of U.S. trade discrimination. Although the case for MFN denial is sometimes made based on inadequate EE purchases of U.S. exports, reciprocity typically is subordinated to political considerations in U.S. policy on MFN.¹² However, the effectiveness of linking commercial normal-

¹⁰ Congressional Record, vol. 134, No. 105, July 13, 1988, pp. 5619-5622.

¹¹ An early study concluded that the more industrialized countries in Eastern Europe—e.g., Czechoslovakia and the GDR—are more affected by MFN denial than are either the remaining East European nations or the Soviet Union. (A. Malish, Jr., "An Analysis of Tariff Discrimination on Soviet and East European Trade," the *ACES Bulletin*, Spring 1973, 15, pp. 43-56. A subsequent study predicted significant losses to the region as a whole from MFN denial. (Andrew Elias and Marjory E. Searing, "A Quantitative Assessment of U.S. Constraints on Trade With Eastern Europe and the U.S.S.R.," Joint Economic Committee, *Reorientation and Commercial Relations of the Economies of Eastern Europe*.) In contrast, Brada and Wipf conclude that poor marketing by East European exporters may explain more about the latter's shares of Western markets than does MFN denial. Josef Brada and Larry J. Wipf, "Romanian Exports to Western Markets," in Brada, ed., *Quantitative and Analytical Studies in East-West Economic Relations*. Bloomington, IN, 1976. Others suggest a positive interaction between the psychological benefits from MFN status and marketing effort. (Paul Marer and Egon Neuberger, "Commercial Relations Between the United States and Eastern Europe: Options and Prospects," in *Reorientation* . . . , p. 571.)

¹² For discussions of the issues pertaining to reciprocity in East-West trade, see Edward A. Hewett, "Most-Favored-Nation Treatment in Trade Under Central Planning," *Slavic Review*, 37, No. 1 (March 1978), pp. 25-39; and Mark Z. Orr, "Eastern European Participating in the Tokyo Round of Multilateral Trade Negotiations," Joint Economic Committee, *East European Economic Assessment*, part 2, 1981, pp. 808-821.

ization with improvement in emigration performance has come under increasing scrutiny. For instance, there is little hard evidence that the improved prospect of receiving MFN treatment explains relaxation on Jewish emigration from the Soviet Union during the 1970's.¹³ Moreover, it is problematic that unilateral U.S. decisions to withhold or suspend MFN appear inconsistent with at least the spirit of U.S. participation in the General Agreement on Tariffs and Trade (GATT).¹⁴

While the economic impact of MFN status should not be exaggerated, Western credits are critical to revitalizing East-West trade in the 1990's. The paucity of new Western lending circumscribes indispensable structural change in East Europe as scarce foreign exchange is diverted to debt service. A resumption of U.S. Government loan guarantees would serve to reactivate many private banking channels for East Europe. In addition, America's disproportionate clout in the International Monetary Fund (IMF) can be exercised to influence the size and terms of conditionality in standby agreements between the Fund and East European debtors. Striking such an agreement typically serves as a "stamp of approval" for expanded private lending. Approving an extended moratorium on debt principal, stretching out interest payments and even excusing part of the interest and/or principal should not be dismissed out of hand. However, given recent experience such efforts to reverse East Europe's debt trap make sense only if the latter demonstrates tangible progress in implementing appropriate structural and systemic reforms geared to enhancing its hard currency earning potential, raising living standards, and establishing the basis for long-term growth.

Aside from Yugoslavia, over the past two decades Hungary has taken the lead in economic decentralization. Although serious impediments to competitiveness remain, a wide consensus has been forged within Hungary to further promote market forces and rely increasingly on indirect financial coordination mechanisms. While certain elements of Poland's economic reform blueprint have received widespread criticism, Solidarity's recent startling electoral success has transformed the political landscape in Poland. In contrast, Czechoslovakia, Romania, and East Germany appear reluc-

¹³ U.S. Congress, Office of Technology Assessment, *Technology and East-West Trade*. New Jersey: Allenheld, Osmun & Co. Publishers, 1981, p. 75.

¹⁴ As GATT signatories, several East European countries are granted the right to the lowest tariff rates extended to other exporters irrespective of domestic or foreign policy issues. Despite being an original GATT signatory, Czechoslovakia was denied MFN treatment in the United States 4 years after joining the GATT under the national security provision of Article XXI. The remaining Contracting Parties submitted to a mutual non-application of MFN in the two countries. Poland's accession to the GATT in 1967 raised no problems as it had long enjoyed MFN. However, Poland formally protested the U.S. decision to revoke its MFN following the delegitimation of Poland's independent trade union, Solidarity. Following Romania's and Hungary's accession to GATT in 1971 and 1973 respectively, the United States initially invoked Article XXXV, which allows two members to agree to mutual denial of MFN if one of those countries is a new signatory. Although the U.S. subsequently granted both countries MFN, this is of a conditional nature with the application annually reviewed and approved pending a satisfactory ruling on the human rights question. Since 1976 MFN renewal for Romania has been questioned due to human rights violations. Defying U.S. appeals to clean up its human rights record, Romania unilaterally suspended its MFN status in the United States in early 1988. This action has been estimated to cost Romania approximately \$200-\$300 million per year. (*Planecon Report*, vol. IV, No. 9, Mar. 4, 1988, p. 6.)

tant to consider far-reaching market-type incentives and political liberalization.¹⁵

A graduated credit policy that extends more favorable terms to those countries which have instituted the most far-reaching economic reforms would signal U.S. approval of these trends. Such a measured approach should be based on strictly commercial considerations, that is, tying the disbursement of funds to strict compliance with terms which advance competitiveness in these economies. While this course goes against the spirit of recent proposals by Senator Garn and Congressman Kemp advocating financial export control legislation, it would be consistent with what commercial banks will likely do vis-a-vis individual East European countries as they depart from a strict umbrella theory approach to East Europe.¹⁶

III. COPING WITH CENTRALLY PLANNED ECONOMIES: ARTIFICIAL PRICING AND MARKET DISRUPTION

In his testimony before a Senate subcommittee attorney Richard Cunningham asserts that the problems associated with importing from centrally planned economies (CPE's) are twofold:

- (1) . . . The risk that the nonmarket economy government may engage in deliberate and predatory practices aimed at markets or industries in the United States.
- (2) . . . The possibility that the normal operation of the nonmarket economy may confer upon its exporters certain "artificial" advantages—"artificial" in the sense that such benefits are not available to U.S. firms which must compete against imports from the nonmarket producers.¹⁷

Although predation by individual CPE countries has never been demonstrated,¹⁸ it could be argued that systemic peculiarities of CPE's such as "artificial" pricing under certain conditions can generate unusually disruptive export patterns. Whether trade with CPE's raises special welfare concerns for importing market economies is beyond the scope of this paper. However, it may help to delineate the issues on which a rigorous analysis would center:

First, irrespective of the exporter concerned, it behooves policy-makers to confront whether the antidumping, countervailing duty, or escape clauses in U.S. trade legislation are intended as crude vehicles for income redistribution (toward inefficient domestic industries) or rather as shields against broadly disruptive (and potentially welfare-reducing) import patterns. From an efficiency perspective, the United States legitimately might restrict market access to exporting countries whose economic systems can be shown to generate erratic export patterns which threaten the national interest.¹⁹

¹⁵ For a recent analysis of East European reform developments, see the United Nations Department of International Economic and Social Affairs, *World Economic Survey 1988: Current Trends and Policies in the World Economy*. New York: United Nations, 1988, Chapter VI.

¹⁶ Gabriel Eichler, "Country Risk Analysis and Bank Lending to Eastern Europe," Joint Economic Committee, *East European Economic Assessment*, part 2, 1981, p. 768.

¹⁷ Statement by Richard Cunningham in U.S. Senate Subcommittee on International Trade of the Committee on Finance. *Remedy for Artificial Pricing of Articles Produced by Nonmarket Economy Countries*. 97th Cong., 2d sess., Jan. 29, 1982, 1982, p. 52.

¹⁸ See, e.g., J. Wilczynski, 1966, "Dumping and Central Planning," *Journal of Political Economy*, 74, pp. 250-264, or J. Wilczynski, 1966, "Dumping in Trade Between Market and Centrally Planned Economies," *Economies of Planning*, 6 (No. 3), pp. 211-227.

¹⁹ Provided imports are forthcoming at a reasonably predictable pace without excessive price volatility, the principle of comparative advantage recommends that on efficiency grounds com-

Whether so restricting the access of CPE imports can be defended depends on one's notions of how these systems operate. For example, whereas exporting state foreign trade organizations seek the highest attainable price, a directive to satisfy planned export targets within strict time limits reduces their flexibility and arguably could foster pronounced price fluctuations.²⁰ Low flexibility may extend to balance of payments planning. For example, where imports occupy a central place in the matrix of intersectoral commodity flows generated by central planners, import reductions triggered by unanticipated foreign exchange shortfalls can generate unacceptable bottlenecks with costly spillover effects. A reluctance to cut imports below planned levels combined with an equally rigid balance of payments constraint and a chronic tendency to overestimate either export volume or export prices, could be problematic for market economy trading patterns.²¹

If CPE's exhibit a systematic tendency to overproject export revenue coupled with downwardly sticky import demands, a persuasive argument could be made for more stringent U.S. import restrictions. However, such a policy would have to rest on a controversial premise that CPE's exhibit a chronic "salability" or "terms of trade illusion."²² Alternatively, it would be based on assumptions about the foreign trade organization's (FTO's) objective function. For instance, if unloading physical allotments of goods at prescribed time intervals were the FTO's main directive, the resulting tendency to lower prices would arouse legitimate concern. Alternatively, at certain prices and exchange rates the granting of foreign exchange retention and direct trading rights to producing enterprises conceivably could precipitate artificially low pricing to secure hard currency. In contrast, East European preoccupation with intensive growth and the potential contribution of trade would suggest a greater sensitivity to the terms of trade or the shadow price of foreign exchange. The gradual deemphasis on quantitative targets in favor of value indices in export planning reflect this trend.

A. DUMPING

A recent study suggests a greater relative CPE vulnerability to dumping charges in the United States.²³ The authors estimate antidumping (AD) incidence indices by country groups which show the percentage value of all exports from a given country group that

petitively priced imports should be welcomed as a net resource gain to the United States. A concern with "unfair trade" should arise when goods are being imported intermittently, at unpredictable prices and solely in response to adverse conditions in the exporting or importing country. (William Ware, *The Theory of Dumping and American Commercial Policy*, 1977, Chapter 3.)

²⁰ Paul Marer, "United States Market Disruption Procedures Involving Romanian and Other CPE Products, With Policy Recommendations," in Marvin Jackson and James Woodson (eds.), *New Horizons in East-West Economic and Business Relations*. Boulder: East European Monographs, No. CLVI, 1984, p. 129.

²¹ Padma Desai and Jagdish N. Bhagwati. 1981. "Three Alternative Concepts of Foreign Exchange Difficulties." In Bhagwati, ed. *International Trade: Selected Readings*. Cambridge, MA: MIT Press.

²² Franklyn D. Holzman, "Some Systemic Factors Contributing to the Convertible Currency Shortages of Centrally Planned Economies." *American Economic Review*. Vol. 69, May 1979, pp. 76-80.

²³ Stuart S. Brown and Deborah Haas-Wilson. "Centrally Planned Economy Vulnerability to Antidumping Action," manuscript, 1989.

are subject to AD investigation during 1978–85. Considering the East Europeans and the Soviets (but excluding China), the CPE's encounter a significantly higher AD complaints incidence compared with market economies in all but 2 years (1979 and 1982) during which the differences are statistically insignificant. By 1984 and 1985 the CPE incidence of AD complaints had risen to over 20 and 15 percent respectively, a percentage far exceeding that of other exporting groups for any year during 1978–85.

The standard for dumping in market economy cases typically involves a comparison between the producer's domestic and export prices.²⁴ This procedure, which presumes organically linked domestic and foreign price structures, is untenable for CPE's which to varying degrees insulate domestic from world price movements. Thus, the convention which has been adopted in CPE cases is to rely on the prices of a "surrogate" third country to arrive at a fair value standard.

In a landmark case during the 1970's—*Electric Golf Carts From Poland*—a novel procedure was introduced for situations where no third country producer exists (USITC 1980). This test values the physical inputs entering the CPE product at the "free market" prices of a comparably developed market economy surrogate, converting the resulting sum total into dollars at the surrogate currency's exchange rate. To avoid an import duty the CPE exporter must have priced above the resulting dollar estimate.²⁵

Legislation contained in the "Omnibus Trade and Competitiveness Act of 1988" accords the constructed value test greater prominence in CPE dumping cases. Preference is to be given to the constructed value standard presumably because the latter has the advantage of incorporating the CPE's production factors into the calculation. The factors will be valued at factor prices in one or more market economy countries that are at a comparable level of development and are "significant producers of comparable merchandise." If "the available information is inadequate" for determining fair value on this basis, the administering authority is directed to turn to prices for comparable products in "one or more market economy countries that are at a level of economic development comparable to that of the nonmarket economy country . . ." (Congressional Record, H 5571). Finally, the administering authorities may suspend an investigation following CPE adoption of a volun-

²⁴ If home sales for various reasons fail to satisfy the dictum "in the ordinary course of trade" third country prices or constructed costs are employed. The 1974 Trade Act instituted a policy by which home sales judged to be "below cost" could not serve as the basis for estimating the producer's "fair price" in the foreign market.

²⁵ Although previous Commerce regulations stipulate that third countries' (domestic or export) prices are preferred to constructed value, where possible the law also requests surrogates at comparable development levels. Hence, even when third producers exist Commerce can select a nonproducing but "comparable" surrogate, valuing the CPE's physical inputs in the latter's factor prices. Alternatively, the regulations provide scope for using the domestic prices of a "non-state-controlled-economy country" at a higher development level. There have even been cases in which the otherwise appropriate surrogate was rejected because other of its exports are subsidized. In contrast, cases have arisen in which a country known to subsidize a broad range of exports (but not necessarily the one in question) nevertheless is chosen as the surrogate. In at least one such case adjustments were made to the surrogate's export prices in calculating the fair price since "the possibility exists" that the relevant item was also subsidized.

tary export restraint agreement which "will prevent the suppression of undercutting or price levels of domestic products."²⁶

These measures perpetuate and even elevate a provision which unduly aggravates the uncertainty of import-competing producers but especially CPE exporters.²⁷ Although the conceptual problems with the constructed value procedure have been presented at length elsewhere,²⁸ the central issues can be briefly summarized: First, its administration is enormously costly and depends crucially on eliciting information from would-be surrogates many of which decline to cooperate. Second, it holds the CPE hostage to cost and exchange rate fluctuations in a third country with little chance of demonstrating its actual degree of efficiency. Third, it is built on the erroneous premise of a high correlation between development levels (GNP) and individual product costs. The renewed emphasis placed on the constructed value measure as well as the alternative minimum price floor may discourage East European exporters who face formidable debt-service requirements and intense competition from the newly industrializing economies for industrial economy markets.²⁹

B. COUNTERVALUING DUTIES (CVD)

The CVD provision is intended to apply compensating duties to imports to offset alleged foreign government subsidies. It had long been conventional wisdom that Congress did not envision the law's applicability to CPE's on the grounds that the CVD statute presupposes strict separability between public and private sectors and a predominantly market allocation of resources in the exporting country.

The first attempt at invoking the CVD law against CPE's occurred with a U.S. textile industry petition against the People's Republic of China in 1983.³⁰ In a second CVD case, several U.S. steel

²⁶ In addition, while not directed at CPE's *per se*, sections in the Act on "Third-Country Dumping" and "Downstream Product Monitoring" conceivably could threaten CPE exports to the United States in the future. (Congressional Record, Vol. 134, No. 105, the July 13, 1988, p. 5572). The intention here is to impose antidumping duties on products which incorporate components imported from third countries where such components are sold "below cost." Given the complex pattern of trade among the CMEA countries at prices which deviate markedly from world market prices, it is likely that CPE exporters may confront dumping charges based on the use of alleged below-cost inputs containing components from other CMEA countries. For example, Czechoslovakia exports refined petroleum products with crude imported from the Soviet Union. What standards would be used to estimate the fair price of Soviet crude exports to Czechoslovakia or the GDR's exports of ammonia that incorporate Soviet natural gas?

²⁷ See, for example, Stuart S. Brown, "Centrally Planned Economy Export Uncertainty and U.S. Administered Protection," *Journal of Comparative Economics*, forthcoming; and Stuart S. Brown and Sinan Koont, "Optimal Foreign Trade Pricing in Centrally Planned Economies Under Endogenous Uncertainty: The Case of Dumping," *The International Trade Journal*, forthcoming.

²⁸ See, for example, Franklyn D. Holzman, "Dumping by Centrally Planned Economies: The Polish Golf Cart Case," in Padma Desai, ed., *Marxism, Central Planning and the Soviet Economy*. Cambridge, MA: MIT Press, 1983.

²⁹ Kazimierz Poznanski, "Competition Between Eastern Europe and Developing Countries in the Western Market for Manufactured Goods," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*. Vol. 2, 1986, pp. 62-90.

³⁰ The industry argued that the discrepancy between the official yuan exchange rate and the internal settlement rate (established in 1981 and later revoked) conferred a "bounty or grant" on Chinese exporters. Before the U.S. Commerce Department could rule on the CVD law's applicability to CPE's, the industry withdrew its petition in exchange for global quotas on textile imports. For a summary of this case and an econometric analysis of Chinese apparel pricing, see Stuart S. Brown, "U.S. Unfair, Trade Laws and the People's Republic of China," *Journal of World Trade*. August 1988.

firms petitioned to countervail alleged export subsidies on carbon steel wire rod from Poland and Czechoslovakia. A separate petition on potash from the U.S.S.R. and the GDR was consolidated with the steel case. Commerce ruled that, as a matter of law, subsidies cannot be found in CPE countries.³¹ After being overruled by the Court of International Trade (CIT) on July 30, 1985, Commerce appealed to the U.S. Court of Appeals for the Federal Circuit. In September 1986 the latter vacated in part and reversed in part the CIT's decision.³² Although CIT's ruling appears to preclude CVD petitions against CPE exporters in the near future, it is likely that this ruling will be reconsidered and that the statute will be invoked against CPE's at some later date.

In this writer's opinion Commerce's position (upheld by the U.S. Court of Appeals) that countervailable subsidies cannot exist in centrally planned economies, is fundamentally flawed.³³ Economic analysis and a familiarity with foreign trade organization and planning in CPE's suggest that CPE's can subsidize exports even if defining and measuring subsidization is rendered more complex by peculiar systemic features.³⁴ It is equally difficult to accept the U.S. steel industry's contention that isolating countervailable subsidies in CPE's is straightforward; the latter view presumes mistakenly that peculiarities of the CPE domestic economies "are not inextricably intertwined with" export activity.

The most credible charge lodged against Poland and Czechoslovakia in the steel CVD case involves alleged discrimination between their trade with dollar and ruble trading areas effected through differential exchange rates. In effect, the industry argued that the cross dollar-ruble exchange rate was such that exporters were induced to divert exports from CMEA trade to the United States and other Western countries.³⁵ Such arguments rest on a key

³¹ U.S. International Trade Commission, "44th Quarterly Report to the Congress and the Trade Policy Committee on Trade Between the U.S. and the Nonmarket Economy Countries During July-September 1985." Washington, DC, p. 33.

³² The CIT's ruling on the two potash cases was reversed on the grounds that the incentives given to potash exporters in the U.S.S.R. and the GDR do not constitute countervailable subsidies. The principal arguments were first, that actual traders cannot be analytically distinguished from the "state"; and second, that any economic incentives to state enterprises did not facilitate sales which otherwise would not have occurred. (*Georgetown Steel Corp. et al. v. United States*, Appeal No. 85-2805 (CAFC 1986).) Meanwhile, the Court dismissed the Czech and Polish carbon steel wire rod case because Georgetown Steel did not file a timely appeal to the CIT, so the latter lacked jurisdiction. Therefore, no attempt was made to evaluate the economic merits of the steel industry's argument.

³³ Stuart S. Brown, "Nonmarket Economies, Multiple Exchange Rates and the Countervailing Duty Law: The Case of Polish and Czech Steel". *Journal of World Trade Law*. Vol. 21, No. 6, December 1987, pp. 89-111.

³⁴ These features include the existence of multiple exchange rates—each with separate systemic functions—and an elaborate network of tax-cum-subsidies differentiated by commodity, type of transaction, and the geographical destination (source) of products. See Jozef M. van Brabant, "Exchange Rates in Eastern Europe." World Bank Staff Working Paper. Washington, DC, 1985. All of this amounts to a vector of domestic prices far removed from world market prices, albeit with considerable variation in the degree of divergence among the various East European economies. On the legal issues pertaining to the law's applicability to CPE's the reader can consult the voluminous briefs plus transcripts of the hearings for each CVD case involving the non-market economies. Also see Randall B. Marcus, "An Argument for Freer Trade: The Nonmarket Economy Problem Under the U.S. Countervailing Duty Laws." *International Law and Politics*. Vol. 17:407, 1985; and Eliza R. Patterson, "Improving GATT Rules for Nonmarket Economies." *Journal of World Trade Law*. Vol. 20, No. 2, 1986, pp. 195-201.

³⁵ This implicit cross-exchange rate was based on the official zloty (koruna) ER's with the dollar and the ruble respectively.

premise—namely, that central planners adjust cross exchange rates to affect currency-area specific real trade flows and prices. Abstracting from the fact that the alleged “subsidies” in this case largely disappear when realistic commercial exchange rates are substituted for (often arbitrary) official rates, only under exceptional circumstances if at all can CPE enterprises shift supplies from one currency region to another; and it is unlikely that exchange rate differentials would have much to do with these situations.

Despite problems with the arguments presented in the original CVD petitions directed at CPE's, U.S. policymakers should expect pressure by U.S. industry to reconsider the CVD's applicability to CPE's, especially as reforms in those countries provide greater scope for various kinds of real export subsidies. Given the complexity of these economies and the parallel difficulty of resolving trade disputes, the CVD statute potentially can have an enormously depressing effect on U.S. imports from Eastern Europe.

C. MARKET DISRUPTION

In 1974 a U.S. Senate Finance Committee report read:

The Committee recognizes that the Communist country through control of the distribution process and the prices at which articles are sold, could disrupt the domestic markets of its trading partners and thereby injure producers in those countries. In particular, exports from Communist countries could be directed so as to flood domestic markets within a shorter time period than could occur under free market conditions.³⁶

This statement capsulized concern that the CPE's had the wherewithal and intention to disrupt U.S. commodity markets with rapid and unexpected export surges. While the promulgation of Section 406 of the 1974 Trade Act was specifically associated with the granting of MFN to certain CPE's, even those countries subsequently denied MFN treatment remained subject to the law's discriminatory treatment of CPE's. Section 406 provides for relief in the form of tariffs, quotas, or emergency action by the President if CPE imports are found to be disrupting a U.S. market. Although Section 406 is distinct from the AD provision in that the former focuses on rapid increases in volume and applies to “fair” trade, the two measures now overlap; determining whether market disruption exists depends not only on volume but also the impact on prices of comparable U.S. products and “evidence of disruptive pricing practices, or other efforts to unfairly manage trade patterns.”³⁷

Perhaps the most telling evidence that the market disruption law was based on exaggerated if not groundless fears is found in the history of investigations under Section 406. Since 1974 only 11 cases of alleged market disruption have been brought against the Soviets, East Europeans, and Chinese combined. In only two of these cases were the determinations affirmative (one of which was later reversed) and there was one split decision. Only three of the investigations involved imports from Eastern Europe. This is the case despite the laxer standards necessary to prove injury in 406

³⁶ U.S. Senate, Committee on Finance, 1974, p. 210.

³⁷ Congressional Record, H 5588.

cases as compared with Section 201 of the Trade Act which applies to all imports irrespective of exporting country.³⁸

Since 1982 the U.S. International Trade Commission has applied a trade monitoring system to identify CPE imports that grew rapidly in terms of value and quantity. At the highly disaggregated seven-digit TSUSA level the fifth run of the system identified 49 import goods from the CPE's which increased in both value and quantity at least 15 percent in a 1-year span. Among these products, 38 originated in China, 5 in the Soviet Union, 2 each in Romania and East Germany, and 1 each in Poland and Bulgaria. This represented a decline from the 82 goods identified in the fourth annual run of the model.³⁹ It should be noted that many of these imports from the CPE's continue to comprise a small percentage of the total value of imports of these items from all countries. For example, in 1984 only six goods met the combined criterion of at least 1-percent penetration by U.S. imports from the CPE's and at least 10-percent penetration by worldwide U.S. imports. All six products originated from China.⁴⁰

The rapid buildup of East European debt to Western commercial banks and governments during the 1970's intensified suspicions that an avalanche of East European imports would ensue. In a 1983 Commerce Department study, Allen J. Lenz shows that of 23 major exports for both Eastern Europe and less-developed-countries (LDC's), the CMEA countries suffered market share declines in 17 while the LDCs gained shares in 16.⁴¹ Despite the superior LDC export performance, LDC debt continued to mount while Eastern Europe reduced its debt. Rather than responding to increasing debt through panicky export price cutting to increase export volume as feared, the CMEA countries reduced their external liabilities largely via a reduction in imports. It should be added, however, that the emphasis on import reduction was not entirely by choice but rather a function of such constraints on exportation as reduced investment, unavailability of quality spare parts and materials and nagging long-term obstacles to competitiveness:

. . . The trend in Eastern European exports on western markets . . . clearly contradict most of the early projections that envisioned a flooding of the West with cheap manufactured goods made by the Eastern Europeans with the help of western technology and financing. Even if there were no trade squeeze and reorientation (i.e., switch to the Soviet market), as is taking place now, Eastern Europe would be in no position to flood the western market for manufactures in the coming years.⁴²

³⁸ See Kate S. Tomlinson, "U.S. Legislative Framework for Commercial Relations With Eastern Europe," in Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*, vol. 1, pp. 565-586, 1986; and Vladimir N. Pregelj, "Normalization of U.S. Commercial Relations With Eastern Europe," in Joint Economic Committee, *East European Economic Assessment*, Part 2, for details about the differences between the market disruption clause directed exclusively against CPE's and the escape clause which applies to all products.

³⁹ For a description of the methodology of the CPE monitoring system as well as numerous tables see for example USITC, "47th Quarterly Report to the Congress and the Trade Policy Committee on Trade Between the U.S. and the Nonmarket Economy Countries During April-June 1986." USITC Publication 1893. September 1986, pp. 41-55.

⁴⁰ *Ibid.*, p. 55.

⁴¹ Allen J. Lenz, "Controlling International Debt: Implications for East-West Trade." For International Trade Administration of U.S. Department of Commerce. For delivery at a Sept. 14, 1983, symposium on "East-West Economic Relations Today and Tomorrow."

⁴² Kazimierz Poznanski, "Competition Between Eastern Europe and Developing Countries in the Western Market for Manufactured Goods," Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*. Vol. 2, 1986, p. 85.

IV. A VIABLE DIFFERENTIATION POLICY FOR EASTERN EUROPE

At this writing a confluence of favorable trends offers the United States a propitious opportunity to regain some influence in Eastern Europe.⁴³ Among these influences is an apparent relaxation by the Soviet Union in the autonomy it tolerates in Eastern Europe. On a recent visit to Yugoslavia, Gorbachev outlined what may be interpreted as a partial repudiation of the Brezhnev Doctrine; his speech called for alternative roads to socialism and the right of each socialist country to reform its system respecting its unique socioeconomic environment. The primacy attached to arresting economic decline in the Soviet Union, and a perception that declining economic fortunes and associated political instability threaten to reduce Eastern Europe to a net liability, help explain the evolving Soviet position.

In addition, despite the disappointing experience with an import-led development strategy, certain East European countries appear committed to extended integration with Western economies. Recognizing that a more comprehensive intra-CMEA integration need not be inconsistent with Western economic ties, the East Europeans generally have rejected the autarchic alternative. The latter would only widen the gap between technological levels and living standards in the two regions. More importantly, many East European observers acknowledge the inextricable connection between the failed import-led growth experiment and the deferral of comprehensive reform. Recent events in Poland, Hungary, and Bulgaria suggest a renewed commitment to pushing reform measures forward.

Given these trends, what concrete steps should the United States take in forging an effective policy toward Eastern Europe? For starters the United States must rethink its objectives in East Europe and reassess their probable impact and the limits of their realization. In particular, recent political events notwithstanding, Europe notions of sudden, dramatic change in East Europe which would alter the global balance of power must be abandoned.

A realistic framework for evaluating U.S. options starts with the recognition that the same fundamental factors restraining economic relations in the 1980's will persist into the 1990's. The bottom line is that Eastern Europe remains shackled to a mountain of debt. Without an unlikely massive infusion of Western government and commercial credits, most East European states will be forced to continue to allocate a sizable portion of their foreign exchange to debt service rather than expanding imports of capital and consumer products. In addition to debt, the underlying constraints on expanded East-West trade remain the traditional Eastern factors which limit the production of world-class quality exportables and engender inflexible reponsiveness to rapidly changing world economic conditions. The central lessons from the 1970's are that access to sophisticated Western equipment and know-how does not substitute for systemic reform in achieving long-run efficiency

⁴³ John P. Hardt and Jean F. Boone, "Poland's Renewal and U.S. Options: A Policy Reconnaissance." Report prepared for the Subcommittee on Europe and the Middle East. U.S. Government Printing Office, Washington, 1987.

gains, and that structural adjustment in response to major relative price changes cannot be delayed indefinitely. Ultimately, the major determinant of expanded East-West (U.S.) trade is an enhanced Eastern ability to generate an ever-increasing supply and variety of quality manufactures. The key to any revolution in East European competitiveness, in turn, is a willingness to implement major structural and systemic reforms.

Despite this sober assessment of the prospects for expanded trade, a reasonable scope for influence is available to U.S. policymakers provided they can avoid exaggerating the potency of American commercial instruments in inducing change in East Europe. First, to a large degree the United States should depoliticize its commercial policy. U.S. export control and most-favored-nation policies have sowed confusion within Western as well as Eastern Europe. Eastern Europe understandably rejects the premises underlying the traditional U.S. approach to restricting much dual-use technology and divergent policies within the Alliance incur sizable political costs even as broad export controls appear increasingly ineffective. Such restrictions are also an unnecessary source of irritation to U.S. business.

Meanwhile, the U.S. MFN policy—both when denied and when subject to annual waivers—poisons the East-West climate by linking commercial advantages to goals which question the right of these governments to determine their own social and political policies. While selective sanctions to express moral outrage are defensible, such policies arouse suspicion when directed only at Communist countries and not at other nations with equally or more deplorable human rights records. Less dramatic channels exist for effectively communicating American human rights concerns than the use of blunt commercial instruments.

Second, U.S. authorities should reevaluate the fairness and efficacy of other existing commercial legislation applicable to CPE exporters. Since experience has disproven the premise upon which the market disruption clause (Section 406) was approved—namely, an exaggerated CPE propensity to flood world markets—the law should be stricken from the books. The elimination of Section 406 in combination with across-the-board extension of MFN status (or at the very least to all GATT signatories) would go far in rebuilding a climate of trust between East and West without tangible harm to U.S. economic interests. The safeguard (escape) clauses in U.S. legislation plus similar measures incorporated in bilateral trade agreements and protocols of accession to GATT are sufficient to guard against rapid imports from the East. In addition, concerning the countervailing duty law's likely reactivation against CPE's in the future, a more sophisticated understanding of foreign trade planning and overall resource allocation in modified CPE's will be needed in interpreting the law's applicability on a case-by-case basis.

A viable compromise solution to the CPE dumping issue is possible which would at once alleviate the special pricing uncertainty encountered by CPE exporters and reduce the enormous administrative burden imposed on U.S. authorities by current conventions. The CPE should be permitted to price at the lowest price of any third (market) country which is neither dumping nor subsidizing

its exports in the U.S. market. In addition, provided the CPE exporter can demonstrate through an opening of its factory and books to American engineers, technicians, and accountants that its greater efficiency justifies still lower prices, U.S. authorities might determine the maximum percentage by which the CPE producer is permitted to price below the lowest market economy price without provoking dumping charges. Given the notorious quality deficiencies in CPE products, an additional discounting to reflect quality differentials should be instituted.⁴⁴ The advantage of this proposal is that it forces the East Europeans to self-differentiate on strictly commercial criteria. That is, those countries willing to open their books and factories to the largest extent will have a greater chance of demonstrating their relative efficiencies. A possible pitfall is resentment among third country competitors of what they may construe as favoritism toward CPE countries. To address such complaints it may make sense to institute an option for such countries to establish their lower costs or greater efficiency in the product, earning them the right to underprice (by an appropriate percentage) the CPE producer.

In addition, renewed attention should be accorded Hungary's claim that the breadth of its reforms—particularly as they impact exchange rates and the alignment of domestic with world prices—merit reconsideration of its status as a “state-controlled-economy country” under the antidumping law. U.S. authorities should scrutinize whether Hungary's prices are any less flexible and its (uniform) exchange rate any less realistic than those of certain LDC's facing “normal” dumping rules.

Third, farsighted U.S. observers recognize that chronic indebtedness and stagnation in East Europe contradict American interests. As Polish experience shows, a perpetuation of this situation inevitably favors domestic unrest and an eventual military crackdown, arresting the gradual opening up of these societies. Accordingly, a realistic plan of partial debt forgiveness similar to that being advocated for other regions such as Latin America should be seriously entertained. Contained debt rescheduling by the United States, the Paris Club, and other creditors remains essential to moderate the pace of repayment, thereby avoiding excessive import cutbacks and continually lowered living standards. These countries must be convinced that given the wrenching economic and political changes attending reform, substantial relief will be forthcoming on the external front to reallocate resources from debt service to structural readjustment.⁴⁵ At the same time the commitment to reform must be unswerving. No alternative program for the long-term viability of these economies exists.

Meanwhile, the United States should apply a graduated scale of government-supported credits, guarantees, and insurance, extending the most liberal terms to those countries establishing greatest

⁴⁴ This solution is preferable to the proposals of Senators Heinz and Gibbons which would have based the fair price on either the lowest average price of the “most suitable” U.S. or foreign producer in the United States or the trade weighted average of all prices of market economy exporters to the United States. Such tests would fail to grant the CPE a reasonable ability to demonstrate superior efficiencies or reduce price to reflect lower quality.

⁴⁵ See Jan Zielonka, “East-West Trade.” *The Washington Quarterly*. Vol. 11, No. 1. Winter 1988, pp. 131-150.

progress in implementing structural and systemic reforms. Such a differentiated approach to individual East European nations, which will reflect the likely posture to be adopted by U.S. commercial banks, should be pursued aggressively subject to budgetary constraints on Eximbank and CCC lending. Although these nations share a common legacy of central planning, they have distinguished themselves in nonsystemic areas including economic structure, resource endowment, and official policy. These differences, to the degree that they account for differential improvements in long run competitiveness, should be reflected in U.S. bilateral economic policy in the region.

Fourth, reasonably strict conditionality should accompany the issuance of fresh credits from the IMF and the World Bank. The United States can exploit its considerable influence in these international organizations to help establish workable standby arrangements on the following basis: (a) An avoidance of overtly political conditions; (b) an emphasis on supply-side growth-oriented rather than demand-reducing austerity measures; and (c) a sensitivity to the special institutional and social framework in which centrally planned economies operate. The United States can assume the basic posture that political liberalization is likely to follow the progressive adoption of market-type instruments; accordingly, the United States should focus on the economic conditions necessary for renewed creditworthiness and longrun growth. In addition, given the political dangers inherent in continued austerity in East Europe, the IMF must advocate more rapid growth of domestic output relative to absorption rather than an absolute decline in production. Furthermore, while encouraging a steady implementation of reform measures the IMF and World Bank should refrain from relying excessively on exchange rate, interest rate, and relative price policies which may be less appropriate to modified CPE's than to "market-type" economies.⁴⁶ Once major institutional and managerial reforms are implemented, stabilization policies that rely heavily on the price mechanism will become more effective. Finally, a major overture by the GATT to invite other East European countries to join the organization on mutually acceptable terms would do much to shore up the reputation of that institution at a time when its influence and adaptability are increasingly questioned.

Fifth, a promising approach to restoring East European competitiveness is to tie fresh credits to promising export projects. Credits could be extended on a stepwise basis in response to a demonstrated improvement in competitiveness. Successful exportation could be advanced with the help of American marketing expertise which could be marshaled to assist in locating lucrative product lines in the world market. Various conditions might be built into contracts between U.S. (Western) creditors and East European enterprises including tight restrictions on the hard currency import content of exportables and Western monitoring of enhanced energy and mate-

⁴⁶ On the difficulties of applying market-oriented stabilization measures to modified centrally planned economies, see Sherman Robinson, Laura D'Andrea Tyson, and Leyla Woods, "Conditionality and Adjustment in Socialist Economies: Hungary and Yugoslavia." Presented at a conference on "The Soviet Union and Eastern Europe in the World Economy," at the Kennan Institute, Washington, DC, Oct. 18-19, 1984.

rial efficiency. All such arrangements should be based on purely economic criteria to ensure East European states that the intention is not to supplant governmental influence. However, the United States must not return to its earlier extension of preferential incentives toward certain East European countries based on an uncritical assessment of their economic policies.⁴⁷ A policy of conditionality based on demonstrated progress in economic performance must underly future American commercial initiatives toward the region.

Meanwhile, the United States can strengthen its support of private enterprise in various ways such as the proposal for funding water projects to be managed by the Agriculture Committee of the Polish Catholic church or continue to donate surplus CCC agricultural commodities on humanitarian grounds. Furthermore, a further expansion of scientific, educational and cultural exchanges would help normalize ties between the United States and much of East Europe.

Finally, U.S. influence in restructuring the East European economies can be effective only if motivated by realistic expectations. This realism pertains both to a reassessment of Soviet interests and East European priorities. Soviet restructuring and the economic and political liberalization in progress in parts of Eastern Europe provide an advantageous setting for U.S. policy. However, although Gorbachev envisions expanded interaction among capitalist and socialist states in Europe, Moscow remains wary both of American influence and the prospect of reform fostering a gradual drift away from intra-CMEA integration.⁴⁸ Furthermore, while a consensus for economic decentralization and enhanced political pluralism in countries like Hungary and Poland has gained momentum, only time will tell whether the Communist Parties in these societies cede fundamental political power. The most expedient way for the West to foster democratization in East Europe is to direct its commercial policy toward the promotion of renewed creditworthiness and long-term competitiveness. The latter requires systemic economic reform which by its nature will encourage eventual political restructuring.⁴⁹

The limits to change extend to central planning. U.S. Government officials should refrain from tying economic concessions to demands for economic reforms that preclude a leading role for central planning. While these societies recognize the importance of redirecting central planning from detailed directives to strategic guidance, they are not bent on full-blown marketization. A realistic conditionality package will acknowledge this reality. Intellectual energy needs to be invested in fashioning schemes by which central planning can be combined symbiotically with progressive monetization and devolution of economic authority.

⁴⁷ Hardt/Boone, *op. cit.*

⁴⁸ See Karen Dawisha, "Eastern Europe and Perestroika Under Gorbachev: Options for the West," in this volume.

⁴⁹ On April 17, 1989, President Bush unveiled an aid plan for Poland acknowledging Warsaw's recent decision to allow free elections. Although we support many of Bush's specific proposals to help revitalize the Polish economy through credits and investments, we differ with Bush's apparent decision to link such concessions to political liberalization as opposed to economic reform measures *per se*.

COMMENT

By Carlo Boffito*

It is fairly obvious that in coming years the West's economic policy toward the Eastern bloc should be based on the support of economic reform in the CMEA countries. Improvement in the international political situation implies the depoliticization of East-West economic relations. Western countries should help their Eastern counterparts create conditions which would assure the expansion of international trade; specifically they should favor economic reforms which would make the economic system in socialist countries more flexible and efficient and increase the competitiveness of their exports on foreign markets. Moreover, economic reforms would hopefully provide a basis for the democratization of socialist society.

It is quite difficult to assess the progress of economic reforms, however, and considerable caution is required when expressing a positive or negative judgment on their current state. To assure the adoption of a consistent policy favoring economic reform, Western governments should consider both the nature and the possible scenarios behind these reforms. The process will certainly be long-lasting, though with periods of acceleration and slowdown, and uncertainties will emerge which will make it impossible to predict further developments.

At present, socialist governments supporting economic reforms have adopted an outlook which may be defined as "extreme illuminism." In order to work for the good of their society, they have to take action against the main components of that society: the bureaucracy and the labor force. The success of the reform movement would deprive the bureaucracy of its power and the labor force of its alleged privileges (stable consumer prices and full employment). The reason why the reformists continue to hold power in spite of limited social support is that the conservatives have failed to come up with an ideology and a policy able to assure economic growth and improve social conditions. However, the position of the latter group within the management system of the state sector is still strong, and this will continue to be the case for some time to come.

Therefore, the reforms will advance at different speeds in the two sections of the economy. Reformists will easily be able to fill the void left by the state sector through the promotion of the private and cooperative sectors. But they will encounter obstacles, which will not always be easy to overcome, in their reform of the state sector. For many years, the reformed economic system will be a dual economy composed of a market and a state sector. The coex-

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istence of these two sectors will lead to instability while hampering progress of the reform. In spite of the broader social support which will come from expansion of the reformed sector, the government will have to compromise repeatedly with the opposition.

East-West economic relations are entering a new phase, which is based on the experience gained during the two previous phases. During the *first phase*, which coincided more or less with the 1970's, European CMEA countries imported capital equipment from the West, thereby building up an enormous foreign debt. Indeed, integration of Western technology into centrally planned economies was unable to bring about a substantial increase in exports and foreign currency earnings, which was necessary to service the debt.

The *second phase* covered about three-quarters of the 1980's. At the end of the 1970's, the increasing burden of debt servicing forced Eastern European countries to reestablish a balance of payments equilibrium, following the example of the Soviet Union, which had already balanced its payments in convertible currencies during the second half of the 1970's.

However, foreign payment equilibrium was reached, in the case of the Eastern European countries, and maintained, in the case of the Soviet Union, by cutting imports and concentrating resources on the production of goods which were easily sold on Western markets (e.g., raw materials, intermediate goods, and cheap consumer goods). This commercial policy worsened the commodity structure of the CMEA countries' exports, thus making them extremely vulnerable to broad swings in the international price of primary goods.

In the *third phase* of East-West relations, which has just started, promotion of trade is now based on industrial cooperation, and more specifically joint ventures. Joint ventures should help socialist countries overcome the traditional separation between Eastern and Western businesses, learn new management skills, establish direct links with Western markets, assure continuous transfers of technology and non-debt-creating capital inflow. By reaching these goals, joint ventures should lead to an improvement in domestic supply, while simultaneously strengthening the Soviet Union's export capacity.

Given the domestic economic situation and the foreign economic policy of socialist countries as outlined above, Western governments should not confine themselves to supporting economic reforms solely through the supply of credit. Increased credit supply as such would not be consistent with the new phase of East-West relations. In fact, this has not even been requested by socialist countries, with the understandable exception of Poland which cannot normalize its foreign financial relations without multiyear restructuring by Western governments.

The recent noise on both sides of the Atlantic about increased official credits provided by Western governments to the Soviet Union is not justified. The terms of these credits are not in contradiction with OECD arrangements on export credits, although it is time to ask Soviet financial institutions to give up the practice of establishing a cosmetic interest rate which allows exporters to increase their sale price by the difference between the cosmetic and the

market rate. The Soviet Union sharply increased its debts vis-a-vis banks in 1985-87, following problems in oil exports and the drop in oil prices, but at the same time it managed to reduce its debts (calculated at constant exchange rates) towards Western governments. In 1988, on the basis of the new international political situation, the Soviet Union accepted the more stable official credit lines which will at least partially replace the debt toward banks. There is enough evidence to believe that the Soviets are still convinced that they need to increase the competitiveness of their exports before increasing their foreign debt and not vice versa.

In order to support economic reform in the Eastern bloc, foreign economic policy should favor initiatives which are better able to undermine the rigidity and cohesion of the state sector and develop competition within it. These initiatives are consistent with the new approach to East-West relations promoted in Eastern countries, since they focus on development of industrial cooperation with specific reference to joint ventures.

Although Western businessmen prefer direct investments or acquisition of companies in other countries, since 1987, attracted by the potential of the Eastern market, they have become interested in the establishment of joint ventures in socialist countries, particularly in the Soviet Union. This has been true despite operative difficulties and uncertainties, which are mainly due to the necessary developmental stages of the reform itself, and which will have to lead to changes in relative prices, wages, and the ruble's exchange rate. Moreover, conditions for the establishment of joint ventures should improve further as European CMEA countries (with the exception of the GDR) will continue to compete among themselves to attract foreign capital.

However, individual initiatives do not appear to be sufficient to overcome the institutional and political obstacles to East-West industrial cooperation, Western governments should encourage this process by adopting a set of policy measures in favor of industrial cooperation with socialist countries. The best opportunities for the development of industrial cooperation may be found in the production of consumer goods, the growth of which is a necessary condition for the success of economic reform in the Soviet Union and other socialist countries. With this objective in mind COCOM should limit controls on exports of capital equipment for joint ventures producing consumer goods, even when these undertakings incorporate technologies with dual use capacity. Western countries should allow free entry to goods produced by joint ventures. These products will respond more closely to the requirements of competition, and it will be easier to test if joint ventures are following practices that imply market disruption. Finally, Western governments should come up with financial schemes that are specially designed to support industrial cooperation and joint ventures, banks would follow suit providing more and more credits to individual companies and projects and less and less to governments and state organizations.

COMMENT

By Marie Lavigne*

What are the prospects for East-West trade in the nineties and what commercial policy should be conducted on the Western side? U.S. Western European views are bound to differ, if not on the first point, then surely on the second, but only exactly for the same reasons as in the early eighties. At that time, political and economic focus was on the U.S.S.R. The Soviet Union was the most attractive partner of the West, as its trade with the West went on expanding, though at a slow pace, during the years (1981-83) when trade with Eastern Europe collapsed. It was also the bone of contention between the U.S.A. and their European allies in the political field: the "sanctions dispute" illustrated by the pipeline crisis in 1982 highlighted the divergences.

In the end of the eighties, while the political image of the U.S.S.R. recovered perhaps even more dramatically in the United States than in Europe due to the charisma of Gorbachev, the growing concern about the Soviet economy's ability to export and hence to import enhances the attractiveness of Eastern Europe. From 1983 to 1987 the share of Eastern Europe went up from 35 percent to 45 percent of East-West trade. True, the share of Eastern Europe in total trade of the West remains low: 1 percent for the OECD countries taken together, 1.2 (exports) and 1.3 (imports) for the EEC countries, 0.3 (exports) and 0.4 (imports) for the U.S.A. in 1987. The significance of exports to Eastern Europe for the national economies of the West is both very small, and very different for the U.S.A. and Western Europe: the share of these exports in the gross domestic product amounts to 0.33 percent for Western Europe in 1986 (down from the highest point reached in 1975, 0.64), and to 0.02 percent for the United States (down from 0.06 in 1975).¹

Bearing these changes in mind, and in view of the modest but significant improvement in East European-West trade in 1987 and beginning of 1988,² one cannot but agree with the analysis of the determinant of East-West trade given by Brown. One might, however, challenge his assumption of "an increasing pressure (on Eastern Europe) to divert higher quality goods from hard currency markets to the Soviet Union at inferior terms of trade relative to the 1970's." The pressure exists but is growingly weakened for political reasons and also as a result of the fall in *intra-CMEA* prices for oil in 1987, this fall bringing about an *improvement* in East European

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¹ OECD data, quoted from Anita Tiraspolaky, "Le Commerce EstQuest: des espoirs & concretiser," *Le Courrier des Pays de l'Est*, 1988, No. 333, October 1988, p. 42; Jan Stankovsky, "East-West Trade 1987-1989: Slight Improvement in Sight" (Developments in 1987 and Prospects for 1988/89), *WIIW Forschungsberichte*, No. 150, October 1988, table 30.

² See *Economic Bulletin for Europe*, vol. 40, 1988, p. 19.

terms of trade with the U.S.S.R. Under the general heading of *differentiation*, Brown first looks at the export control and credit policies of the West; then he analyzes commercial policy issues proper, MFN status belonging to the first heading, which is by itself a significant difference of approach between the U.S.A. and the West.

The issue of *differentiation* is not evaluated alike in the U.S.A. and in Western Europe, and one could hardly apply the concept to relations of Western European states with individual Eastern European countries. Political or national security considerations are hardly relevant, except in crisis situations such as the Polish one in 1981–82. The propensity to develop trade relations with given countries is linked with historical and cultural reasons (examples; France and Poland or Romania; Austria and Hungary, Czechoslovakia; FRG and GDR), and cemented by economic opportunities. The decrease of trade with Romania is much more due to the Romanian policy of reimbursing debt through import cuts than to Western European reaction to violations of human rights in that country.

While the notion of *security interests* of each of the Western nations in East-West trade has been reasserted in the Summit meeting of the G7 in Toronto (June 1988), Western European governments (and Japan) are favoring a greater relaxation of Cocom controls than what the U.S. Government is ready to accept, as the meeting of the Cocom in Paris at the end of October 1988 has shown. But the main issue in the long term—not mentioned at all in Brown's article—is the impact of the single European market on Cocom operation after 1992. The whole Cocom format, based upon national enforcement of export controls, is to become obsolete. Will Cocom turn into a trilateral organization—with the U.S.A., the EC, and Japan as members? An informal meeting of the foreign affairs ministers of the EC in Greece at the end of October (*Financial Times*, Oct. 17, 1988) showed that no unified view emerged on sensitive issues of East-West trade. In addition, the EC Commission and the national governments may have different approaches. In any case, it is impossible to say now how the Cocom might be managed from 1993 on.

The issue of *credits* is linked with the soundings of "a Marshall Plan" for Eastern Europe which have been heard in 1988. In fact, the concept is still very vague, and the beneficiaries of such a "Plan," as well as its mechanisms, have never been precisely stated. One may identify it with a willingness to expand lending to Eastern Europe (with differentiation among countries) under the condition that these countries implement "appropriate structural and systemic reforms geared to enhancing its hard currency earning potential, raising living standards, and establishing the basis for long-term growth . . . reform(s) which by (its) nature will encourage eventual political restructuring" . . . without, however, "tying economic concessions to demands for economic reforms that preclude a leading role for central planning" . . .

Such a scheme may be objected on several grounds:

(1) There is no sign that Eastern Europe—Poland being a case apart—needs such a help. Eastern European banks have increased their borrowing to the West in 1987–88 (with the exception of Ro-

mania), mainly in the form of bank-to-bank borrowing, on quite favorable terms;³

(2) Some of them have expressed their willingness to limit (Hungary) or avoid (GDR) new borrowing;

(3) The case of Poland is much more to be treated as the debt of a developing country due to its magnitude and to the crucial Polish need for new money, than as a quid pro quo for reforms; and

(4) The objectives sought (better hard currency earning potential, export growth, increase in living standards, political liberalization and market orientation) are not compatible and hence should be ranked, which would create additional clarification difficulties.

The *commercial policy* outlined by Brown is not exempt from some contradictions. U.S.-East European trade, it is said, ultimately depends on the "enhanced Eastern European ability to generate an ever-increasing supply and variety of quality manufacturers," but this must not be confused with "a systematic tendency to overproject export revenue". . . . However, he must be credited with very courageous suggestions for amending the existing U.S. commercial legislation (and legal practice) as regards the CPE's. The "state-trading" countries meet much more obstacles on the U.S. market than on the European markets, and the credibility of their shifting to market rules in foreign trade seems even weaker in the U.S.A. than in Europe. Here again, in a comparative view, one has to take into account the specific European situation after 1992.

The implementing of a unified market will lead to a dramatic change in EC's commercial policy toward the East. Up to now, its main instruments were the QR (quantitative restrictions) monitored by the commission vis-a-vis each of the Eastern European countries and for each of the EC members (art. 115 of the Treaty of Rome). What will happen to the provisions of art. 115 and to the national QR's is far from clear. Logically, after 1992, there should be only one EC QR for each relevant position vis-a-vis each country. Several EC members are very much opposed to that (for example Italy, which had the largest number of QR positions). But it may be expected that by 1992, most of the Eastern European countries will have agreements with the EC. The agreements already concluded (with Hungary and Czechoslovakia, in 1988) provide for a gradual reduction or elimination of QR's. Does this mean commercial disarmament? Soundings from Brussels hint at the substitution of antidumping action to the operation of QR's. Should Western Europe, in this case, borrow some of the U.S. practice, Eastern European exports will have a very difficult time.

³ Economic Bulletin for Europe, vol. 40, 1988, pp. 42-43.

COMMENT

By Heinrich Vogel*

This is a politically important paper, not least because it shows the limitations of Western policy. The constraints for a normalization of East European-West trade—not exclusively with the U.S.—are listed quite accurately, also in their ranking order of importance. The main problem indeed is incapacity of Eastern European countries with overcentralized or semireformed economic systems to become more innovative, to respond to the challenges of increased competition, to master structural adaptation, quality improvement, and organizational change in bold steps toward reform of the domestic system. These are problems inaccessible for the policies of any foreign trade partner.

With regard to other constraints, however, some influence is possible, if only indirectly. One aspect is the political image of partner countries, shaped by information policy of all kinds—Communist propaganda and Western public opinion management, both biased. The political climate in domestic and in foreign relations cannot be underrated in its impact on economic relations, more than just “background noise.” The image of East European countries as members in a hostile ideological camp, in an expansionist military pact, and in a repressive political system, is critical in times of uncertainty or confrontation between East and West. The general trend in U.S.-East European trade is dominated by economic factors. But the amplitudes of ups and downs cannot be explained without taking this political element into account. Today, the prevalence of ideological premises and the volatility of political considerations are a serious obstacle for planning any commercial activities, not only of U.S. companies. They also complicate the indispensable consensus among Western industrialised countries regarding economic relations with the East at large.

Clearly, decisionmakers in the U.S. Government will have to make up their mind in reassessing the political premises which underly their decisions and legislation on credit, import policies, and export controls before commercial actors can consider more than the currently trivial engagements. Political risk assessments not only “overshadow” but seriously aggravate the situation today: the potential for political reform in East European countries is among the key parameters for any decision of private or governmental actors to reschedule old debts or granting new credits. In public debates the criteria for sufficiently “radical” reform are often inoperational or unrealistic. Still, no commercial bank in the U.S.—even if no state guaranties are needed—can take the risk of openly

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countering public and published opinion in applying standard commercial criteria.

The paper rightly stresses a crucial methodological aspect: the accessibility to empirical testing of the criteria applied in endless arguments. This is no academic (i.e., irrelevant) point; it rather constitutes the very core of structural problems which make a bipartisan, unemotional cost/benefit approach impossible. Where evidence is missing, ambiguous, or hard to come by wishful thinking, disguised normative or openly ideological arguments take over. There is no chance for consensus as a sizable literature has been showing. The bones of contention are:

(a) The use of economic levers in support of foreign policy. Measuring success or failure is virtually impossible here. Public economic diplomacy (or political linkage) cannot refer to any measurable and accountable proof with regard to positive impact on the domestic political situation (liberalisation, systemic change) in Eastern Europe. The willingness to initiate political and economic change in Hungary, to lesser extent also in Poland, is the result of indigenous reasoning. It grew on the soil of painful experience that the viability of the state was to be safeguarded only by opening up to the outside world and by dismantling the myth of power of a Communist Party without competence.

(b) Defining the military relevance of technologies to be denied in export control policies is difficult in the Soviet case. The justification for controls of technology transfer to Eastern Europe is even more complicated. Assuming a simple "conveyor belt" function of Eastern European countries beyond the well-known areas of cooperation among Warsaw Pact intelligence in clearly militarily relevant cases for all kinds of dual-use technology has not been substantiated in the open literature. The well-known problems of diffusing legally acquired Western technologies in individual countries of the CMEA due to organizational and technical incompetence are bound to complicate any intra-CMEA transfer (causing additional loss of time), should Western technology be transferred illicitly to the Soviet Union. Without training and servicing by the Western supplier technology transfer is of limited value, specifically with regard to the critical element of time in an arms race.

(c) Demonstrating deliberate and predatory practices or artificial advantages with the effect of disrupting Western markets is a long-standing issue and theoretically well defined. But the efforts to present evidence which will stand the test of judicial procedures have not been successful in a sufficient number of cases to support generalization. Additionally, this point is compromised by the suspicion of a "natural" bias which is boosted by current protectionist tendencies. In addition to Brown's well-balanced statements, a fairly unsophisticated point can be made: current reforms of foreign trade regimes in most East European countries, handing down the competence and responsibility for setting prices and quantities in export, make it less convincing to assume capacities to design deliberate national export strategies with the intention of upsetting Western markets. And yet, the outcome of all the intricate legal arguments, as presented by Stuart Brown, is predictable: it will be depressing U.S. imports from Eastern Europe.

A policy of differentiation as proposed by Stuart Brown is no new approach. But it needs political reinforcement. It will be useful to remember pitfalls of past attempts. There is little doubt that MFN policy has more symbolic (i.e., political) than real (i.e., economic) significance for relations with Eastern Europe. If applied for political reasons, however, the political criteria must be applied equally—and Stuart Brown is making this point—in order not to discredit the standards of moral disapproval or encouragement. Granting Romania MFN conditions before 1976 as a reward for President Ceaucescu's foreign policy was compromising the credibility of less favorable treatment for the CSSR or other CMEA countries—however justified the humanitarian and political considerations backing such sanctioning. In today's policy the moral standards remain to be seen why the relatively liberal human rights situation in Poland does not deserve equal treatment with the PR China or other LDC's whose record on these accounts is not different if not worse.

Generally speaking, there was no specific policy of the United States in dealing with Eastern Europe. This region rather was seen as a subsystem in the dominant great power antagonism. Western European attempts at differentiation, particularly after the Polish crisis, found little support in Washington—if any. But contrary to the declared intention of reducing East European dependence on economic ties with the Soviet Union, denial or discriminative neglect in U.S. trade and credit policies vis-a-vis these countries tended to increase, not weaken this relationship. It is in this view that Stuart Brown's thoughtful analysis is filling an important gap for the dialog with policymakers not only in the United States.

Contradictions of argument in his "realistic conditionality package" are apparent only. To ask for "sensitivity to the special institutional and social framework in which centrally planned economies operate, purely economic criteria to ensure East European states that the intention is not to supplant governmental influence, partial debt forgiveness," and a "graduated scale of government-supported credits, guarantees, and insurance, extending the most liberal terms to those countries establishing greatest progress in implementing structural and systemic reform," go together quite well. They can be made politically consistent if (1) a gradualistic approach of optimal timing and dosage can be applied, (2) if the previous practice of discriminating Communist against non-Communist (authoritarian) regimes is given up, and (3) if the rhetoric of destabilization and external interference is ceased.

The willingness of U.S. administrations to show leadership in shaping Western policies has been viable primarily in the context of punitive, disapproving, and sanctioning policies. To use the positive "stamp of approval" in demonstrative easing MFN and credit conditions deserves renewed effort to encourage East European countries which are seriously testing the potential of reform in order to increase economic competitiveness. "The right of these governments to determine their own social and political policies" is one of the pillars of cross-systemic cooperation in the CSCE-process. Paradoxically, it was this process based on acknowledgment of this right which has been fostering systemic change in Eastern Europe. Why then change the approach? A "depoliticized policy" of this

sort, supporting economic common sense rather than ideological fundamentalism, would certainly be welcome in Eastern Europe, but no less in Western Europe.

