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## LETTER OF TRANSMITTAL

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*February 17, 1993.*

*To the Members of the Joint Economic Committee:*

I am hereby transmitting for use by the Joint Economic Committee, Congress, and the public a study assessing the economies of the newly independent states of the former Soviet Union entitled, *The Former Soviet Union in Transition.* The study is in two volumes and contains papers prepared at the committee's request by a large number of government and private experts.

This volume concentrates on the transition to market economies and their integration into the world economy. The past year was a difficult one for the countries of the former Soviet Union, all of whom experienced economic downturns. At the same time, there were important gains in the area of economic reform. The leaderships of Russia and the other countries appeared to understand the need for fundamental change and the high transitional costs required for the reforms to succeed. However, the outcomes of the reform movements remain to be seen.

The study was planned, directed, and edited by John P. Hardt, Associate Director of the Congressional Research Service of the Library of Congress, and Richard F Kaufman, General Counsel of the Joint Economic Committee. Phillip J. Kaiser acted as publications coordinator, and editing and production assistance was provided by Karen Wirt, James Voorhees, Linda Kline, Mary Maddox, and John Bartoli. We are grateful to the Congressional Research Service for making Dr. Hardt and others available to work on the project, and to the many authors who contributed papers.

Sincerely,

DAVID OBEY,
*Chairman, Joint Economic Committee.*

## LETTER OF SUBMITTAL

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THE LIBRARY OF CONGRESS,
CONGRESSIONAL RESEARCH SERVICE,
*Washington, DC, January 15, 1993.*

Hon. DAVID R. OBEY
*Chairman, Joint Economic Committee*
*Congress of the United States*
*Washington, DC.*

DEAR MR. CHAIRMAN: I am pleased to transmit to you a collection of papers on the situation in the former U.S.S.R. entitled, "The Former Soviet Union in Transition." The study was directed by John P. Hardt, Associate Director and Senior Specialist in Soviet Economics of the Congressional Research Service and Richard F Kaufman, General Counsel of the Joint Economic Committee. Phillip J. Kaiser coordinated the publication with editing and production assistance from Karen Wirt, James Voorhees, Linda Kline, Mary Maddox, and John Bartoli. Many CRS and other Library of Congress personnel, as well as government and private specialists contributed significantly to the project.

We trust that the analyses and information contained in this study will be of value to the Joint Economic Committee, as well as the Congress in general and the broad audience of students of the former Soviet Union.

Sincerely,

JOSEPH E. ROSS,
*Director.*

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# INTRODUCTION: TRANSITION AND INTEGRATION

By John P. Hardt and Richard F Kaufman *

Two of the most significant events in recent decades were the collapse of the Soviet Empire and the decision by Russia and the other successor states to transform themselves into market economies. The break up of the Soviet Union left in its place 15 independent states, including the 3 Baltic nations, Georgia, and the 11 republics that made up the Commonwealth of Independent States (CIS). In 1992 all struggled to stabilize their economies and implement market reforms. The transitions were difficult and, as 1993 began, the outcomes still uncertain. But despite severe downturns throughout the region, major reform initiatives were underway and governments appeared to remain committed to the goal of marketization.

Russia was the focus of most attention in the West, because of its size, natural resources, and military power. Indeed, the map of this single republic still resembles that of the former Soviet Union despite the loss of large areas. Its present territory is nearly twice the size of the United States and its population of 150 million is equivalent to the combined populations of France, Germany, and the Netherlands. In the former Soviet Union, Russia accounted for 60 percent of total output, 60 percent of the total capital stock, and 55 percent of the total labor force. About 70 percent of Soviet defense industry was on Russian territory.

Observers were also keenly interested in the non-Russian republics and the unique challenges faced by each, from the relatively advanced Baltic states of Estonia, Latvia, and Lithuania, to Belarus, Moldova, and Ukraine in the west, to Georgia, Armenia, Azerbaijan bordering Turkey and Iran, to Kazakhstan and the republics of Central Asia: Turkmenistan, Uzbekistan, Tajikistan, and Kyrgyzstan. Some of these newly independent states are small, with limited resources and prospects. Others, such as Ukraine, with an area larger than France, and Kazakhstan, more than 4 times the size of Ukraine, are more developed and richly endowed. In terms of economic size, Ukraine is generally considered second to Russia among the former Soviet republics.

In Russia, as in the other successor states, both economic policy and performance measures are drastically changing in the emerging new system. An economy that for seventy five years placed military and protected industrial power at the top of the priority

* John P. Hardt is Associate Director, Congressional Research Service, Library of Congress. Richard F Kaufman is General Counsel, Joint Economic Committee, U.S. Congress.

scale, is moving to favor consumers needs. The important success criteria have become the availability of food in the markets, consumer durables, medicine and other factors influencing the quality of life of the citizens. Money has increasingly become a measure of value and the criteria for generating economic activity. The implementation of radical economic reforms in 1992 encouraged Western nations to put together a large-scale program of assistance to Russia.

## Recent Trends

Although there is controversy and uncertainty over the precise measurement of key aspects of the economy of the former Soviet Union, there is widespread agreement among specialists regarding the general trends. The Soviet Union was unable to reverse or arrest the long term slowdown in growth that began in the 1960s and grew steadily worse. The slowdown and accompanying signs of weakness in many sectors of the Soviet economy were documented in the successive compendia of studies published by the Joint Economic Committee and by the committee's many hearings on the subject. [1]

The 1980s were a period of slow growth and stagnation. The latest estimates of the World Bank show Soviet GNP declined slightly in 1981, and dipped again in 1986 and 1990. Annual growth for the 10 year period, 1981–1990, averaged just under 2 percent. [2] The World Bank's average growth estimates are roughly comparable to those of the Central Intelligence Agency which show average annual growth rates for the same period of somewhat less than 2 percent.

A downturn occurred in 1990 which accelerated over the next 2 years. There was a sharp drop in production in both industry and agriculture; while defense industrial production was expected to fall, output declined in all sectors. Trade among the republics was disrupted. Shortages of supplies worsened. Foreign trade fell, especially with Eastern Europe which could not meet the hard currency terms set by Moscow at the beginning of the year. Inflationary pressures intensified along with large increases in budget deficits and the money supply. Living standards deteriorated.

Estimates of the rates of decline vary. According to the International Monetary Fund (IMF), real gross domestic product (GDP) in the former USSR went down by 9 percent in 1991 and by 18.6 percent in 1992. The IMF also estimates that consumer prices increased by about 90 percent in 1991 and by nearly 1200 percent in 1992. Export volumes declined by about 24 percent in each of those years. [3]

The downturn extended, more or less, throughout the region. Inflation in Russia was somewhat higher than elsewhere. Retail price increases were estimated at 1400 percent and the ruble plummeted.

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[1] See, for example, *New Directions in the Soviet Economy,* 1966; *Soviet Economic Prospects for the Seventies,* 1973; *Soviet Economy in the 1980s: Problems and Prospects,* 1982; *Gorbachev's Economic Plans,* 1987; and the series of annual hearings, *Allocations of Resources in the Soviet Union and China,* 1974–1990.

[2] World Bank, *World Atlas 1993.*

[3] International Monetary Fund, *World Economic Outlook, Interim Assessment,* December 1992, p. 19.

Its value was 113 per US dollar at the beginning of June 1992 and 418 per US dollar in mid-December. Conditions were worse in the oil importing states, notably the Baltic nations, where output declined by an estimated 30 percent, and Ukraine. Official figures from the successor states, and some private economists in the region and from the West, painted even bleaker pictures.

Some problems that were expected did not occur. The widespread food shortages that many predicted for the winter of 1991-1992 were avoided, in large part because the extent of private food reserves and informal methods of distribution were not fully understood. Humanitarian assistance from the West played a small but important role.

The high levels of unemployment that were widely anticipated also did not materialize. At the end of 1992 the unemployment rate was only about 1.0 percent in Russia, according to official figures. However, observers questioned the reliability of employment statistics and pointed to weaknesses in the safety net programs for the unemployed. Many state enterprises faced bankruptcy and would have been forced to close down were it not for government bailouts. If there had not been a revival of subsidies and easy credit, which contributed to substantial increases in interenterprise debt, the International Labor Organization's prediction of unemployment exceeding 10 million persons likely would have proved correct. Although mass unemployment was avoided, there was much "hidden unemployment" in large state-owned enterprises where workers were kept on payrolls notwithstanding cutbacks in production.

International trade and finance were matters of particular concern to those in the successor states who appreciated the importance of attracting foreign investment and integrating with the western trading system. In 1991 and 1992 foreign direct investment was disappointingly modest as Western entrepreneurs remained nervous about the legal environment for private ventures and access to domestic markets. [4] The dramatic fall in foreign trade was softened somewhat by energy exports which continued to provide most of the hard currency earnings for the region.

Some Western analysts saw reasons for limited optimism in Russia's export sector. Although oil and coal production would likely decline again in 1993, there were expectations of continued strength in exports of oil and gas because of the reduced domestic demand during the recession. Hard currency earnings from this source would make possible imports of essential commodities and Western capital and technology. Further, Western assistance to Russia was expected to finance other imports and make it possible for Russia to provide transitional support to other successor states. [5]

But Russian officials were disturbed about the structure of trade. One stated in a December 1992 report, "We are firmly bogged down among those who traditionally trade mainly in fuel and raw materials and who have not yet won a worthy place in the market for

[4] Ed A.Hewett, *Open for Business, Russia's Return to the Global Economy,* Washington, D.C., 1992, pp. 152-153.

[5] PlanEcon, *Review and Outlook for the Former Soviet Republics,* Washington, D.C., November 1992.

finished products." [6] It was understood, although not perhaps by all, that before manufactured goods in the former Soviet Union could become competitive in world markets greater progress in the implementation of economic reforms would be necessary.

THE REFORMS: PROGRESS AND SETBACKS

Mikhail Gorbachev's course of action was doomed to failure. He laid the groundwork for economic reform but did not act decisively enough. Boris Yeltsin, the first president of Russia, pressed the case for a market economy but, in some respects, may have acted too fast. While Gorbachev should be credited with many achievements, he wanted to create a "socialist market" within the framework of a command economy dominated by the Communist Party. Yeltsin pledged himself to a transformation to a true market system.

There were generally good harvests during the Gorbachev years, 1985–1991, including the second best in history. In that period numerous reforms were introduced. The center's economic controls were weakened. Some powers were transferred to industrial enterprises and farms. The authority, number, and size of the state ministries were greatly reduced. Military spending was reduced. New laws encouraged small businesses and private cooperatives, which began to flourish. The government's foreign trade monopoly was ended and foreign investment was welcomed.

But there were fundamental flaws in Gorbachev's economic plans. The reforms were haphazard and at times contradictory. There were no meaningful steps to decontrol prices or to end the effective monopolies of the state enterprises. He refused to accept and implement the 500 Day Program of radical reform, and end the Party dominated command economy system. He sought to perfect Soviet socialism. In the end, he failed to halt the slide into deep recession or to prevent price increases from reaching a near hyperinflationary stage.

Yeltsin's approach to economic reform, in the first year of his presidency, was strikingly different from Gorbachev's and proceeded from the foundation that was laid in the Russian Republic during the 2 years prior to the final break up of the Soviet Union. In that period, laws were passed establishing some rights of private ownership and free enterprise, and calling for privatization and the elimination of monopolies. At the end of 1991, Yeltsin outlined a program of radical change to a market economy and was given the power by Russia's congress to implement it. Yeltsin moved decisively to outlaw the Communist Party, dismantle the old ministerially directed economy, and liberalize prices. Price liberalization was the clear signal the West looked for to make reform credible.

In January 1992, the government embarked upon a "shock therapy" policy of rapid economic reform. Prices were decontrolled on most producer and consumer goods. Steps were taken to reduce the budget deficit through cuts in spending, including defense and subsidies, and to impose a new tax system. Foreign trade was liberal-

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[6] Yuriey Petrov, chief of the Economic Administration of the Russian Ministry of Foreign Economic Relations, *Rossiyskiye Vesti*, December 31, 1992, in FBIS-SOV-93-001, January 4, 1993, p. 26.

ized although certain restrictions were retained, such as export and import licensing and a requirement that a large portion of foreign exchange earnings be sold to the government. The pain of shock therapy was the sharp fall in living standards, especially for those on fixed incomes or unable to work, and the imminence of unemployment if a "hard budget" constraint was continued.

There were some initial positive economic reactions to these and other measures but, as indicated above, the overall results were dismal. The reasons are clouded in compromises and arguments over whether the original program would have worked. In April 1992, the political backlash against worsening conditions brought about a tactical retreat from the government's tight fiscal and monetary policies. Specifically, easy credit and other subsidies were reintroduced and this enabled unprofitable plants to stay open, providing employment. However, the dramatic rise in the budget deficit and money supply increased the rate of inflation.

In the months that followed large amounts of easy credits were provided to the industrial sector and privatization was slowed. By the end of the year, Yeltsin's critics, led by the industrial lobby, forced further concessions culminating with the dismissal of the architect of his economic program, Yegor Gaidar, the acting Prime Minister. Viktor Chernomyrdin, one of the industrial leaders, was selected to replace him.

In December 1992, Chernomyrdin ordered the reimposition of price controls on certain items but in January 1993 the order was criticized by Boris G. Fyodorov, the Deputy Prime Minister and mostly reversed. The incident suggested a continuing struggle in Moscow over economic policy and the pace of reforms. As the new year began many doubts had been raised about the future of the reform program but there were, as yet, no signs of a return to central planning or that the decision to make the transition to a market economy had been overturned.

## The Debate Over Reforms

The debate over economic reforms within Russia can be described in the context of four camps: "shock therapy" advocates, conservative gradualists, liberal democrats, and reactionary nationalists. [7] The "shock therapy" approach followed by Yeltsin in 1992 emphasized stabilization through price liberalization, and restrictive fiscal and monetary policies. Proponents of this approach wanted to move quickly to achieve a free market. They would put safety net programs in place to help persons in dire need, but would tolerate substantial falls in production and increases in unemployment.

A number of groups pressed for a more gradual approach. The more powerful faction was composed of representatives of the largest state-owned enterprises, some military leaders, and local officials. They generally agreed with the need to restructure industry but wanted more time for the adjustment and wanted the govern-

[7] Hardt, John P. *Vision and Program for Russia: An American View.* Published in French in the volume of proceedings of the Summer University held at the University of Pau, France, "Mutations a l'Est: transition vers le marche et integration Est-Oest," edited by Marie Lavigne, Publications de la Sorbonne, France, 1993.

ment to intervene in the process to maintain employment and production. They urged continued credits for state enterprises and would recentralize some portions of the economy such as energy production and the export of commodities.

Another approach, mid way between Yeltsin and the conservatives, is inferred from the statements of "liberal" economists such as Oleg Bogomolov, Stanislav Shatalin, Gregorii Yavlinsky, Yevgenii Yasin, and Nikolai Petrakov. Some in this group were long time supporters of reform and some helped draft the 500 day plan rejected by Gorbachev. They joined with the conservatives in criticizing the deindutrialization that began under Yeltsin and the possibility of mass unemployment. They supported a relatively rapid transition to a market economy but argued for more balanced policies that would stress the need for price stability, while maintaining economic growth and employment—the typical agenda of Western market economies. The Deputy Minister for Finance and Economic Policy, Boris Fyodorov, appointed by Yeltsin at the start of 1993, may be in this school as he previously allied himself with Yasin and Yavlinsky.

Nationalistic forces were composed primarily of extremists of all persuasions. Some argued for a return to a Stalinist type command economy, others argued for a right wing dictatorship. They appealed to those who felt the loss of power and prestige that accompanied the break up of the empire and reduction of military forces, as well as those disillusioned with Yeltsin's first year in office and embittered by actual or threatened losses of position and diminished living standards.

## Measuring Performance

Ironically, the break up of the Soviet Union further complicated the problem of measuring economic performance. Under Soviet rule, official secrecy and the absence of market prices hid real growth rates, inflation, and other indicators from view. There was also a tendency for producers to overreport production because rewards were given to those who achieved the centrally planned targets. Western analysts had to make numerous adjustments to account for these deficiencies.

After the break up Western analysts had to take into account several new factors. (1) There was no longer a central source of official figures for all republics, and it became necessary to monitor the reports of each of the successor states, most of whose statistical systems were less developed than the former Soviet Union's. Each new state took over some of the assets of Goskomstat, the statistical agency of the U.S.S.R., but had little quality control over statistics or analysis. A carryover of one of the longstanding statistical problems was that government reporting did not adequately cover activities in the private market, including the underground economy. With the growth of the private sector, this problem became more serious.

(2) The weakening of the old central controls and the introduction of new economic rules, such as taxation, created incentives for producers to underreport production. (3) The declines in production were not equivalent to declines in consumer living standards as

much of the production declines were in the military and durable goods sectors.[8] (4) The rapid changes in ruble exchange rates added to the complexity of estimating the dollar values of economic activities. With fluctuating inflation rates, reliable dollar/ruble conversions became difficult if not impossible. As a result of these and other factors, the distortion of reality by official statistics, and the divergence of views among Western analysts, about trends and developments in the successor states may be as great as ever.

Continuing efforts to monitor and analyze the economies of the successor states are required for at least three reasons.

First, the successor states are important to U.S. economic interests. In 1992, President George Bush cited U.S. economic interests as part of the justification for U.S. participation in the proposal of the G-7 nations for a $24 billion package of Western assistance to Russia. As Michel Camdessus, director of the International Monetary Fund, has pointed out, the downturn in the former Soviet Union, together with that of the former East Bloc nations, has had negative effects on the global growth rate and, by implication, the U.S. economy. According to another estimate, exports from the West to the overall region, would have been $200 billion in 1985, had the Eastern economies been open. The U.S. share would have been $50 billion. There are major potential markets for American firms in the energy, telecommunications, and agricultural equipment sectors. There are also significant prospects for technology transfers from the former Soviet states, especially Russia and Ukraine, to the U.S.[9]

Second, there is a wide array of Western assistance activities to the former Soviet Union. Financial and technical aid, along with humanitarian relief, are being provided by Western governments, international organizations, and private foundations. The U.S., in addition to the expanded assistance package mentioned above, has provided technical advice to help improve the quality of official statistics. A better understanding of the transformation process would enhance the effectiveness of Western aid.[10]

Finally, although the former Soviet Union's military threat to the West is greatly diminished, the success of the transformations to market economies can influence regional and global prospects for peace. Russia retains significant military capabilities, in conventional and strategic nuclear weapons. Several other successor states, including Ukraine, still have nuclear weapons on their territories. A Russian government that is cooperative with the West can help reduce international tensions. Future relations with Russia will be heavily influenced by the success or failure of the economic reforms.

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[8] Charles Wolfe, Jr., "Reasons for Hope," *World Monitor,* January 1993, pp. 48-49.

[9] Congressional Research Service, "The Freedom Support Act: Criteria For Response," Library of Congress, CRS Report 92-395 S, May 1, 1992; Richard F Kaufman, "The United States And Technology Transfer With The Former Soviet Union," *External Economic Relations of the Central and East European Nations,* NATO Colloquium, 1992.

[10] National Research Council, *Improving Research on Former Soviet and Other Historically Planned Economies, Summary of a Planning Meeting,* Washington, D.C., 1992.

# Ed A. Hewett

**1942–1993**

Ed A. Hewett, one of the nation's foremost experts on the economies of the former Soviet Union and Eastern Europe, died on January 15, 1993. Dr. Hewett was a senior fellow at the Brookings institution from 1981 to 1991 when he joined the staff of the National Security Council and became an advisor to President Bush. He was a frequent contributor to studies of the Joint Economic Committee and an expert witness in committee hearings. His views were often sought after by policymakers in Congress and the Executive Branch. He gave his time generously to many members of Congress and their staffs. Dr. Hewett was held in the highest regard by all who knew him, his works, and his writings. His publications included *Energy, Economics and Foreign Poilcy in the Soviet Union* (1984), *Reforming the Soviet Union: Equality Versus Efficiency* (1988), and *Open for Business: Russia's Return to the Global Economy* (1992). These volumes are dedicated to his memory.

# I. THE TRANSITION TO MARKET ECONOMIES

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## OVERVIEW

By Steven J. Woehrel *

The papers in this section deal with the legacy left by the past, especially the Gorbachev era, and discuss moves that have been taken so far toward economic reforms in Russia and the other successor states to the Soviet Union. Lawrence Modisett's paper disputes assertions that there is little historical basis to suppose that Russia can transform itself from a statist to a free market economy. These assertions are based on many theses, including a traditional Russian "culture of envy" that exposes a successful entrepreneur to the spiteful attacks of his neighbors, the influence of the collectivist institutions of the peasant commune, and the alleged lack of a native capitalist tradition.

Modisett counters that, throughout Russian history, all classes engaged in commerce, in contrast to the West, where it was mainly a middle class occupation. In today's Russia, Modisett points to the rapidly growing number of small businesses, private farms, street markets, commodity exchanges, and commercial banks as proof of a budding Russian entrepreneurial spirit. However, Modisett cautions, Russian entrepreneurs are faced with formidable obstacles, including the lack of a legal and financial infrastructure, hostile labor unions, a growing environmental movement, more demanding consumers, and political instability.

### GORBACHEV'S LEGACY

Three papers, by James Noren and Laurie Kurtzweg, Anders Aslund, and Douglas Diamond and Gregory Kisunko, deal with the legacy of the Gorbachev effort. In their paper, Noren and Kurtzweg provide a sector-by-sector analysis of Soviet economic performance in the Gorbachev era. They note that Gorbachev's policy of heavy investment, especially in high technology sectors, achieved some degree of success in 1986–88, posting high growth rates in industry, agriculture, and construction. By 1989, however, the industry, construction, and transportation sectors experienced a downturn, partly as a result of a shift in Gorbachev's policies away from investment to consumption. In addition, Gorbachev's grant of greater freedom to enterprise directors served to weaken the central planning system without establishing a wholesale trade sector to allo-

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cate supplies. In 1990, the crisis deepened and hit all sectors. By 1991, the economy went into a tailspin. Contributing factors to the decline in these years were increasing ethnic strife and local economic autarchy, and, above all, inflationary pressures caused by a huge budget deficit and a lax monetary policy. While Noren and Kurtzweg rely on official statistics of net material product in their paper, Diamond and Kisunko's paper develops a series of synthetic measures (i.e., constructed by the analyst) to give what the authors believe is a clearer picture of industrial growth in the republics of the Soviet Union from 1981 to 1990.

Aslund's paper discusses the flaws in Gorbachev's policymaking style that led to this economic failure. Aslund argues that Gorbachev combined great skill at political maneuvering with a certain lack of ideological flexibility. His skill at maneuvering brought him to power and kept him there, despite the fact that his views were much more liberal than the rest of the Communist Party leadership. Yet, his lack of flexibility led him to insist on economic half-measures combining plan and market (which was, as Yeltsin put it, like trying to "marry a hedgehog and a grass snake") and resist a resolute move toward a full-fledged market economy in 1990. This, combined with his ignorance of nationality issues, was the main reason for the failure of his rule. Aslund notes that while Gorbachev will be known for his achievements, such as glasnost, democratization, and the new thinking in foreign policy, he will be best known as the destroyer of the Soviet political and economic system, a result that his reforms were aimed at avoiding.

## Current Reform Efforts

Papers by Gertrude Schroeder, John Tedstrom, James Duran, and James Millar deal with current moves toward economic reform in the post-Soviet states. Schroeder, in her paper "Post-Soviet Economic Reforms in Perspective," describes the legacy of Soviet socialism for current reform efforts. She notes that the remnants of Soviet economic institutions and the mindset they engendered are a particularly heavy burden. Socialized property, a hierarchically ordered production-distribution chain, an artificial pricing structure, "passive" money, and a lack of financial and capital markets were all features of a system antithetical to a market economy. Decades of a "treadmill" of ineffective reforms ended when Gorbachev's attempts at radical reform led to the collapse of the Soviet economy. The former republics are currently engaged in an unprecedented effort to establish market economies. Schroeder believes the republics have made surprising progress, given the lack of experience with the market and indeed in running their own affairs in general. Most price controls have been lifted, new fiscal systems have been established, privatization is starting, and market relations are beginning to arise spontaneously "from below." However, the implementation of some reforms is proceeding slowly, in part due to intense political struggle over the course of reforms, and remnants of the old systems are likely to remain for some time. Schroeder sees the political stability as the key question in determining whether the new states can stay the course on reform.

Schroeder sees reform by "fits and starts" as the most likely course of developments in the former republics.

Tedstrom's paper describes the Baltic states' efforts to establish their own fiscal policy from 1989 until the final dissolution of the Soviet Union. The author applauds the Baltic states for establishing the basis for an effective fiscal system, but notes that a lack of experience in conducting fiscal policy and political pressures for increased spending and more tax loopholes will continue to make conducting an effective fiscal policy difficult for the Baltic states and the other former republics. Tedstrom advises leaders of the new states to keep a broad tax base (i.e., few loopholes) with low rates and underlines the importance of establishing an effective tax administration.

Duran discusses Gorbachev's disastrous fiscal and monetary policy and Yeltsin and Gaidar's moves toward stabilization. Previous Soviet leaders had run up deficit spending from 2 percent to 4 percent of GNP. However, Gorbachev's relaxation of controls on enterprises led to a reduction of government revenues, and relaxation of controls on the accounts of enterprises led to a surge in the growth of the money supply and an expansion of central and republic budget deficits. In 1990, deficit spending was at 8.5 percent of GDP, down from 11 percent in 1988.

After the collapse of the Soviet Union, Russia moved forward with a radical macroeconomic stabilization plan in January 1992. Prices, commodity markets, and foreign trade were liberalized, and a strict fiscal and monetary plan was put in place that aimed at nearly eliminating the budget deficit. The government's efforts were undermined chiefly by the lack of a "hard budget constraint" on enterprises—i.e., they could not go bankrupt as a result of their actions. Despite huge drops in demand, Russian enterprises did not reduce prices. Instead, they borrowed from banks largely owned by them and from each other. As a result, Duran notes, up to 90 percent of enterprises and 70 percent of banks would be in jeopardy of going bankrupt if strict accounting rules were applied.

During the Sixth Congress of People's Deputies in April, Yeltsin was forced to compromise with the "industrialists." Some of them were taken into the government. Government spending ballooned, partly because unpaid commitments from earlier in the year had to be honored, partly because of demands for new spending by the Supreme Soviet. "Industrialists" also demanded the injection of R1 trillion of credits and the forgiveness of interenterprise debts. The head of the Russian Central Bank resigned under fire from the Supreme Soviet in July when he opposed these demands and was replaced by the former USSR State Bank chairman, Viktor Gerashchenko, who favored them. The government's response was an outline for a long-term plan for "deepening reforms," making clear that the budget could not be used to save weak enterprises and putting emphasis on privatization. Presidential decrees were also prepared for the freezing and auditing of inter-enterprise debts and on the bankruptcy of nonviable enterprises.

Duran concludes that Russia is not making significant progress toward budget and monetary stability, noting that deficit-spending is on course to reach the same levels as in the U.S.S.R. in 1991. By fall 1992, hyper-inflation of 50 percent or more a month is possible.

Duran points to an explosive growth in the money supply, extension of massive credits to industry and agriculture, and increases in social welfare benefits as key factors. Further price increases will occur as energy prices are raised to world levels and as the unified ruble exchange rate is applied to goods sold from central reserves. Nevertheless, Duran lauds Russia for its change in approach in macroeconomic policy in comparison to the policy of the U.S.S.R. He believes that while conditions for an IMF currency stabilization fund for the ruble have not been met, humanitarian and technical assistance is needed to help Russia construct a new economic system.

In his paper, Millar criticizes the "shock therapy" approach to reform adopted by the Yegor Gaidar government. The IMF, World Bank, and Russian proponents of shock therapy, Millar believes, do not take into account the political and economic realities of Russia and the other CIS states. Western economists specializing on the Soviet economy, in contrast, favor the gradual modification of Soviet economic institutions as the best path to market reform. Millar notes that short-run successes of "shock therapy" have occurred—price liberalization has put goods on the shelves and private markets are appearing everywhere. However, these short-run successes do not imply long-run success for the reform, since this requires structural changes in the economy, including privatization and de-monopolization. Millar attacks the "shock therapy" assumption that if monetary and pecuniary problems can be solved, production will be restored without government intervention by profit and utility-maximizing economic actors. What Millar believes is needed is a well-crafted industrial policy that would focus, like the Marshall Plan, on production and economic integration of the former republics, rather than just on macro-economic stabilization.

Because of the weakness of the market mechanism in Russia, Millar predicts that Gaidar's approach will likely fail and be followed by a partial restoration of the centrally managed economy. A true market economy will have to evolve over the next 10 years or more, as former Soviet economists and entrepreneurs gain practical experience in managing and operating in a free market economy.

## Privatization and the Private Sector

Papers by Joseph S. Berliner, Marvin Jackson, and Sandra Hughes and Scot Butler deal with privatization and the private sector in Russia. Like Millar, Berliner is skeptical of a rapid approach to economic reform, specifically to rapid privatization of large state enterprises. Berliner estimates the total efficiency gains from privatization at about 55 percent. However, he believes that the source of these gains comes not as much from private ownership per se than from marketization—i.e., the transfer from central authorities to enterprises (whether private or state-owned) of the right to set prices and output. Moreover, Berliner argues, these gains would be smaller if privatization were to occur rapidly rather than gradually. As reasons for the reduced benefits, Berliner points to the need for increased state subsidies to prevent huge increases in unemployment, the lack of a market infrastructure of legal, fi-

nancial, and accounting services, and the likelihood that the members of the nomenklatura, who are likely to be the main beneficiaries of rapid privatization, are unlikely to become successful entrepreneurs.

Jackson's paper compares the Commonwealth of Independent States (CIS) countries' records on privatization with that of Poland, Hungary, and Czechoslovakia. During the Gorbachev era, privatization took the form of transformation of state firms into joint-stock companies or the leasing of assets by a state firm to a private cooperative that it formed. This latter method was a favored method of "spontaneous privatization" by the nomenklatura and enterprise managers. In June 1992, the Supreme Soviet approved a privatization plan. The plan struck a compromise between radical reformers, who wanted a voucher system to distribute property ownership as widely as possible, and "industrialists," who wanted devices such as leasing and large distributions of shares to work collectives in order to maintain managers' control over enterprises. Jackson notes that, despite the passage of laws setting out the principles of large-scale privatization in Russia and other CIS states, few concrete steps have as yet been taken in any former republic, with the exception of Kyrgyzstan.

Jackson draws on the experience of the Central European states to suggest how the privatization process will work in practice. Poland and Hungary set up privatization agencies in order to control "spontaneous" nomenklatura privatization and stressed a cautious evaluation of each firm to be privatized. This has led to complaints that the agencies pose an obstacle to privatization and that more "spontaneous" means may have to be used to speed the process. Judging from the Czechoslovak and Polish experience, Jackson believes that the Russian voucher system is unlikely to have much effect soon, and that case-by-case privatization by a central agency is also likely to be cumbersome. Instead, Jackson predicts that privatization will continue to be mainly "spontaneous." He warns that an alliance of enterprise managers and work collectives to establish control over their firms poses the greatest long-term threat to economic reform in the CIS states.

In their paper, Hughes and Butler attempt to measure the current size of Russia's private sector. If one uses a conventional Western definition of private property, they note, Russia's private sector makes up less than 4 percent of the value of fixed capital at the beginning of 1992. However, if one broadens the definition to quasi-private forms of property that emerged in the former Soviet Union under perestroika (joint-stock companies, leaseholding, cooperatives, joint ventures and others), one sees that the Russian private sector is already quite large and growing. Hughes and Butler say these firms employed 15 percent of Russian workers in 1991, as compared with under 10 percent in the previous year. The authors estimate that the Russian private sector accounted for about a third of trade volume and consumer services, a quarter of agricultural production and contract construction, and one-fifth of industrial output. In addition, fully a quarter of living space in Russia is privately owned.

## Economic Relations between the Post-Soviet States

Contributions by Jozef van Brabant, Gertrude Schroeder, and Stuart Brown and Misha Belkindas discuss the important issue of interrepublic trade and regional economic disparities. Like many observers, van Brabant notes that, because the former Soviet Union had a tightly integrated economy with great mutual dependencies between regions, the reestablishment of interrepublic trade ties is essential during the transition from planned to market economies. Van Brabant says maintenance of the ruble zone can only be an effective solution with effective economic policy coordination between the former republics. Since this is unlikely to be the case in the current political atmosphere in the former Soviet republics, van Brabant suggests that a flexible payment system be established between the new states, with financial support and monitoring from international financial institutions. Van Brabant believes that this approach could be cheaper and more effective than through IMF assistance for ruble stabilization and current-account financing.

Schroeder's paper discusses regional economic disparities in the Soviet Union and the development of Gorbachev's economic policy vis-a-vis the republics until June 1991. Schroeder notes that, while Soviet leaders often spoke of equalizing the levels of development between the republics, the reality was quite different. The gap between the republics became wider in recent years, not narrower. Moreover, central planners in Moscow made decisions based on their own economic goals, often ignoring the needs of the republics and regions. The result was severely distorted regional economies and ecological disaster. Gorbachev's policies made matters worse, as a generalized economic crisis and increasing nationalism led to local protectionism that further reduced economic activity. Brown and Belkindas analyze what was a politically charged question in the Soviet Union: who gained and who lost the most from interrepublic merchandise trade, or "who's feeding whom?" The question is of more than historical interest because of the shift of interrepublic trade to world market prices in the wake of the breakup of the Soviet Union. The authors find that, if one uses world market prices, Russia is by far the largest net creditor, largely because of its energy exports to the other republics. All other republics have modest to large negative balances, with the Baltic states being in the worst position.

## Social Policy

A paper by Lillian Liu, and one by Philip Hanson and Elizabeth Teague, address the issue of social benefits in Russia. Liu notes that, before Gorbachev started incremental reforms, the Soviet social security system lacked programs to protect the unemployed or deal with inflation (since these were not admitted to exist in the Soviet Union), or to encourage citizens to take responsibility for their economic security. Gorbachev aimed to guarantee a minimum income for all, to reshape the Soviet social security system so that it resembled Western ones and looked to employers and to republic and local authorities to supplement benefits. The collapse of the Soviet Union and Russia's move toward rapid economic reform has

put new pressures on Russia's social security system. While many of the goals of the social security system remain the same, the Russian government has been forced by budgetary shortfalls and inflationary pressures to limit indexing of payments, delay payment of pensions, and cut the maximum pension benefit. The government has also propòsed a partial privatization of social security by encouraging the growth of independent insurance companies.

Hanson and Teague focus on the issue of unemployment benefits in Russia. They underline the fact that the Russian government faces a difficult trade-off between financial stabilization and the need for social protection of the population in the face of impending mass unemployment, which poses a threat to political stability. The authors believe that the Russian government must adopt a "hardheaded" approach toward unemployment compensation or it will be impossible to reduce the budget deficit or master inflationary pressures. The government had been unable to do so by mid-1992 in large part because of the pressure of the "industrialists" and the ex-Communist dominated organized labor movement. Like Jackson, Hanson and Teague see an alliance between these two groups as a major obstacle to financial stabilization in Russia.

# THE SOVIET ECONOMY UNRAVELS: 1985–91

By James Noren and Laurie Kurtzweg *

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## SUMMARY

When Mikhail Gorbachev came to power in March 1985, he promised to first revive and then transform the creaking Soviet economy. Instead, he set in motion many of the forces that led to the unraveling of the centrally planned economic system and his own political undoing.

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Initially, Gorbachev set out confidently to clean house in the economic bureaucracy, restore discipline in the workplace, and curtail alcohol consumption. Soon afterward, he launched an ambitious program to modernize the Soviet industrial base by boosting investment, especially in high-technology machinery. While these policies met with some initial success in 1986–88, they were badly flawed in important respects. The sharp increases in investment required for modernization, coupled with a failure to cut defense spending, left few resources available for consumer needs. In addition, a rapid climb in the state budget deficit starting in 1986 pumped money into the economy at rates that outstripped the growth of real output. In 1987, moreover, Gorbachev announced an economic reform package that relaxed central controls over the production and distribution of output and the setting of prices and wages. The implementation of these reforms in 1988–89, when budget deficits had become massive, led to a combination of open inflation in some prices and shortages as a result of the extensive price controls that remained in place.

When consumers became increasingly frustrated over these worsening shortages and the erosion of their already low living standards, Gorbachev belatedly shifted resources toward consumption. He jettisoned his modernization campaign, finally began to cut defense outlays, and stepped up imports of consumer goods by incurring a large hard currency debt. As the condition of the Soviet economy deteriorated in 1989–90, the government and legislature began to consider a series of increasingly far-reaching reform programs, including the delegation to the republics of greater authority and financial responsibility for economic policy on their territories. The program endorsed by Gorbachev in October 1990—which was not the most radical alternative considered—called for the gradual removal of state controls over output and prices; the sale or transfer of property to owners other than the state; and the eventual convertibility of the ruble to hard currency.

This program was rapidly overtaken by events. Consumer frustrations—now aired openly thanks to glasnost—became a growing political burden for Gorbachev. Moreover, the central government's willingness to delegate limited powers to the republics was quickly overwhelmed by republic demands for greater autonomy and, in some cases, independence. Meanwhile, the power of the traditional establishment—including industrial ministries, the Communist Party, and the military—was eroding rapidly. By the spring of 1991, Gorbachev had lost his battle to reassert central authority; only the terms of surrender remained to be negotiated.

## INTRODUCTION

With the erosion and finally the collapse of Communist rule in the Soviet Union, an economic system unraveled. Mikhail Gorbachev assumed power in March 1985 promising to first revive and then transform an economy characterized by slow growth, mediocre technology, and an increasingly apparent inability to respond to the changing demands of the population and compete in world markets. By 1990 the economy was clearly in worse shape than when Gorbachev became general secretary. The reasons for the de-

teriorating economic performance will be debated long into the future. The discussion will not get far, however, without some agreement on the timing, extent, and sectoral composition of the deterioration. Moreover, the analysis of prospects for the new states that once were part of the Soviet Union and an appraisal of their economic performance needs to begin with some sense of where they were when they gained their independence.

This paper therefore describes the major trends in Soviet economic performance from 1985 through 1991, when the union dissolved. Much of the basis for the description of trends at the all-union level is the set of estimates of gross national product (GNP) developed by the Central Intelligence Agency (CIA) and published periodically under the auspices of the Joint Economic Committee. [1] The accounting framework for these estimates was devised to provide calculations of Soviet GNP in a disaggregated format when the Soviet Union published figures only on material production, and that in very little detail. More important, the CIA and other Western estimates were undertaken in the belief that many of the numbers furnished by the Soviet statistical agency were seriously flawed. Official macroeconomic indicators overstated real growth and understated inflation, and the prices of goods and services did not reflect relative resource costs or the possibilities of substitution in production or consumption. The CIA's estimates attempted to sidestep or correct these deficiencies. [2] Satisfactory measures of the growth of GNP at the republic level, however, are not yet available. The analysis of economic trends in the republics in this paper is instead based on official statistics on the growth of net material product, with some discussion of the shortcomings of this approach.

After the torrent of criticism of Soviet statistics by Soviet citizens under glasnost, it may be fair to ask whether any estimates of Soviet economic growth that are based on these statistics are credible. We believe the estimates presented in this paper can be used in the analysis of Soviet economic history because:

1. Most of the attacks on the figures provided by the State Committee for Statistics (Goskomstat) center on the deficiencies of value statistics in supposedly constant prices; the estimates in this paper rely overwhelmingly on reporting on quantities of production or consumption, which we believe to be reasonably reliable. [3]

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[1] The GNP estimates have appeared in joint CIA-DIA testimony before the Joint Economic Committee of Congress (JEC) as well as in the compendia on the Soviet Union sponsored by the JEC every few years. The most detailed discussions of the basis for the estimates can be found in two special studies prepared for the JEC: *Measures of Soviet Gross National Product in 1982 Prices* (Washington: US Government Printing Office, 1990), and *USSR: Measures of Economic Growth and Development, 1950–80* (Washington: US Government Printing Office, 1982).

[2] The estimates of GNP growth are built up from detailed Soviet statistics on the production and consumption of individual goods and services. Because the vast majority of these detailed statistics are reported in physical units, this procedure avoids most of the overstatement of growth imbedded in official macroeconomic indicators. Moreover, the base-year GNP estimates (which serve as weights for the calculations of growth) are adjusted for many of the distortions of Soviet prices. In this adjustment, GNP by sector of origin in established prices is converted to a factor cost basis by subtracting turnover taxes and profits from value added in each sector and adding subsidies and a charge for fixed and working capital. To obtain GNP by end use at factor cost, the factor cost adjustments for each sector of origin are distributed among the various end uses with the help of an input-output table.

[3] Until it was renamed and reorganized in 1987, the Soviet statistical agency was known as the Central Statistical Administration.

2. The attacks mounted against official statistics on the physical production and consumption of goods and services have not been well supported, especially as they relate to bias in trends as opposed to levels. [4]

On balance, we judge that the reporting on physical production that came up through the Goskomstat system through about 1990 was sufficiently accurate to support the estimates of GNP that have been made according to CIA procedures over the years. According to Russia's Acting Premier Yegor Gaydar, this continues to be true of Russian statistics on physical output. [5] By 1991, however, as central authority (and with it the authority of Goskomstat) weakened and the number of transactions outside state channels grew, even Goskomstat's physical production statistics became increasingly suspect.

There is also the question of the impact of the thriving second economy during this period and earlier. Much of the activity in the second economy (bribery, thievery, prostitution, drug trafficking, and the like) either does not affect the real output of goods and services or is excluded from GNP by convention on the grounds that it is illegal. Nonetheless, the second economy does produce goods and services that to some degree have made up for the shortfalls of the state sector in satisfying the population's demand. The home manufacture of alcoholic beverages and the private provision of repair services are leading examples. The most that we can say is that the inclusion of second economy activity not captured in our estimates would clearly raise the level of GNP and probably increase its rate of growth, especially in trade and services.

## MAJOR TRENDS IN PERFORMANCE AT THE UNION LEVEL

The readers of successive Joint Economic Committee compendia on the Soviet economy since the 1950s will be familiar with the story told there of growing weakness evidenced in declining rates of growth, sharply falling productivity gains, and a wide and probably increasing gap between Soviet and Western levels of technolo-

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[4] The partial economic reforms and the reduced role of central planning during the Gorbachev period could have affected reporting of physical production in various ways. (See James Noren, "The Soviet Economic Crisis: Another Perspective," *Soviet Economy*, January-March 1990, pp. 5-6.) Overreporting of output may have declined because:

- Enterprises, no longer required to meet production targets handed down from above, had less incentive to overstate production.
- In 1987-88, the introduction of stricter state quality control may have raised the average quality of a given product.
- The disarray in the state supply system and the increasing importance of barter may have inclined enterprises to conceal some production from union, republic, and local authorities in order to have some goods to trade.
- During the early Gorbachev period at least, the authorities tended to take a sterner view of falsification than they had under previous leaders.

On the other hand, overreporting of physical production may have increased at times because:

- When enterprises were converted to self-financing in 1988, they had an increased incentive to lower quality standards so as to increase profits under fixed prices.
- When the leadership resorted to campaign tactics (the high technology drive of the early Gorbachev years, the program to increase production of consumer goods and convert defense industry to civil production), the enterprises may have tried to exaggerate their production of the targeted output where they could.

[5] Asked whether the information he is receiving is objective, Gaydar replied that the reporting on physical indicators "has in principle always been good quality, and remains so now," while acknowledging that there is now less reason to try to exaggerate production (*Izvestiya*, 6 June 1992, pp. 1, 3).

gy. During this period institutions that planned and administered the economy changed little, and policies that successive governments adopted to improve matters proved to be marginal changes at best.

POLITICAL AND POLICY MILESTONES

The Gorbachev era was different, often spectacularly so. In broad terms his tenure was marked first by an emphasis on accelerating economic growth and modernizing the Soviet industrial base, then by the adoption of increasingly far-reaching economic reforms and a turn toward the consumer, and finally by attempts to stabilize an economy (and a country) that was slipping out of control and performing progressively worse (see Appendix for list of milestones).

After setting out confidently to modernize the socialist economic mechanism, the leadership found that cleaning house in the economic bureaucracy and trying to restore discipline in the workplace had only a short-lived effect on production. A strategy that relied heavily on boosting investment and force-feeding high-technology sectors in an effort to accelerate economic growth did not pay off on schedule. At the same time, the diversion of resources toward investment while maintaining the military's share of national product gave short shrift to consumer needs. Gorbachev's gamble that the population would wait until his modernization program permitted an acceleration in the output of consumer goods and services failed, and his belated attempt to redirect resources away from investment and defense programs proved to be excessively disruptive.

Meanwhile, the expenditures required to support state programs were not offset by budget revenues. The sudden climb in the state budget deficit that started in 1986 led to an expansion in the money supply that outstripped the growth in real output. As inflationary pressures intensified, the government struggled to formulate a macroeconomic stabilization program. Now, however, economic policymakers had to contend with a U.S.S.R. Supreme Soviet and an increasingly articulate citizenry who resisted attempts to reduce food subsidies and contain wage increases.

In June 1987 Gorbachev put forward a package of economic reforms that gave enterprises some new authority to make decisions about the mix of their output and set some prices and wages. Although this package contributed to the weakening of central controls, it stopped considerably short of eliminating state controls over production and distribution, freeing prices to respond to market signals, and permitting private ownership. When these reforms failed to achieve the desired results, the Soviet government and legislature, starting in the fall of 1989, began to consider a series of increasingly far-reaching changes in the economic system, including private ownership and the eventual elimination of price controls. The program that Gorbachev embraced in October 1990—which was not the most radical alternative considered—called for the gradual removal of state controls over output and prices; the sale or transfer of state property to shareholders, labor collectives,

and individual owners; and gradual movement toward making the ruble convertible to hard currency.[6]

Significantly, these evolving reform programs gave the republics increasing authority and financial responsibility for economic activities on their territory, especially in consumer-oriented matters. The central government's willingness to delegate limited powers, however, was quickly overtaken by the demands of republics and even regions for greater autonomy and, in some cases, independence. Central authority was further eroded by flare-ups of long-suppressed ethnic conflicts and the efforts of republics and smaller regions to insulate themselves from the growing disarray in the economy. By the spring of 1991, Gorbachev had lost his battle with the republics. What remained to be negotiated were the terms of surrender—a process that the perpetrators of the abortive August 1991 coup tried but failed to avert.

### GNP BY SECTOR OF ORIGIN

By the time Gorbachev assumed office, Soviet economic growth had subsided to the point that in 1984-85 it had almost stopped in per capita terms (Table 1).[7] He devised policies and a new five-year plan (1986-90) with the goal of restoring the rates of growth that the Soviet Union had enjoyed in the 1970s and earlier decades. After some initial success in 1986-88, helped greatly by a rebound in agriculture in 1986 and faster growth in industry and construction, the Gorbachev program failed. By 1989, production had turned down in industry, construction, and transportation. In 1990, the slippage became more general and more severe. When the country fragmented in 1991, the economy did likewise, and recession turned into a downward spiral.

#### *Industry*

Because the Gorbachev program relied so heavily at first on industrial modernization and revival, it is worth looking at industrial performance in greater detail (Table 2). The initial emphasis on industrial modernization and investment resulted in a spurt in the production of civilian machinery and construction materials in 1986-88. Although the targets for production of advanced technology were not met, output of computers, numerically controlled machine tools, and robotics showed impressive gains. The investment-oriented strategy did not halt the ongoing slide in the growth of industrial fixed capital, however. Nonetheless, productivity gains in industry in 1986-88 reached their highest level since the 1960s. To this extent, perestroyka enjoyed an early success in industry. The turnaround is evident in measures of the productivity of both labor and capital in industry:[8]

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[6] For a thorough discussion of economic reforms during this period, see Gertrude E. Schroeder, "Post-Soviet Economic Reforms in Perspective," in this volume.

[7] Because the new leadership did not take charge until the spring of 1985, the results in 1985 are attributed to the previous regime in the periodization employed in Table 1. The GNP estimates reported in the table are based on values of Soviet GNP in 1982 prices at factor cost (see footnote 2 above).

[8] CIA, *Handbook of Economic Statistics, 1991*, p. 67.

| | Average Annual Percent Change | | | |
|---|---|---|---|---|
| | 1961-70 | 1971-80 | 1981-85 | 1986-88 |
| Labor | 3.1 | 2.6 | 1.3 | 3.4 |
| Capital | -2.9 | -3.0 | -3.5 | -0.5 |
| Labor and capital combined | -0.3 | -0.6 | -1.4 | 1.3 |

TABLE 1. U.S.S.R.: Growth of GNP, by Sector of Origin, 1981–91.

| GNP Component | Average Annual Percent Change | | | Annual Percent Change | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1981–83 | 1984–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 [a] | 1991 [b] |
| Total GNP | 2.2 | 1.1 | 1.3 | 4.1 | 1.3 | 2.1 | 1.5 | -2.4 | -8.5 |
| Industry | 1.6 | 2.3 | 0.9 | 2.4 | 3.0 | 2.7 | -0.6 | -2.8 | -10.5 |
| Construction | 0.4 | 2.2 | 0.0 | 3.7 | 2.4 | 3.1 | -0.5 | -8.0 | -15.0 |
| Agriculture | 4.0 | -3.0 | 1.8 | 11.2 | -3.8 | -0.4 | 6.1 | -3.6 | -8.5 |
| Transportation | 2.5 | 1.7 | 0.7 | 3.0 | 1.2 | 2.6 | -0.3 | -2.9 | -7.5 |
| Communications | 3.3 | 4.6 | 5.1 | 5.6 | 6.9 | 5.0 | 5.3 | 3.0 | 1.0 |
| Domestic trade | 1.7 | 1.6 | 1.5 | -0.2 | 1.6 | 3.3 | 2.3 | 0.4 | -10.5 |
| Services | 2.1 | 2.4 | 2.3 | 2.3 | 3.2 | 2.9 | 2.2 | 1.0 | -4.0 |

Source: CIA estimates, based on value added at 1982 factor cost, as reported in *Handbook of Economic Statistics, 1991*, p. 62.

[a] Because of greater uncertainty than in past years, estimated change in total GNP in 1990 ranges from −2.4 to −5 percent. Estimate of 2.4 percent decline in total GNP and all estimates for individual components are based on routine application of standard CIA methods. Estimate of 5 percent decline in total GNP reflects corrections (described in ibid.) for measurement problems that worsened in 1990.

[b] Authors' rough estimates, made using same basic methods as CIA estimates for earlier years but much more tentative data on changes in output; estimates pertain to Commonwealth of Independent States area only (former U.S.S.R. excluding Estonia, Latvia, Lithuania, and Georgia).

In 1989, performance slipped abruptly in every branch of industry, and the deterioration continued in the following two years. To some extent the developments were the intended consequences of the central government's policy. When economic priorities were revised in 1989 in favor of consumption, the cutbacks in state-funded investment reduced demand for ferrous metals and construction materials. Similarly, the decision to scale back spending on military procurement so as to free up defense industry capacity for production of civilian goods curtailed output in the machinery sector. As the government soon discovered, defense conversion was not easy or quick. The abrupt shift in priorities also depended on the assumption—or hope—that the continuing rise in investment could be curbed without affecting energy production. [9] This assumption proved to be mistaken; production of fuels and power could not be maintained at planned or even existing levels without ever-increasing injections of investment. The problems in the fuel sector soon surfaced in slower growth of chemical feedstocks and a decline in output of chemicals.

The year 1989 also marked the extension of Gorbachev's 1987 reforms to all sectors of the economy and the intensification of ethnic strife. Under the reforms industrial enterprises were increasingly responsible for planning and marketing their own production and

[9] Investment in energy (fuels and electric power) increased by 7.3 percent per year in 1976–88, compared with an average annual increase of 4.2 percent in total investment. Energy's share of total investment rose from 10 percent in 1970 to 15 percent in 1988.

TABLE 2. U.S.S.R.: Industrial Growth, by Branch, 1981-91.

| Industry Component | Average Annual Percent Change | | | Annual Percent Change | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1981–83 | 1984–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 [a] |
| Total industry | 1.6 | 2.3 | 0.9 | 2.4 | 3.0 | 2.7 | -0.6 | -2.8 | -10.5 |
| Ferrous metals | 1.8 | 1.8 | 0.1 | 3.6 | 0.8 | 1.5 | -2.0 | -3.4 | -14.0 |
| Nonferrous metals | 1.4 | 3.0 | 1.2 | 3.0 | 2.3 | 3.2 | 0.8 | -3.0 | -11.0 |
| Fuel | 1.3 | 0.1 | 0.1 | 3.3 | 1.9 | 1.4 | -1.6 | -4.0 | -8.5 |
| Electric power | 2.6 | 3.8 | 2.3 | 3.5 | 4.1 | 2.4 | 1.0 | 0.3 | -2.0 |
| Machinery | 1.1 | 2.7 | 0.7 | 2.4 | 3.7 | 2.7 | -1.4 | -3.5 | -13.5 |
| Chemicals | 3.9 | 3.7 | 0.2 | 4.7 | 2.7 | 2.2 | -2.9 | -5.3 | -9.5 |
| Wood, pulp, and paper | 1.6 | 2.5 | 1.4 | 4.5 | 2.2 | 3.2 | -0.5 | -2.2 | -10.5 |
| Construction materials | 1.7 | 1.9 | 1.6 | 4.0 | 3.7 | 4.2 | 0.6 | -3.9 | -7.0 |
| Light industry | 0.8 | 2.6 | 1.4 | 1.4 | 1.7 | 2.4 | 1.5 | 0.0 | -8.5 |
| Food industry | 2.9 | 0.2 | 1.0 | -4.7 | 3.6 | 4.1 | 3.1 | -0.8 | -12.0 |

Source: CIA estimates, based on value added at 1982 factor cost, as reported in *Handbook of Economic Statistics, 1991*, p. 68.

[a] Authors' rough estimates, made using same basic methods as CIA estimates for earlier years but much more tentative data on changes in output; estimates pertain to Commonwealth of Independent States area only (former U.S.S.R. excluding Estonia, Latvia, Lithuania, and Georgia).

financing their own investment. The changeover was more difficult than anticipated. Products which were unprofitable to manufacture at existing prices soon were hard to find, and the lack of a functioning wholesale trade sector to supplant the state supply system meant that interruptions in supplies interfered increasingly with production schedules. Ethnic unrest and associated transportation blockades also brought some production to a halt. In 1990 and especially in 1991, the clash of nationalities and the desire to protect republic and local interests assumed a much larger role in blocking interregional deliveries of industrial supplies and finished products.

The transition to enterprise independence and wholesale trade would have proceeded much more smoothly, however, if the rubles in enterprise bank accounts had real purchasing power. As inflationary pressures mounted, enterprises found that these "noncash" rubles, if not backed by government orders, could not buy goods in short supply, and barter became an increasingly important mode of exchange. On the one hand, barter helped to sustain trade in industrial supplies and products as the scope and authority of state planning diminished. On the other hand, it was a cumbersome process that imposed its own penalty on the level of industrial activity.

### *Agriculture*

Food shortages in state stores became increasingly prevalent during Gorbachev's administration, but the average production of most key farm products was substantially higher than in the two preceding five-year periods (Table 3). [10] Agriculture's principal contribution to Soviet economic decline was not a diminution in the supply of farm products. Rather, it was the huge and increasing investments poured into the sector and the growing budget subsidies

[10] The year-to-year changes in net farm output shown in Table 3 are not as variable as the changes in agriculture's contribution to GNP, or value added, shown in Table 1. Variations in net farm output are accentuated by the deduction of purchases from other sectors in order to calculate value added in agriculture.

required to finance the difference between prices paid to farms and the lower, fixed prices of food in state retail stores.[11]

TABLE 3. U.S.S.R.: Agricultural Output, by Agricultural Component, 1981–91.

| Agricultural Component | Average Annual Metric Tons (Millions) | | Annual Metric Tons (Millions) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1981–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991[a] |
| Net output (value in billions of rubles)[b] | 123.1 | 135.4 | 136.7 | 133.8 | 133.6 | 138.9 | 134.5 | 123.1 |
| Crops | | | | | | | | |
| Grain | 168.7 | 196.6 | 194.0 | 193.8 | 180.2 | 196.7 | 218.0 | 161.2 |
| Potatoes | 78.4 | 72.3 | 87.2 | 75.9 | 62.7 | 72.2 | 63.6 | 67.0 |
| Vegetables | 29.2 | 28.7 | 29.7 | 29.2 | 29.3 | 28.7 | 26.6 | 26.2 |
| Sunflower seed | 5.0 | 6.2 | 5.3 | 6.1 | 6.2 | 7.1 | 6.6 | 6.3 |
| Sugar beets | 76.4 | 87.3 | 79.3 | 90.7 | 88.0 | 97.4 | 81.7 | 66.5 |
| Cotton | 8.3 | 8.4 | 8.2 | 8.1 | 8.7 | 8.6 | 8.3 | 7.8 |
| Livestock | | | | | | | | |
| Meat | 16.2 | 19.3 | 18.0 | 18.9 | 19.7 | 20.1 | 20.0 | 18.6 |
| Milk | 94.6 | 105.9 | 102.2 | 103.8 | 106.8 | 108.5 | 108.4 | 101.5 |
| Eggs[c] | 74.4 | 83.0 | 80.7 | 82.7 | 85.2 | 84.9 | 81.7 | 78.7 |
| Wool | 0.46 | 0.47 | 0.47 | 0.46 | 0.48 | 0.48 | 0.47 | 0.47 |

Source: Soviet official statistics, except as noted: 1981-90 from *Narodnoye khozyaystvo SSSR v 1990 g.* (Moscow: Finansy i statistika, 1991), pp. 460, 462; 1991 from reports published by statistical agencies of Commonwealth of Independent States and individual countries. Hereafter referred to as *Narkhoz*.

[a] Preliminary.

[b] CIA estimates valued in 1982 established prices; net of feed, seed, and an allowance for waste in harvesting.

[c] Billions of eggs.

*Construction and Transportation*

The fortunes of two other sectors of origin—construction and transportation—reflected the policy shifts and regional struggles that crippled parts of industry in the late 1980s. After an early spurt in 1986–88, construction became constrained first by shortages of materials and machinery to service a construction front that had expanded too rapidly. Then, the sharp reductions in state funding for investment, connected with a shift in priorities from modernization to consumption, forced a reduction in construction activity. Transportation barely kept up with overall economic growth in 1986–88 and then tailed off as the demand for its services declined, its physical plant deteriorated for lack of sufficient investment, and civil unrest and local autarky severed transportation links.

## GNP BY END USE

The failures of perestroyka in the economy led to some sharp discontinuities in the allocation of Soviet GNP by end use. When economic growth was not rapid enough to revive the stagnant consumer sector, the leadership's priorities changed in favor of consumption. But what were intended to be shifts at the margin turned out to be major cutbacks in investment and defense as the

[11] The agricultural subsidy bill climbed from 25 billion rubles in 1980 to 105 billion rubles in 1990, the result of a tripling of prices paid by the state for grain and other crops and a doubling of prices paid for most livestock products during a period when retail prices of the main foods were virtually unchanged.

government tried to decentralize investment decisions as part of the economic reform and correct the growing disequilibrium in the economy resulting from steeply rising budget deficits.

*Consumption*

Under Gorbachev, consumption grew at about the same rate as in the early 1980s (Table 4). The trouble was that its record in 1981–85, and especially in 1981–83, was so lackluster (less than 1 percent per year in per capita terms) that it elicited considerable consumer discontent and was a factor in convincing a group of senior Politburo members that a new approach to economic policy was necessary. Under the new leadership, the old problem of stagnation in real consumption levels was compounded by the loss of control over the population's incomes that was the consequence of partial economic reforms and the inflationary pressure created by huge budget deficits.

TABLE 4. U.S.S.R.: Growth of GNP, by End Use, 1981–90.

| End Use Component | Average Annual Percent Change | | | Annual Percent Change | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1981–83 | 1984–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 [a] |
| Total GNP | 2.2 | 1.1 | 1.3 | 4.1 | 1.3 | 2.1 | 1.5 | –2.4 |
| Consumption | 1.6 | 2.3 | 2.2 | 1.5 | 2.2 | 3.5 | 2.3 | 1.5 |
| Food | 0.8 | 1.4 | 1.4 | –0.1 | 1.5 | 3.4 | 1.6 | 0.5 |
| Soft goods | 1.0 | 3.6 | 3.1 | 3.0 | 2.0 | 3.5 | 4.3 | 2.4 |
| Durables | 3.8 | 3.9 | 3.2 | 4.0 | 1.3 | 3.9 | 1.9 | 5.1 |
| Household services | 2.9 | 3.1 | 2.9 | 3.1 | 3.8 | 3.7 | 2.3 | 1.4 |
| Communal services | 1.7 | 1.9 | 2.3 | 1.1 | 2.7 | 3.1 | 2.8 | 2.0 |
| Investment | 3.0 | 2.1 | 1.1 | 5.3 | 1.7 | 4.5 | 0.6 | –6.0 |
| New fixed investment | 3.3 | 2.1 | 1.1 | 6.5 | 0.6 | 4.9 | 0.8 | –6.8 |
| Capital repair | 1.9 | 2.1 | 1.1 | 0.7 | 5.7 | 2.7 | 0.0 | –3.2 |
| Government administration | 1.7 | 1.2 | –1.6 | 1.5 | 1.7 | –2.5 | –3.6 | –4.8 |
| Exports [b] | 3.3 | –0.8 | 1.4 | 9.3 | 2.1 | 2.5 | 8.0 | –13.2 |
| Imports [c] | 6.6 | 4.5 | –0.3 | –5.0 | 1.0 | 2.8 | 1.2 | –1.1 |

Source: CIA estimates, except as noted: based on values at 1982 factor cost, as reported in *Handbook of Economic Statistics, 1991*, p. 64.

[a] Because of greater uncertainty than in past years, estimated change in total GNP in 1990 ranges from –2.4 to –5 percent. The estimate of 2.4 percent decline in total GNP and all estimates for individual components are based on routine application of standard CIA methods. The estimate of 5 percent decline in total GNP reflects corrections (described in ibid.) for measurement problems that worsened in 1990.

[b] Soviet official statistics, from *Vneshniye ekonomicheskiye svyazi, 1990* (Moscow, 1991), pp. 6, 17.

Shortages of food increased in severity as the gap widened between the population's disposable income and the volume of goods and services available for purchase.[12] The statistics indicate a somewhat more favorable situation in the supply of soft goods and durables. Here too, however, the population's demand outstripped availability. As a result, an increasing share of consumer goods were driven out of state retail trade and sold legally or illegally at higher prices in parallel markets.[13]

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[12] Emigré surveys conducted by Radio Free Europe/Radio Liberty suggest that the availability of food products in state stores increased in 1983-84, declined slightly in1985, worsened steadily in 1986–88, and then dropped sharply in 1989. In 1989, little more than one-quarter of respondents reported regular availability of 22 food groups in state stores compared with 53 percent in 1984. (James Noren, op. cit., pp. 17–20.)

[13] Uncertainty about the share of goods sold in these markets is a major source of disagreement about the degree of open inflation in the U.S.S.R. in 1986–91. Despite the initial sporadic

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The government responded by jettisoning its initial investment-oriented strategy. In particular, it charged the defense industry with taking over machine building for the food and light industry and greatly increasing its production of consumer durables. By the time Gorbachev's period of effective rule ended (in early 1991), the greater investment in the food and light industry had not yet paid off, but production of consumer electronics and household durables such as refrigerators, washing machines, and vacuum cleaners had improved. In any event, the consumer-oriented programs foundered in the confusion accompanying the economic reform and the governmental paralysis brought on by the conflict between the center and the republics and between the old-line communists and the reformers in the republics. With its hard currency resources shrinking, the Soviet government also was forced in 1990 to curtail the imports of food and consumer goods that had augmented domestic supplies. As a consequence, consumption tailed off in 1990 and declined sharply in 1991.

*Investment*

Plans to modernize the economy on the basis of a surge in investment and a focus on investment in machinery and equipment rather than construction-installation work did not pan out as perestroyka proceeded. After an initial acceleration, the growth of new fixed investment faltered in 1987, recovered briefly, and then fell back again in 1989 when Soviet policymakers decided to rein in state investment in an attempt to cool down an overheated economy. By 1990 the level of capital investment was falling precipitously. Over the whole 1986–90 period, the growth of capital investment was much slower than in 1981–85. The goal of "improving" the structure of capital investment by raising the share accounted for by machinery and equipment was also frustrated. The ratio of construction-installation work to machinery and equipment, according to official statistics, increased through 1988 before falling to its 1985 level in 1989. In 1990 and 1991 the sharp fall in new project starts finally brought about an increase in the machinery share.

The modernization program was jettisoned fundamentally because it did not generate the productivity gains necessary to sustain rising standards of living and prevent macroeconomic disequilibrium. The reasons for the low productivity of investment during the Gorbachev era are as various as the factors that disrupted the economy during the period. But the investment program failed also because of constraints that appeared within the investment sector. First of all, the machine building sector was not prepared to handle the increased production of producer durables implicit in higher rates of growth of investment and a larger share for machinery in total investment. The strain on machine building was particularly severe because it was at the same time being asked to improve the quality of its products, shift its output mix toward the

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and then more general unavailability of food in state stores, however, the increased inflationary pressure did not show up until 1990 in collective farm markets, where prices could rise or fall according to supply and demand. Soviet official statistics indicate that the ratio of prices of food in those markets to prices in state retail stores increased slowly from 2.63 in 1985 to 2.94 in 1989, a rise of 12 percent. In 1990, the ratio jumped to 3.51, or by 19 percent (*Narodnoye khozyaystvo SSSR v 1989 g.*, Moscow: Finansy i statistika, p. 138).

higher technology end of the spectrum, accelerate the production of consumer durables, and continue to produce large quantities of military hardware. As Gorbachev and other leaders repeatedly complained, machine building enterprises did not achieve the technological improvements necessary for the investment program to make a real difference.

Moreover, economic reform and shortcomings in construction delayed the completion of investment projects and thereby diminished the effectiveness of new investment. For a time (1986–87), the ratio of the annual value of completed construction projects to total new fixed investment held at roughly the 1985 level (about 96 percent). The ratio then dropped to 88 percent in 1988 and 84 percent in 1990. Meanwhile, the volume of unfinished construction in industry (the focus of the modernization campaign) climbed from 94 percent of annual new fixed investment in 1985 to 130 percent in 1990. [14]

In part the difficulties in completing projects resulted from mistakes in the 1986–90 plan—an inconsistency between planned production of construction materials and the investment goals. When the partial reforms in Gorbachev's 1987 package brought a reduction in centralized control over investment, enterprises responded by initiating a large number of new projects having no assured backing in terms of construction resources. The dispersal of too few resources among too many projects dragged out construction time substantially. Hoping to restore order in construction and reduce the state budget deficit, the union government slashed budget-financed investment further in 1990 and 1991. By then enterprises were largely on their own in financing investment and reluctant to continue investing at the levels they had earlier.

*Defense and Civil Research and Development*

The unraveling of *perestroyka* dislodged defense from its leading position in Soviet resource allocation. Outlays on defense programs and civil research and development increased rapidly in the early years, but then the leadership decided to turn to the defense sector to rescue a flagging economy. By 1991, real spending on defense had fallen to the lowest level since the early 1970s. [15]

Initially, the government apparently planned to increase outlays on defense at a rate not attained since the early 1970s. [16] By the early 1980s, military criticism of Brezhnev's defense policies had surfaced. Some defense leaders probably believed that the Soviet Union was not doing enough to counter the U.S. defense buildup under way since the last years of the Carter administration. [17]

[14] The ratios reflect unfinished construction at the end of a given year relative to new fixed investment that year. Campaigns to reduce unfinished construction were common in the 1960s and 1970s. In 1981–85, the authorities had some success on this front, reducing the ratio in the economy as a whole from 87 percent in 1980 to 79 percent in 1985.

[15] The estimates of spending on defense in 1982 rubles have been taken from the papers submitted by CIA and DIA to the Joint Economic Committee in connection with their annual joint testimony on developments in the Soviet Union.

[16] In June 1989 Premier Nikolay Ryzhkov revealed that in the formulation of the 1986–90 plan it was decided to maintain the growth of defense spending at a rate higher than that of national income (planned at an average of 4.5 percent per year). He explained that the "international situation prevailing and our military doctrine" required this course (*Izvestiya*, 8 June 1990).

[17] In 1979–84, U.S. defense spending increased by 36 percent in real terms; CIA estimates put the real growth of Soviet defense spending during this period at 11 percent.

With the benefit of hindsight, Gorbachev's decision to accelerate the growth of defense spending at a time when the U.S.S.R. was beginning a massive restructuring and renovation of its economy seems inexplicable. But Gorbachev believed that a restoration of past rates of economic growth would permit all of his programs to go forward.

When consumer discontent over living standards became increasingly evident and industrial modernization ran into trouble as an overtaxed machine building sector struggled to cope with all its various assignments, the regime first responded by giving the defense industry additional tasks in support of modernization and the consumer. [18] This could not work, however, because the entire machine building sector was trying to do too much. During 1988, the Soviet leadership realized that priorities would have to be changed if perestroyka was to be rescued. [19] Its decisions, announced by Gorbachev at the United Nations in December 1988 and a meeting with the Trilateral Commission in January 1989, encompassed a 500,000-man cut in force levels, partial withdrawal of forces from Eastern Europe and Mongolia, and reductions in military spending and military production of 14.2 and 19.5 percent over a period of two years. Before long the deteriorating economic situation pushed the Gorbachev team to cut defense further. The announced defense budgets for 1990 and 1991 specified declines in defense spending of 8.3 and 8.5 percent, respectively, with the largest cuts programmed for procurement of weapons.

The defense industry's tepid response to calls for greater support for civil programs during 1986-88 may have convinced Gorbachev that it would not or could not contribute in a major way to perestroyka until part of its assured market for military hardware had been removed. In the last three years of Gorbachev's rule, however, hopes faded that defense conversion might give an impetus to the production of investment goods and consumer durables. Conversion plans imposed from the top down did not work, and defense industrialists found it at least as hard to operate in an increasingly unplanned economy as did their civilian counterparts. [20] Much of existing capacity could not be adapted to civil production quickly or easily, and the decline in production of military equipment in 1989-91 was far from offset by an increase in the output of civil machinery in defense industry.

### *Administration and Other Government Services*

Under *perestroyka* real outlays on administration and government services declined—by an average of 1.6 percent per year in

[18] In October 1987 Ryzhkov gave the defense industrial ministries specific targets for deliveries to the food processing branch of industry, and in February 1988 it was decided that the civilian ministry producing equipment for the food and light industries would be abolished and its resources and responsibilities transferred to several defense-related ministries.

[19] In a trip to Krasnoyarsk in September 1988 Gorbachev encountered the sullen mood of the populace in its full force. The crowds complained bitterly about the lack of food, housing, schools, and health care.

[20] Arguably, defense industry managers were even more at sea than the directors of civil industry. The defense industry was accustomed to preferential treatment in terms of supplies and labor, and—as the complaints of military leaders now indicate—largely had their own way in deciding what to produce and what prices to charge.

1986-90 (Table 4).[21] In the first two years of the period these expenditures actually increased more rapidly than they had in 1984-85. After 1987, Gorbachev's drive to trim the ministerial bureaucracy coupled, with economic reform's erosion of central planning and administration, led to successively larger absolute reductions in the end-use category. Within the category, however, activities related to culture enjoyed growing support.

*Net Exports*

In the early 1980s the Soviet consumer and the economy generally were helped by an improvement in the U.S.S.R.'s terms of trade that permitted real imports to rise substantially more than exports (Table 4).[22] This advantage disappeared in the Gorbachev years. The U.S.S.R. encountered some bad luck early in the Gorbachev period when prices for its principal export products—oil and gas—fell sharply in 1986.[23] Later, slumping domestic production forced a reduction in the volume of exports of crude oil and petroleum products. As a consequence, the value of Soviet exports declined by 6 percent in 1986, leveled off through 1989, and then fell by 12 percent in 1990.

When perestroyka was under pressure in 1988-89, the government sought relief from shortages by increasing spending on imports, a policy that could not be continued as export earnings tailed off, foreign exchange reserves dwindled, and private lenders to the U.S.S.R. sought to reduce their exposure in a country that was tardy in its debt service and whose political future was uncertain.

In 1991, the U.S.S.R.'s foreign trade collapsed. The value of exports and imports in the Commonwealth of Independent States (the U.S.S.R. less the Baltics and Georgia) plunged by 33 percent and 44 percent, respectively. Trade with Eastern Europe was crippled by the Soviet attempt to convert it to world prices, while lack of hard currency required a sharp cutback in purchases from capitalist countries. The sudden breakdown in established trading relationships was a major factor in pushing the Soviet economy from slow decline into a major depression.

## Developments in the Republics

The Soviet economic system—like the political system—was highly centralized when Gorbachev came to power in 1985. For a short period in the late 1950s and early 1960s, Khrushchev had organized economic administration on a regional basis, with enterprises supervised by regional economic councils appointed by republic councils of ministers. The Brezhnev regime returned eco-

[21] In the CIA end-use accounts this category encompasses administration of state and social organizations, general agricultural programs, support of the forest economy, outlays on cultural activities, provision of municipal services, and the financing of civil police.

[22] Estimates of the net exports component of real GNP for the Soviet Union cannot be made with precision for two reasons. First, data on trade in services have not been published, and second, the values for trade with capitalist and socialist countries are not comparable because the prices at which they are stated are often quite different for identical products. The statistics shown in Table 4, taken from official Soviet yearbooks, are probably adequate, however, to indicate trends in the contribution of foreign trade to Soviet GNP even though they cannot support an estimate of net exports of goods and services in constant prices.

[23] According to Soviet statistics, prices for Soviet crude oil and natural gas in all foreign markets in 1990 were, respectively, 63 percent and 58 percent of the 1985 level (*Narkhoz 1990*, pp. 648-649).

nomic administration to its traditional industrial basis—with enterprises throughout the U.S.S.R. subordinate to Moscow-based ministries—and the scope of central authority gradually increased. For example, the share of industrial output produced under the supervision of all-union ministries rose from 50 percent in 1970 to 58 percent in 1985, and the union's share of state budget expenditures went from 51 to 53 percent in 1970–79 to 52 to 54 percent in 1980–85.

Despite this centralization of authority, economic conditions varied greatly across the U.S.S.R. From the 1930s through the 1950s, Soviet economic development policies almost certainly reduced the extent of economic inequality among regions. The less developed republics were industrialized, and basic levels of education and health care were established throughout the country. Nevertheless, substantial inequalities persisted when Brezhnev declared in 1972 that the major economic disparities among national groups had been resolved, and Soviet efforts to reduce these inequalities slackened in the 1970s and 1980s. [24]

Recently published Soviet statistics on republic levels of GNP and consumption per capita in 1989 indicate wide variations in levels of economic development. Variations in GNP are somewhat greater than variations in consumption, but both measures suggest the same division of republics into three broad groups. Russia, Belarus, and the three Baltic republics—Estonia, Latvia, and Lithuania—had the highest levels of GNP and consumption per capita, while Azerbaijan and the four Central Asian republics—Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan—clearly ranked lowest. The middle group of republics consisted of Ukraine, Moldova, Kazakhstan, Armenia, and Georgia.

Before we discuss the record of economic performance by republic during the Gorbachev years, a few words about questions of measurement are needed. In the rest of this paper we rely on Western estimates of economic growth for the U.S.S.R. as a whole. Western estimates for individual republics are scarce, however, and, even when available, generally are more tentative than corresponding estimates for the Soviet Union. [25] In this section we use Soviet official statistics to compare *relative* rates of economic growth across republics—a purpose for which Western scholars have found these statistics to be adequate. Like official macroeconomic indicators for the U.S.S.R. as a whole, however, these summary statistics for the republics overstate actual rates of real growth.

Almost all of the Soviet republics experienced slower rates of growth of real output in 1986–89 than in 1981–85 and declining levels of output in 1990 and 1991. These trends are reflected in statistics on "national income produced," a Soviet official measure that is similar to GNP in coverage, except that national income ex-

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[24] For a more thorough discussion of Soviet regional economic policies and their consequences, see Gertrude E. Schroeder, "Regional Economic Disparities, Gorbachev's Policies, and the Disintegration of the Soviet Union," in this volume.

[25] For some of the few Western estimates available, see ibid.; Douglas Diamond and Gregory Kisunko, "Industrial Growth by Republic in the Former USSR, 1981–90," in this volume; and Gertrude E. Schroeder, "Regional Living Standards," in *Economics of Soviet Regions*, I.S. Koropeckyj and Gertrude E. Schroeder (eds.) (New York: Praeger, 1981).

cludes depreciation and services that do not contribute directly to material output (see Tables 5 and 6). Official statistics on the output of industry and agriculture generally show trends consistent with those in national income, and so do statistics on consumption (Tables 7-9).

For the most part, republics with relatively high per capita levels of national income and consumption increased their lead over lower-income republics during the 1986–90 period. Russia, by virtue of its size, grew at rates close to the U.S.S.R. average. Outside Russia, rates of growth of national income—both total and per capita—were generally average or better in the Western and Baltic republics. In contrast, national income per capita declined in Kazakhstan, Tajikistan, and Turkmenistan and barely rose in Uzbekistan. The Caucasian republics went from above average growth in 1981–85 to negative growth in 1986–90, largely reflecting the effects of the ethnic clashes that began to flare in 1989.

National income for the U.S.S.R. as a whole increased through 1989 (as GNP did), but in that year five republics experienced declines—probably reflecting a combination of ethnic violence and regional difficulties in agriculture. The downturn deepened in 1990 and again in 1991, when it expanded to include the republics. In general, the fall in output was greatest where ethnic and political clashes were fiercest, but the destruction of the old economic system brought problems everywhere.

Investment allocations contributed to some of the differences in output growth among republics (Tables 10–11). Belarus and Lithuania benefited from above average rates of increase in investment throughout the 1980s. Azerbaijan and Georgia went from above average investment growth in 1981–85 to below average growth in 1986–90. It appears that a sharp increase in investment in Armenia following the 1988 earthquake came at the expense of investment cuts in the neighboring republics.

Moreover, Gorbachev's economic reforms most likely played a role in the relatively better economic performance of the higher income republics. As noted above, these reforms called for republic and local governments to cover more of their budget expenditures out of revenues collected on their territory. This exacerbated the disadvantages faced by lower income regions, despite the transfer of revenues to them from the union budget.

## Reflections on the Gorbachev Economic Record

The economic history of the U.S.S.R. in its last decade is likely to be discussed and debated for many years to come. Some have argued that the Soviet economy already was in decline as it entered the 1980s. Judged by its ability to produce goods and services, this was not the case. It was, however, a failing economy in the sense that it had increasing difficulty in producing the assortment of goods and services desired by the population and that a rising proportion of increments to total production were accounted for by additions to the labor force and the capital stock rather than by gains in the productivity of labor and capital. Nonetheless, the popular description of the economy as in a state of collapse cannot be supported from the statistics on production.

## TABLE 5. U.S.S.R.: Growth of National Income Produced, by Republic, 1981–91.

| Republic | Average Annual Percent Change | | Annual Percent Change | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1981–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 [a] |
| Russia | 3.0 | 0.9 | 2.4 | 0.7 | 4.5 | 1.9 | –5.0 | –11 |
| Ukraine | 3.4 | 2.4 | 1.6 | 5.3 | 2.5 | 4.1 | –1.5 | –11 |
| Belarus | 5.3 | 3.3 | 4.3 | 3.5 | 2.4 | 7.9 | –1.4 | –3 |
| Moldova | 2.8 | 2.5 | 7.2 | 1.8 | 2.0 | 8.6 | –6.6 | –12 |
| Kazakhstan | 0.9 | 1.0 | 1.4 | 0.1 | 5.8 | –0.4 | –1.7 | –10 |
| Kyrgyzstan | 3.7 | 3.8 | 0.9 | 2.7 | 12.7 | 4.3 | –0.9 | –5 |
| Tajikistan | 2.6 | –0.8 | 3.5 | –1.4 | 12.2 | –7.8 | –8.9 | –9 |
| Turkmenistan | 2.2 | 2.3 | 4.3 | 3.8 | 10.2 | –6.8 | 0.5 | –0.6 |
| Uzbekistan | 3.0 | 2.7 | –0.2 | 0.2 | 9.5 | 2.7 | 1.4 | –0.9 |
| Armenia | 5.5 | –0.9 | 1.7 | –0.6 | –2.3 | 7.5 | –9.8 | –11 |
| Azerbaijan | 4.4 | –1.7 | 1.6 | 4.0 | 0.6 | –6.0 | –8.0 | –0.4 |
| Georgia | 4.8 | –0.8 | –1.1 | –1.9 | 6.9 | –3.4 | –4.3 | –23 |
| Estonia | 2.8 | 3.4 | 2.9 | 1.2 | 5.2 | 6.6 | 1.1 | –11 |
| Latvia | 3.3 | 3.2 | 4.6 | 1.5 | 6.2 | 7.4 | –3.2 | –8 |
| Lithuania | 4.3 | 1.7 | 6.3 | 4.8 | 10.7 | 1.6 | –13.0 | –10 |
| U.S.S.R. | 3.2 | 1.3 | 2.3 | 1.6 | 4.4 | 2.5 | –4.0 | –15 [b] |

Source: Soviet official statistics—1981–90 from *Soyuznyye respubliki: osnovnyye ekonomicheskiye i sotsial'nyye pokazateli* (Moscow: Goskomstat Information-Publishing Center, 1991), p. 8; 1991 from reports published by statistical agencies of Commonwealth of Independent States (CIS) and individual countries.

[a] Preliminary.

[b] Reported decline for the U.S.S.R. reflects the CIS only and is steeper than the weighted average of declines reported for individual countries. Part of this discrepancy probably results from use of inadequate deflators for at least some countries.

## TABLE 6. U.S.S.R.: Growth of per Capita National Income Produced, by Republic, 1981–91.

| Republic | Average Annual Percent Change | | Annual Percent Change | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1981–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 [a] |
| Russia | 2.4 | 0.2 | 1.6 | –0.1 | 3.7 | 1.4 | –5.4 | –11 |
| Ukraine | 3.0 | 2.0 | 1.2 | 4.9 | 2.1 | 3.7 | –1.7 | –11 |
| Belarus | 4.6 | 2.7 | 3.7 | 2.9 | 1.8 | 7.3 | –1.9 | –3 |
| Moldova | 1.7 | 1.7 | 6.2 | 1.0 | 1.3 | 7.9 | –7.0 | –12 |
| Kazakhstan | –0.3 | –0.1 | 0.2 | –1.2 | 4.5 | –1.5 | –2.5 | –11 |
| Kyrgyzstan | 1.6 | 2.0 | –1.1 | 0.7 | 10.6 | 2.5 | –2.4 | –6 |
| Tajikistan | –0.3 | –3.7 | 0.1 | –4.5 | 8.8 | –10.5 | –11.1 | –11 |
| Turkmenistan | –0.3 | –0.3 | 1.6 | 1.1 | 7.5 | –9.1 | –2.1 | –3 |
| Uzbekistan | 0.3 | 0.2 | –2.9 | –2.5 | 6.9 | 0.4 | –0.7 | –3 |
| Armenia | 4.4 | –1.5 | 0.6 | –1.6 | –2.5 | 7.7 | –10.7 | –13 |
| Azerbaijan | 2.8 | –3.0 | 0.1 | 2.4 | –0.9 | –7.4 | –8.9 | –0.5 |
| Georgia | 3.9 | –1.5 | –2.0 | –2.7 | 6.1 | –4.0 | –4.6 | –23 |
| Estonia | 2.2 | 2.6 | 2.0 | 0.2 | 4.3 | 5.8 | 0.8 | –11 |
| Latvia | 2.8 | 2.5 | 3.8 | 0.5 | 5.1 | 6.8 | –3.3 | –8 |
| Lithuania | 3.5 | 0.8 | 5.3 | 3.7 | 9.5 | 0.6 | –13.6 | –10 |
| U.S.S.R. | 2.3 | 0.5 | 1.3 | 0.6 | 3.5 | 1.7 | –4.4 | –15 [b] |

Sources: Soviet official statistics—1981–90 from *Soyuznyye respubliki: osnovnyye ekonomicheskiye i sotsial'nyye pokazateli* (Moscow: Goskomstat Information-Publishing Center, 1991), p. 9; 1991 from reports published by statistical agencies of Commonwealth of Independent States (CIS) and individual countries.

[a] Preliminary.

[b] The reported decline for U.S.S.R. reflects CIS only and is steeper than the weighted average of declines reported for individual countries. Part of this discrepancy probably results from use of inadequate deflators for at least some countries.

TABLE 7. U.S.S.R.: Growth of Industrial Output, by Republic, 1981–91.

| Republic | Average Annual Percent Change | | Annual Percent Change | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1981–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 [a] |
| Russia | 3.3 | 2.6 | 4.5 | 3.5 | 3.8 | 1.4 | -0.1 | -2.2 |
| Ukraine | 3.4 | 3.0 | 4.2 | 3.9 | 4.1 | 2.8 | -0.1 | -4.5 |
| Belarus | 5.3 | 5.3 | 6.7 | 6.7 | 6.3 | 4.6 | 2.1 | -1.5 |
| Moldova | 4.4 | 4.0 | 2.6 | 5.0 | 3.3 | 5.7 | 3.2 | -7.0 |
| Kazakhstan | 3.4 | 2.9 | 5.1 | 4.3 | 3.7 | 2.5 | -0.8 | 0.7 |
| Kyrgyzstan | 4.6 | 3.4 | 4.3 | 1.4 | 6.8 | 5.2 | -0.6 | 0.1 |
| Tajikistan | 3.7 | 3.0 | 1.7 | 5.0 | 5.5 | 1.8 | 1.2 | -2.0 |
| Turkmenistan | 2.6 | 3.7 | 4.8 | 3.1 | 4.3 | 3.3 | 3.2 | 4.1 |
| Uzbekistan | 4.5 | 3.3 | 5.6 | 2.5 | 3.3 | 3.6 | 1.8 | 1.8 |
| Armenia | 5.7 | -1.7 | 4.5 | 4.7 | -1.1 | -8.3 | -7.5 | -9.6 |
| Azerbaijan | 4.4 | -0.2 | -2.0 | 3.7 | 3.4 | 0.7 | -6.3 | 3.8 |
| Georgia | 4.0 | 0.6 | 2.3 | 2.5 | 3.2 | 0.7 | -5.7 | -19 |
| Estonia | 2.8 | 2.1 | 3.8 | 3.0 | 3.1 | 0.7 | 0.1 | -9.0 |
| Latvia | 3.3 | 2.9 | 3.7 | 4.2 | 3.5 | 3.1 | -0.2 | 0.0 |
| Lithuania | 4.5 | 3.2 | 4.8 | 4.6 | 5.7 | 4.2 | -2.8 | -1.3 |
| U.S.S.R. | 3.6 | 2.5 | 4.4 | 3.8 | 3.9 | 1.7 | -1.2 | -7.8 [b] |

Sources: Soviet official statistics—1981–90 from *Soyuznyye respubliki: osnovnyye ekonomicheskiye i sotsial'nyye pokazateli* (Moscow: Goskomstat Information-Publishing Center, 1991), pp. 137–139; 1991 from reports published by statistical agencies of Commonwealth of Independent States (CIS) and individual countries.

[a] Preliminary.

[b] The reported decline for U.S.S.R. reflects CIS only and is steeper than the weighted average of declines reported for individual countries. Part of this discrepancy probably results from use of inadequate deflators for at least some countries.

TABLE 8. U.S.S.R.: Growth of Agricultural Output, by Republic, 1981–91.

| Republic | Average Annual Percent Change [a] | | Annual Percent Change | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1981–85 | 1986–90 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 [b] |
| Russia | 1.0 | 2.2 | 6.7 | -1.2 | 3.2 | 1.7 | -3.6 | -5 |
| Ukraine | 0.5 | 1.6 | 2.2 | 2.2 | -1.6 | 5.1 | -3.7 | -12 |
| Belarus | 1.6 | 2.0 | 6.9 | 0.1 | -7.3 | 8.9 | -8.7 | -3 |
| Moldova | 1.3 | 0.9 | 10.1 | -4.3 | 0.6 | 5.2 | -12.8 | -11 |
| Kazakhstan | 0.1 | 3.0 | 12.6 | -2.6 | 4.4 | -7.3 | 6.8 | -8 |
| Kyrgyzstan | 1.7 | 3.0 | 7.9 | 1.5 | 4.1 | 2.5 | 1.3 | -8 |
| Tajikistan | 1.7 | 0.7 | 3.7 | -7.0 | 9.4 | -10.8 | 2.8 | -10 |
| Turkmenistan | 2.2 | 3.7 | -1.8 | 5.0 | 8.6 | 0.3 | 7.0 | -2 |
| Uzbekistan | 2.0 | 0.7 | -2.0 | 0.3 | 8.8 | -4.3 | 6.3 | -5 |
| Armenia | 2.6 | -1.7 | 3.3 | -6.9 | 1.4 | -18.7 | -11.4 | 11 |
| Azerbaijan | 5.2 | -0.7 | -2.0 | -1.0 | -3.2 | -8.9 | -0.1 | 0 |
| Georgia | 2.5 | -0.4 | 4.5 | -6.8 | 3.5 | -15.5 | 6.9 | NA |
| Estonia | 0.8 | 0.9 | 7.1 | -2.6 | -3.7 | 7.6 | -13.1 | -16 |
| Latvia | 2.3 | 1.5 | 5.5 | -1.7 | -1.5 | 3.9 | -10.2 | -4 |
| Lithuania | 1.3 | 2.2 | 4.6 | 0.0 | 2.4 | 1.8 | -9.0 | -4 |
| U.S.S.R. | 1.0 | 1.9 | 5.3 | -0.6 | 1.7 | 1.3 | -2.9 | -7 |

Sources: Soviet official statistics—1981–90 from *Soyuznyye respubliki: osnovnyye ekonomicheskiye i sotsial'nyye pokazateli* (Moscow: Goskomstat Information-Publishing Center, 1991), p. 150; 1991 from reports published by statistical agencies of Commonwealth of Independent States (CIS) and individual countries.

[a] Average annual increase in the sum of output during the five-year period shown over the sum during the previous five-year period.

[b] Preliminary.

Another, more difficult question is whether the economic slide of the late 1980s was preordained by the systemic flaws of the Soviet economy. We would argue that the demise of the system, while per-

TABLE 9. U.S.S.R.: Growth of per Capita Personal Incomes, by Republic, 1981–88.

| Republic | Average Annual Percent Change | Annual Percent Change | | |
|---|---|---|---|---|
| | 1981–85 | 1986 | 1987 | 1988 |
| Russia | 1.9 | 0.0 | 1.1 | 3.6 |
| Ukraine | 2.7 | 0.7 | 0.3 | 3.2 |
| Belarus | 2.3 | 3.4 | −0.3 | 1.0 |
| Moldova | 2.1 | 1.8 | 2.1 | 2.7 |
| Kazakhstan | 1.4 | 1.2 | 1.4 | 4.0 |
| Kyrgyzstan | 2.0 | 1.1 | 0.4 | 6.5 |
| Tajikistan | 1.2 | 0.5 | −1.6 | 3.2 |
| Turkmenistan | 1.1 | 2.3 | 0.3 | 1.0 |
| Uzbekistan | 1.0 | −1.7 | −3.1 | 5.0 |
| Armenia | 1.5 | 2.8 | 2.5 | 4.0 |
| Azerbaijan | 2.4 | 0.2 | 4.2 | 4.8 |
| Georgia | 3.5 | 2.3 | 3.8 | 7.5 |
| Estonia | 1.5 | 2.4 | 1.3 | 4.5 |
| Latvia | 1.5 | 1.4 | 1.5 | 2.9 |
| Lithuania | 1.4 | 4.1 | −0.6 | 6.8 |
| U.S.S.R. | 1.8 | 0.1 | 0.9 | 3.2 |

Source: Soviet official statistics from *Osnovnyye pokazateli balansa narodnogo khozyaystva SSSR i soyuznykh respublik* (Moscow: Goskomstat Information-Publishing Center, 1990), p. 138.

haps inevitable at some point, was brought forward in time by a particularly unfavorable constellation of developments. Gorbachev's plans were dogged by bad luck in several respects. The downturn in world energy prices after 1985, the Chernobyl' disaster (1986), and the Armenian earthquake (1988) did substantial damage to the economy in addition to inflicting a terrible loss of life. Agricultural weather in 1984–87 was also uncommonly poor. [26]

More important, perestroyka's policies were in important respects ill-conceived, and Gorbachev's partial economic reforms contributed to the collapse of the traditional system. The initial emphasis on investment—to the neglect of the population's desire for higher living standards—was a costly mistake. To make matters worse, by launching his antialcohol campaign, Gorbachev simultaneously dealt a blow to production of a major consumer good and cut state budget revenues. The population, which had always experienced shortages of particular goods and services, found the shortages becoming more general as income growth outstripped the supply of consumption goods.

To explain the popular discontent that flourished in the 1980s, however, one also has to take into account the much greater freedom of expression in printed and spoken dialogue and even in demonstrations and strikes. Glasnost served as a powerful amplifier for the dissatisfaction that lay under the surface before Gorbachev. Perestroyka's failures in improving living standards and reforming

[26] Using regression analysis to estimate weather-related harvest losses, Robert Kellogg found that the Soviet Union sustained 30 billion rubles of farm losses from worse than average weather in 1984–87, or 6 percent of reported production (*Modeling Soviet Agriculture: Isolating the Effects of Weather*, CIA: SOV 88-10054, August 1988, p. 10).

## TABLE 10. U.S.S.R.: Growth of Investment Allocations, by Republic, 1981–90.

| Republic | Average Annual Percent Change[a] 1981–85 | Average Annual Percent Change[a] 1986–90 | Annual Percent Change 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|
| Russia | 3.5 | 6.6 | 9.2 | 5.9 | 7.7 | 4.1 | 0.1 |
| Ukraine | 3.1 | 5.3 | 10.0 | 2.5 | 4.0 | 3.7 | 1.9 |
| Belarus | 5.3 | 9.0 | 6.0 | 19.7 | −0.2 | 10.3 | 10.0 |
| Moldova | 4.3 | 5.0 | 3.1 | 9.2 | 3.9 | 5.9 | −0.5 |
| Kazakhstan | 3.0 | 6.0 | 4.9 | 10.3 | 7.1 | 3.5 | −2.9 |
| Kyrgyzstan | 3.3 | 5.0 | 5.6 | 2.6 | 7.5 | 1.7 | 11.3 |
| Tajikistan | 3.2 | 7.4 | 7.9 | 8.7 | 8.0 | 6.8 | 0.7 |
| Turkmenistan | 6.8 | 4.1 | 8.4 | −1.3 | 4.6 | 2.3 | 7.5 |
| Uzbekistan | 3.9 | 3.5 | 2.5 | 2.7 | 5.6 | −0.5 | 13.0 |
| Armenia | 4.2 | 15.7 | 6.6 | 3.6 | −11.4 | 149.1 | −4.6 |
| Azerbaijan | 8.6 | −0.7 | 6.3 | −2.0 | 0.1 | −14.4 | −3.6 |
| Georgia | 5.6 | 0.4 | −1.8 | 7.5 | 1.0 | −1.2 | −14.4 |
| Estonia | 2.1 | 4.9 | 7.2 | −0.7 | 8.5 | 6.2 | 2.7 |
| Latvia | 5.2 | 1.4 | 9.5 | −5.7 | −0.2 | 4.2 | −8.2 |
| Lithuania | 7.4 | 6.6 | 14.3 | 5.1 | 8.5 | −1.8 | −10.3 |
| U.S.S.R. | 3.7 | 6.1 | 8.4 | 5.6 | 6.2 | 4.7 | 0.6 |

Source: Soviet official statistics, from *Soyuznyye respubliki: osnovnyye ekonomicheskiye i sotsial'nyye pokazateli* (Moscow: Goskomstat Information-Publishing Center, 1991), p. 173.

[a] Average annual increase in the sum of investment allocations during the five-year period shown over the sum during the previous five-year period.

## TABLE 11. U.S.S.R.: Growth of Investment Project Completions, by Republic, 1981–90.

| Republic | Average Annual Percent Change[a] 1981–85 | Average Annual Percent Change[a] 1986–90 | Annual Percent Change 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|
| Russia | 4.3 | 3.5 | 6.4 | 8.1 | −0.7 | 2.6 | −2.8 |
| Ukraine | 2.7 | 3.0 | 8.8 | 2.9 | 0.4 | 0.1 | −0.5 |
| Belarus | 4.7 | 5.0 | 2.8 | 19.6 | −5.0 | 3.6 | 9.4 |
| Moldova | 2.8 | 3.2 | −7.0 | 19.5 | −2.3 | 0.8 | −5.9 |
| Kazakhstan | 3.8 | 3.1 | −1.5 | 10.7 | −2.1 | 7.0 | −5.8 |
| Kyrgyzstan | 3.8 | 3.0 | −0.8 | 11.6 | −9.5 | −2.0 | 8.0 |
| Tajikistan | 1.9 | 5.3 | 4.3 | 11.4 | 0.0 | 7.8 | −8.5 |
| Turkmenistan | 5.6 | 3.3 | 5.3 | −3.6 | 2.5 | −2.9 | 16.9 |
| Uzbekistan | 4.1 | 1.7 | 4.7 | 0.1 | 3.4 | 0.7 | 7.2 |
| Armenia | 3.9 | 5.6 | 34.2 | −26.0 | −30.7 | 116.7 | −0.6 |
| Azerbaijan | 7.9 | 1.1 | −2.5 | 2.0 | −4.3 | −18.4 | −4.6 |
| Georgia | 5.3 | 0.4 | −1.2 | −6.8 | −3.8 | −7.3 | −13.0 |
| Estonia | 2.5 | 4.1 | 24.3 | −11.0 | −2.4 | −3.9 | 11.9 |
| Latvia | 4.0 | 0.9 | 3.8 | −4.2 | −13.7 | 2.7 | −6.2 |
| Lithuania | 4.6 | 4.6 | 10.2 | 21.0 | −13.7 | 1.6 | −16.3 |
| U.S.S.R. | 4.1 | 3.3 | 5.9 | 6.8 | −1.3 | 2.5 | −1.9 |

Sources: Soviet official statistics from *Soyuznyye respubliki: osnovnyye ekonomicheskiye i sotsial'nyye pokazateli* (Moscow: Goskomstat Information-Publishing Center, 1991), p. 20; and *Narodnoye khozyaystvo SSSR v 1990 g.* (Moscow: Finansy i statistika, 1991), p. 563.

[a] Average annual increase in the sum of investment project completions during the five-year period shown over the sum during the previous five-year period.

the economy could not be interred silently as previous campaigns had been. The gulf separating promise and performance was now discussed openly, with fairly obvious consequences for popular perceptions of well-being.

The sudden shift in resource priorities in midplan added to the confusion and disruption in the economy. Because enterprises were not equipped to change gears so suddenly, production dropped, especially in the machine building sector. While the lost production of military hardware was not serious, the methods employed in restructuring the economy set back reform and hurt key industries. The reorientation of the economy toward the consumer was carried out in campaign fashion, by issuing state orders and strengthening central planning. And in the hurry to limit state-financed investment, the crucial energy sector was short-changed. Within a year or two the effect on production, domestic supplies, and export earnings was evident.

When Gorbachev decided to pursue economic reform, moreover, its implementation proved to be partial and contradictory, central control over the economy was lost, and market forces were slow to emerge. Just as economic reforms began to force enterprises out of their accustomed reliance on central plans and orders, the loss of control of the state budget and the disruptions caused by ethnic unrest and republic rivalries wreaked havoc with the traditional distribution system. In addition, the reform, coupled with the rapid demoralization of the party, removed one of the traditional elements of economic administration.

The breakup of the Soviet multinational empire proved to be the final blow to economic activity in the former Soviet economic space. Beginning with ethnic conflicts on the periphery, the desire for autonomy spread to almost all republics. Moscow's belated attempts to reduce the budget deficit, which probably achieved some success in 1990, were overwhelmed by republican refusal to support the union budget in 1991. By the end of the year no monetary or fiscal control worthy of the name remained, and the rate of open inflation accelerated. Republic and even local governments struggled to protect their citizens by limiting exports of food and scarce industrial supplies. The ruble lost its value as a medium of exchange, and factories and workers alike resorted increasingly to barter to sustain commerce. The economic linkages built up in the postwar years were substantially destroyed in a relatively short time. Perhaps only the powerful inertia of the system and the longstanding personal and business relationships that surmounted republic and regional boundaries prevented the economic collapse that many observers predicted or reported.

## IMPLICATIONS

By early 1992, the new states carved out of the former Soviet Union were struggling to develop political arrangements to realize their newly asserted independence and to construct economies with a greater market orientation. The process promises to be long and difficult, as the experience of the old republics and the new governments in Eastern Europe suggests.

The crucial question for the economies of the new republics is whether functioning nonsocialist economies can be established to make the decisions on production and distribution that the central planners did. The difficulty of accomplishing this has been compounded by the precipitous fall in production since the late 1980s

and its consequences for employment, enterprise finances, and government budgets. Moreover, the republic economies are now separate. Kazakhstan's president, Nursultan Nazarbayev, has claimed that the severing of economic ties among the former Soviet republics and the "collapse of CEMA" (Council for Economic Mutual Assistance) was responsible for 80 percent of the fall in production in the former Soviet Union. [27] One does not have to accept this assertion fully to believe that the restoration of such economic linkages is an extremely important source of economic recovery.

The disagreement over the measurement of Soviet economic performance in the recent past raises questions about the reliability of official statistics in the successor countries during the coming years. In many of these countries, statistical offices are assuming responsibilities they never had when Moscow decided on the procedures and objectives of statistical reporting. Even with technical help from international agencies and Western governments, statisticians will need some time to get their feet on the ground. Moreover, because this process will not proceed at the same pace in the several countries, comparative analysis of economic developments in the former Soviet Union will be skewed if it relies entirely on official statistics.

To obtain accurate measures of economic performance will also be harder for them than it was for the U.S.S.R.'s State Committee for Statistics. With prices soaring and relative prices changing rapidly, estimates of inflation will be much more uncertain than in the past, and official statistics are likely to be badly flawed. [28] This means that measures of real output derived by deflating growth in value of output by price indexes will be even more suspect than the official measures were when rates of inflation in producer and consumer markets were relatively slow. In addition, the burgeoning private activity must be covered in the estimates of GNP. Its omission was already a problem in the 1980s; in the 1990s, economic growth will be seriously understated if the statistical agencies do not take it into account. Thus far, systematic reporting on the private sector is in its infancy in the new republics. [29]

Until inflation is brought under control and the republic statistical offices have gained more experience, assessments of republic economic performance will have to be undertaken with some diffidence. Fully articulated alternative measures like those offered by CIA for the U.S.S.R. are not likely to be available for the republics. Still, the need for alternative measures of economic trends will be greater in the transition years for these economies than it was for

---

[27] Nazarbayev was promoting his idea of a CIS economic council at a press conference following a Moscow meeting of CIS leaders (*FBIS Daily Report: Central Eurasia*, 7 July 1992, p. 10).

[28] Conflicting claims regarding inflation rates figured prominently in the Russian debate over economic policy in the first half of 1992. Critics in the Supreme Soviet denounced the government's consumer price index, and it was alleged that producer price indexes were even more unreliable because most transactions took place according to unmonitored contractual agreements rather than at posted prices.

[29] In mid-1992, *Kommersant*, a Russian business weekly, reported the formation of Kominform by the Russian State Committee for Statistics and its branches as a source of commercial information. It said that Kominform's data on state-controlled enterprises would be especially useful "since they are known to provide reports accurately." But "information on enterprises of different forms of property, which are not so accurate in statistical accounting . . . is practically impossible to come by from official statistical data banks." Very likely, the Russian statistical agency, which took over much of the U.S.S.R. Goskomstat, does at least as well as other republic agencies in incorporating private activity in its national accounts.

the Soviet Union in the past. In these circumstances, a judicious search is warranted for a short list of physical indicators like those that underlie the GNP estimates presented in this paper.

## Appendix

## Milestones in Economic Policy and Performance During the Gorbachev Era

| | |
|---|---|
| March 1985 | Gorbachev becomes General Secretary, makes economic revitalization a top priority |
| 1985 | Gorbachev outlines initial strategy: short-run reliance on human factor to improve productivity and weed out incompetents; in longer term, counts on organizational changes and modernization of industrial base |
| | Gorbachev presses antialcohol campaign, cleans house in Council of Ministers and Central Committee economic departments |
| November 1985 | Draft guidelines for 1986–90 plan feature acceleration in industrial and agricultural growth, give special prominence to machinery sector as prime mover in modernization campaign; plan depends on unrealistic assumptions about conservation and productivity |
| February 1986 | At Communist Party congress, Gorbachev proclaims "reasonable sufficiency" guideline for defense programs |
| 1986 | Leadership reorganizes foreign trade apparatus, establishes guidelines for setting up joint ventures between Soviet enterprises and foreign partners |
| | Leaders criticize failure to improve quality of output, set up system of state quality inspection |
| | Glasnost and democratization in economy encounter government and party resistance |
| | Investment surges while per capita consumption stagnates |
| | State budget deficit begins to climb |
| June 1987 | Supreme Soviet and Central Committee approve guidelines for "new economic mechanism" to include enterprise self-financing, narrower scope of state plans, price and wage revisions, greater freedom to engage in international trade |
| October 1987 | Ryzhkov sets out program for expanding defense industry involvement in civil production |

MILESTONES IN ECONOMIC POLICY AND PERFORMANCE DURING THE GORBACHEV ERA—CONTINUED

| | |
|---|---|
| October 1987 | 1988 plan reflects new emphasis on consumer |
| 1987 | New quality control program disrupts industry |
| | Investment program falls far behind because of confusion in construction and machinery shortages |
| | State budget deficit continues to climb |
| January 1988 | Broad implementation of reforms approved in 1987 begins |
| Fall 1988 | Gorbachev raises 1989 targets for production of consumer goods, announces cuts in defense outlays and state investment, tasks defense sector with greatly increased support for civilian economy, stretches out reform process |
| 1988 | State budget deficit continues to climb |
| January 1989 | Implementation of 1987 reforms expands to entire economy, contributes to disruption of traditional supply relationships |
| October 1989 | Abalkin reform program calls for gradual transition from state to other forms of ownership, development of market-oriented financial system |
| December 1989 | Supreme Soviet approves Ryzhkov reform and stabilization program—watering down of Abalkin program |
| 1989 | Economy sputters as production of energy and basic materials falls; transportation and distribution problems, exacerbated by strikes and ethnic tensions, interfere with supplies |
| | Investment program stalls as unfinished construction rises |
| | Spending on defense declines, led by cuts in weapons procurement |
| | Open and repressed inflation evident; shortages intensify, leading to rationing in many localities |
| | International financial position deteriorates as U.S.S.R. borrows to pay for increased imports of consumer goods and industrial equipment |

MILESTONES IN ECONOMIC POLICY AND PERFORMANCE DURING THE GORBACHEV ERA—CONTINUED

| | |
|---|---|
| August 1990 | Shatalin reform program calls for market determination of output and prices, increase in republic authority over economic policy and reforms |
| October 1990 | Gorbachev reform program is adopted, providing for gradual elimination of state controls over output and prices, sale or transfer of property to owners other than state, eventual convertibility of ruble to hard currency |
| 1990 | Central and republic governments at loggerheads over wide range of economic issues, including reforms |
| | Regional autarky disrupts economic ties |
| | Soviet economy passes from stagnation to decline |
| | Investment and defense spending continue to fall |
| | Inflation accelerates, shoppers sweep store shelves clean, shortages of energy and industrial materials worsen, barter proliferates |

# THE ECONOMIES OF THE CIS: REFORMATION, REVOLUTION, OR RESTORATION?

By James R. Millar *

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## SUMMARY

Russia and the other successor states of the Soviet Union are at a critical turning point. With Russia in the lead, they are changing ideological horses. Communism and the socialist command economy have been repudiated in favor of democracy and the market economy. The conversion to democracy has progressed rather more swiftly and successfully than the attempt to convert to a market economy, and many observers both in and outside the former Soviet Union fear that resistance by vested interests to marketization will ultimately undermine the democratization movement too.

This article focuses on the question: What is shock therapy and will it work in the CIS? Shock therapy is a highly conservative Western economic doctrine emphasizing monetary policy. Originally developed to stabilize and invigorate an economy with substantial capitalist aspects, it is here being modified to convert a command economy to capitalism.

The conditions for shock therapy to succeed are quite stringent. Moreover, the theory upon which it rests makes a number of ques-

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tionable assumptions, especially for the Russian case. It is assumed by the theory that if monetary and pecuniary problems can be solved, production will be restored without central government intervention in production decisions.

The article explores the question of whether the market mechanism is still too weak in the CIS to carry the entire burden of allocation, production, and distribution. Enormous external assistance, both financial and educational, will be necessary to avoid failure of the economic transformation process and backsliding into another variant of the crisis administered economy. Russia and the other successor states of the Soviet Union will have to develop their own unique transformation strategies based on their own peculiar economic circumstances, histories, and opportunities. Economies are more like giant tankers than they are like rowboats. They cannot be maneuvered readily or turned about quickly.

## INTRODUCTION

> [T]he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. ... [S]oon or late, it is ideas, not vested interests, which are dangerous for good or evil.—John Maynard Keynes, *The General Theory*, pp. 383–4.

Russia and the other successor states of the Soviet Union are at a critical turning point in mid-1992. The conversion of a socialist command economy into a modern, mixed market economy is without historical precedent, and much disagreement exists both among economists in the Commonwealth of Independent States (CIS) and within the Western economic community about how to go about the transformation process.

Yegor Gaidar, now acting Prime Minister of Russia, initiated a transformation regime that is called "shock therapy" because it attempts to create the necessary institutions for a functioning capitalist economy and achieve macroeconomic stability in the shortest possible time period. This strategy recommends speed in implementation on two grounds. First, a market economy requires the existence of a minimum set of institutions coming into operation simultaneously. Liberalizing retail prices, for example, can have little beneficial effect upon production and allocation decisions unless enterprises have been privatized and thus are operated according to the dictates of profit maximization. A second reason given to move fast with the economic transformation is that the process is expected to be economically painful for most members of the population. The quicker the new economic regime is in place, the less time opponents will have to organize and the sooner it will begin to yield benefits to offset the costs of the transition, such as unemployment and the loss of welfare entitlements and lifetime savings.

As a transition strategy, shock therapy is the approach generally supported by the World Bank, the International Monetary Fund, and such well-known academic consultants as Harvard Professor Jeffrey Sachs. The transformation regime is based on a monetarist philosophy and a free market ideology. Jude Wanniski, for example, has expressed the ideology underlying it most clearly in an essay on the future of Russian capitalism:

> It is possible to imagine a future of Russian capitalism that asserts itself early in the 21st century as the envy of the world. . . .
>
> The Russian people are now engaged in nothing less than designing the basic architecture of a brand new country. Why not consider all possibilities?. Why not design the Russian system of capitalism to be the best?

By the "best," Wanniski means most unfettered by state intervention and ownership. Wanniski's view, as is true also for Sachs, the World Bank, and the IMF, is obviously ideologically informed. This is not an approach based upon the modification of former Soviet economic institutions. It calls instead for complete displacement of the prior economy, which means, in short, a revolution.

A Russian economist and critic of the Gaidar transformation regime, Nikolay Shmelev, believes that it is unrealistic to create a market economy in so short a time: "Three generations built the insane asylum, and three generations will be coming out of the insane asylum." Another critic, the director of the Russian Gosbank, Georgi Matyukhin, argued recently that Yeltsin and Gaidar were being misled by Western advisors such as Jeffrey Sachs, who are not familiar with the political and economic "realities" of the Russian economy. "They know as little as we do, although they are paid very well," he said. "I would give such advice to anyone for a tenth of what they are paid."

The majority of Western economists who were specialists on the Soviet economy prior to the collapse of communism, tend to agree with the critics of shock therapy. They are branded conservatives in the West not because they are opposed to the development of market institutions in Russia and the other republics, but because, like their Russian counterparts, they are all too aware of what Matyukhin calls the realities of the Russian economy. Western Soviet specialists are reformists in the sense that they call for gradual modification of existing economic institutions, not their wholesale elimination. They also tend to be conscious *political* economists who believe that economists recommending economic policies must take political constraints and realities into account in formulating economic reform. Supporters of shock therapy base their recommendations instead on a theoretical model of the market economy that they are attempting to replicate in Russia, and they see little advantage in attempting to salvage or modify existing institutions. They also tend to be impatient with political constraints. In this sense, Jeffrey Sachs, the IMF, and World Bank are revolutionists.

Any attempt to assess the current state of reform in Russia and the other successor states of the U.S.S.R. must, therefore, evaluate transformation strategies as well as empirical indices on production, prices, money stock, and the like. Except for the most hide-

bound of Russian economists, Marx has now been renounced as "defunct," but CIS policymakers must now choose among a bewildering variety of Western "academic scribblers" and their very different theories of how the transformation to a market economy is likely best to be accomplished. As CIS economists and leaders are discovering, there is no such thing as "bourgeois economics." There are only bourgeois economists and schools of bourgeois economics. There is no single body of propositions, theory, or dogma they may cleave to with the kind of assurance a true natural science or the old Marxist dogma provide. Russian and other CIS leaders are obliged, therefore, to choose Western advisors without really knowing which are the most likely to offer useful approaches and to accept advice that is hotly contradicted by the advice of others. In these circumstances, Western economic advisors who assert their views with the greatest confidence and who provide what appear to be simple and quick solutions are likely to appeal to leaders who are facing a leap into the unknown in the face of popular unrest. The danger is, of course, that they may be merely leaping from one obsolete, unworkable economic dogma to another, from the frying pan into the fire.

## THE LIMITS OF ECONOMIC THEORY

If central planning of economies has been discredited by the Soviet experiment, central management of economies has not. In fact, a major objective of economic transformation of the Russian and other CIS economies is to create fiscal and monetary institutions that will permit central management of what is expected to become a predominantly private enterprise economy. The other main thrust is, of course, to privatize and to create the conditions under which private enterprise may flourish. Central management of capitalist economies is, in fact, the main legacy of John Maynard Keynes.

A popular economics textbook published in 1950 by the well-known American Keynesian Abba Lerner, for example, introduced economics to the student by presenting the economy as an automobile that can be steered down the highway by means of appropriate fiscal and monetary adjustments. Thus, depression and inflation could be prevented and a stable, safe and satisfactory rate of growth could be attained by good steering. According to Lerner, "The instrument that can do this is as readily available as the steering wheel for automobiles, yet it has not been installed [in the economy] and put into operation." This is an interesting metaphor. However, after 25 years as an economist, I must say that I would certainly be frightened to death were I in an automobile in which the steering wheel is as loosely connected to the wheels as the economy is to fiscal and monetary policies, or where everyone in the car is struggling to steer the machine in a preferred direction.

Western economists would do well, therefore, not to claim too much for economics as a science or, therefore, for any given reform package. Our field has a number of characteristics of a science—a common and highly specialized vocabulary, a set of operational empirical measurements of the level and intensity of economic activity, and a variety of mathematical and statistical models that seek

to identify precise causal and temporal relationships. We are not, however, very good at prediction yet, and most of our models, particularly the mathematical models, are prescriptive rather than descriptive systems. They are more useful in specifying what will happen if transactors in the system maximize profits and/or utility than as a description of the way market economies really work.

Thanks to these models and to the observation of policy instruments in practice, however, Western economists have developed some highly useful concepts and rules of thumb. Western economists conceive of an economy as a set of simultaneous equations in *n* variables, which require a solution that solves for all prices and quantities in the system simultaneously. It follows that all prices and quantities in the system are interdependent, which is the primary reason that reform proposals call for simultaneity in the creation of market institutions. We also think of this set of economy-wide simultaneous equations as summing to the aggregate demand components of Gross National Product (GNP), that is, to the aggregate final demand categories: consumption, investment, government expenditures and net exports, on the one hand, and to the final distributive income shares, Gross National Income (GNI), on the other. Western policy recommendations, including shock therapy and other forms of macroeconomic stabilization, are based upon these concepts.

The Marxist conception of an economy is a nineteenth century construct that is not consistent with the contemporary bourgeois conception as outlined above. Russian economists are now obliged to adopt these Western concepts if they are to join in meaningful discussion with Western economists and with economic organizations such as the IMF and World Bank. This will involve considerable "unlearning" of Marxist concepts that now impede reform efforts—concepts such as the inherent exploitative character of middleman activities, international trade, economic growth and, of course, of private property and profits too. This is not an easy task because it involves substituting new concepts for well-established thought patterns, and many Russian and other CIS economists will not succeed in doing so. By way of substantiation, it should be noted that students and even scholars first trained in Western economic thought find Marx's writings impenetrable. The absence of a common core for analysis and policy evaluation is a serious handicap for Russian economists in their dealings with each other as well as with Western economists and economic organizations.

## The Economy on the Eve of Reform

The Soviet economy was not at the point of collapse in 1986 when then Communist party General Secretary initiated perestroika. The reform effort was a response to two adverse economic trends: a declining rate of growth of output and productivity and a growing technological gap between the Soviet economy and the leading Western economies, notably the United States, Japan, and West Germany. The Soviet leadership was confronted with two alternatives. They could do nothing and increasingly become a second-rate economic power. The Soviet Union possessed sufficient nuclear weapons and delivery systems to have remained a major

military force, capable of defending the Soviet bloc against aggression. But this strategy would have meant giving up on the idea of catching up with and surpassing the capitalist countries. The alternative was to find a way to stimulate technological innovation and economic growth in the Soviet bloc. The reform movement was designed to do just that.

Thus, by introducing perestroika and glasnost, Gorbachev had no intention of torpedoing the planned economy or the Communist party. Gorbachev had been persuaded by his economic advisors, in particular Aganbegian, Petrakov, and Abalkin, that an adjustment here and an improvement there would provide a gradual improvement in economic performance and strengthen the political legitimacy of the party at the same time. It is true that Gorbachev used the word "revolution" early in his effort to promote perestroika, but it is also clear that he did not have a real revolution in mind. In the end, however, glasnost led to the repudiation of the party as the sole repository of political power. Perestroika brought about the collapse of central planning and a corresponding further decline in economic performance. Democratization fostered ethnic separatism. The "new thinking" in foreign policy led the roll-back of communism in Eastern Europe. In each case, developments outdistanced or undermined the expectations of the reformers, and the system as a whole careened out of central control. What went wrong?

The primary precipitating factors for the breakdown of the economy were the attempt to decentralize economic decision making to the enterprise level, encouragement of the cooperative movement and, ultimately the most compromising, an attempt to open the Soviet economy to the world market. The first two factors were destabilizing because they served to increase aggregate demand in an economic system with chronic excess demand in most markets. In a "shortage economy" of this sort, any sudden increase in demand is destabilizing because it, among other things, increases the degree of supply uncertainty, which is sufficient in itself to increase current demand still further and to aggravate shortages. Stores and warehouses are emptied as buyers seek to protect themselves by hoarding whatever is available and building up inventories. As prices were not free to vary, there was no mechanism available to choke off the cycle of demand increases, and the number of empty stores increased as informal and illegal markets drew off what goods were available.

Opening the Soviet economy to the world market also contributed to current period instability, and in the long run this has had the most devastating effect upon production and performance. The Soviet economy was built at a time when autarky actually served a useful economic purpose. The main institutions of the Soviet economy, particularly detailed central planning, central allocation of critical resources, collectivized agriculture, large-scale and monopolized industry, managerial incentives geared to the gross value of output, guaranteed full employment, centralized price and wage setting, and a full panoply of welfare entitlements, were created during the Great Depression of the 1930s when a policy of autarky served to prevent shocks from the world economy from disturbing the Soviet industrialization drive. World War II reinforced this

tendency, and the cold war had the same effect. Consequently, the Soviet economy (and Eastern Europe also after incorporation in the Soviet bloc) was effectively insulated from the world economy, and trade with the international economy was heavily regulated and essentially minimized.

In the first decades of the post-World War II world Soviet autarky did not appear as a disadvantage, and the high rates of growth of socialist countries in these years were taken as evidence of the superiority of Soviet-type central planning. It is, of course, easier to plan a closed economy than an open one. The planners need not worry about the international business cycle, and shifts in demand and supply in world markets can be prevented from distorting annual plan values. Incorporation of Eastern Europe in a common planned economic space following World War II allowed the development of specialization of production and division of labor under a bloc-wide autarkic system. The disadvantages of the system became evident only gradually as the world market economy began to boom and true international economic integration began to develop outside the Soviet bloc. By the late 1970s, Soviet economists began to realize that technological innovation, product quality and efficiency were fostered in the world market and sadly lacking in the Soviet bloc.

Behind the screen of autarky the Soviet Union had created an artificial, hothouse economic system that rewarded inefficiency, poor product quality, and the avoidance of innovation. World class products and services were limited to sectors where direct competition with the world economy could not be avoided: military and space industry, but even these priority sectors were lagging despite heavy investment of resources in their promotion. Domestic monopolies and the absence of competition from abroad undermined innovation, and full employment of labor along with the other characteristics of a shortage economy made entry of new firms with new products and ideas impractical even had it been condoned by the regime. The division of labor and specialization of production that was developed both within the bloc and within the Soviet economy were based more on domestic political and defense considerations than upon economic rationality. As a consequence of all these factors, the dynamics of the world economy left the Soviet bloc economies behind, and they were increasingly ill-prepared to compete internationally outside the bloc.

Gorbachev and his advisors did intend to open the Soviet economy to the world market, but the process developed much more rapidly than they intended because of the breakup of Eastern Europe. The various Eastern European countries were willing to pay a substantial economic price to diminish ties with the Soviet economy and to seek out trade with the West. Disintegration of the Soviet bloc, followed by disintegration of the Soviet Union, demolished the established trading patterns and thrust the various fragments into the world market willy-nilly. The cost has been enormous. The former East Germany provides an informative case in point.

When the wall came down between the two Germanies and the process of reunification began, the East Germans feared that West German industries and capitalists would buy up all the production facilities in the former East Germany. It only gradually became

clear that the West Germans were going to buy up almost nothing of the existing industrial establishment. East Germany had developed the most successful model of central planning and had adapted its economy to the East European and Soviet market better than other states. As that protected, artificial market was collapsing, the value of the East German capital stock had to be recalculated on the basis of its promise in competition on the world market. Needless to say, the value of the East German capital stock collapsed along with the wall. In order to survive competitively on the world market, the prices of East Germany's products would have had to fall without limit, and real wages along with them. The decision of the Federal Government of Germany to exchange East German marks for West German marks one-for-one doomed Eastern German's industry, and it committed western Germans to an enormous expense to modernize the Eastern German economy. The successor states of the Soviet Union, and those of Eastern Europe, do not have a Western "big brother" to bail them out in this way. They will have to allow prices and real wages to plunge in order to compete on world markets. This is the long-run cost of the policy of autarky.

Soviet style central planning has other adverse legacies that must be overcome as well. As was mentioned above, the Soviet economy became a "shortage" economy under the umbrella of autarky and thanks also to the Soviet interpretation of Marxism. The resulting distortions in economic structure and performance are hindering attempts to reform the economy and to join the world economy. Put simply, the Soviet economy developed into a sellers' market, one in which no sales effort was required to move products or services. This was as true for wholesale markets as it was for retail markets. Consequently one did not find price, product quality, or service competition among Soviet firms at any level. The entire effort in effecting market transactions had to be borne by the buyer, who was obliged to scout supplies, queue, transport and maintain inventories of scarce ("deficit") commodities. Enterprises that failed to do so failed to fulfill their plans and lost incentive payments and prestige. Households that failed to do so did without.

The existence of a sellers' market in the Soviet Union was the product of several institutional arrangements. First, workers in state enterprises were assured of job security as a general rule. The penalty for inefficiency and sloth was small; the reward for efficiency and energy was also negligible. The payoff for stealing time from work to queue for deficit commodities and services was, on the contrary, large. Second, enterprise capital budgets were characterized by "soft budget constraints," which means that there has been no real penalty for overinvestment in plant or inventory (or labor force) and a possible benefit instead. Consequently, investment demand routinely exceeded supply, and there was no automatic adjustment mechanism, such as flexible prices or interest rates, available to correct the process. Third, government expenditures were determined largely by two components: welfare entitlements and defense expenditures, neither of which was sensitive to the current state of aggregate demand and supply in the Soviet economy. Fourth, the Soviet economy has been insulated from the rest of the world by a number of mechanisms, notably by the lack

of convertibility of the ruble and centralized control over foreign access to the Soviet market. What these institutional factors added up to is a state of chronic excess demand both for investment resources and for consumer goods and services, inflexible demand for government goods and services and a consequent competition for resources between and within the government sectors and the household sector.

Add to this set of institutional arrangements the fact that the state also regulated prices of commodities and services sold in state retail outlets. Price did not, therefore, play a role in equating supply and demand anywhere in the official system. Enterprises could ignore prices and focus upon fulfilling their quantitative output plans. The two markets where prices have mattered at all are the labor market and the consumers' goods market. Soviet planners followed a kind of "incomes policy" over the years in an attempt to adjust household disposable income to the total value of consumer goods and services made available annually in state markets. Increases in real income of households took place over the years through gradual money wage increases, with retail prices remaining unchanged. The prices of consumer goods and services in state outlets did not change substantially for decades, and some prices had not changed since the 1950s. Relative prices, therefore, no longer reflected relative scarcities in the economy.

Retail price changes in the Soviet socialist system were politically constrained because they were set by a government committee. Whenever this happens anywhere in the world, whether under socialism or capitalism, political pressure ensures that the prices are set either too low or too high, depending upon the side of the market of the favored or most powerful political force. In the U.S.S.R., prices on food products were set too low in order to favor the urban worker and dweller (and perhaps to simplify central planning too). The result was shortages and queues for food products. Because relative prices failed to change, prices of goods and services in the Soviet economy increasingly did not reflect real scarcity costs to society either, and production proportions became completely irrational. Consumers ate more meat and consumed more petroleum products than was warranted by real costs, and industry wasted energy sources that were underpriced.

Table 1 illustrates for East Germany the degree of irrationality that developed for consumer goods. Most food products sold in East Germany at relative prices substantially lower than in West Germany, and prices of manufactured products sold for much more because the state did not lower retail prices as mass production and "learning by doing" lowered the costs of producing these products over time. Thus, the state overcharged on manufactured goods and used the "profits" to subsidize the price of food products. Consumers quite logically, therefore, overconsumed food and underconsumed light manufactures by comparison with West Germany. When the economy was opened to the West, these relative prices could not be sustained.

Unrealistically low prices on many consumer goods made these goods "deficit commodities" most of the time throughout Soviet-type economies, and consumers were obliged to buy them whenever they appeared as soon as they appeared. Thus, shortages and un-

TABLE 1. Relative Consumer Prices in East and West Germany, 1989

| Consumer Item | Relative Consumer Prices in marks (Numeraire 1 kg of wheat flour) | |
|---|---|---|
| | East Germany | West Germany |
| 1 kg beef (for boiling) | 4.39 | 8.04 |
| 1 kg beef (for roasting) | 7.42 | 14.26 |
| 1 kg pork chop | 6.06 | 9.02 |
| 1 kg potatoes | 0.13 | 0.85 |
| 1 kg black bread | 0.39 | 2.63 |
| 1 kg white bread | 0.75 | 2.61 |
| 1 kg wheat flour | 1.00 | 1.00 |
| 1 kg coffee | 53.03 | 7.23 |
| 1 l milk | 0.51 | 1.01 |
| 1 egg | 0.26 | 0.20 |
| 1 kg butter | 7.27 | 7.03 |
| 1 kg gouda cheese | 5.45 | 10.02 |
| 1 kg sugar | 1.17 | 1.54 |
| 1 Kwh electricity | 0.06 | 0.25 |
| 1 ton brown coal | | |
| rationed | 1.29 | |
| free market | 2.66 | 16.57 |
| 1 public transport ticket (within city) | 0.15 | 1.69 |
| ladies' pantyhose | 10.60 | 4.23 |
| 1 washing machine | 1,742.42 | 791.13 |
| 1 refrigerator | 1,079.50 | 450.80 |
| 1 color TV | 3,712.12 | 1,241.13 |
| 1 first-class domestic letter | 0.15 | 0.80 |
| 1 square-meter rent in new public apartment | 0.6–0.95 | 3.22–6.45 |
| 1 place in public kindergarten | 11.36 | 72.58 |

Source: János Kornai. *The Socialist System. The Political Economy of Communism.* Princeton University Press, Princeton, 1992, p. 157.

certainty of supply ensured that the stores that sold deficit commodities would be "empty" most of the time. They sold out any supplies as quickly as the goods could be moved off the shelves. Perestroika failed because it led to an increase in the number of commodities for which the supply was uncertain and therefore to an increase in the number of "empty" stores. As supply uncertainty grew, so too did the benefits of jumping the queue, both legally and illegally.

The discrepancy between the fixed state retail price for a commodity or service and the price that would just equate supply and demand represents a "rent" or unearned benefit that someone stands to acquire. Ordinary consumers could benefit if they were willing to queue. To obtain a deficit commodity one had to have both rubles and time. People who had more time than rubles, which means the poor, the unemployed, and the retired, stood to benefit differentially where deficit commodities were allocated exclusively through ruble plus time budgets because time budgets are equal for all. People who had more rubles than time stood to benefit differentially from opportunities to jump the queue, and the state provided numerous opportunities for preferred citizens to do

so. Access to special stores and clinics, to exclusive membership clubs and restaurants, special distributions at the place of work, all of which provided goods or services at low state retail prices, represented powerful incentives and rewards for the chosen few.

Economic rents of this sort made kinship and friendship networks beneficial too. In circumstances of general supply scarcity, almost everyone is in a position to pass a portion of deficit rents on to a friend or kin. Advance notice of goods deliveries, set asides, quality differentiation among customers, and so forth, are all ways by which individuals may pass on benefits to those whom they favor. The same is also true with respect to the provision of welfare entitlements, such as public education, access to universities, medical care, and the like, all of which are provided either free of charge or well below cost.

The existence of rents created through the refusal to use prices to allocate goods and services among households and among firms also invited criminality. Pilferage, private (illegal) middleman activities, the use of public property for private gain and general outright theft of public property were all invited by the structure of Soviet wholesale and retail markets.

## THE CRISIS OF 1990–91

The system by which goods and services came to be allocated in the chronic sellers' market of the Soviet economy had been gradually deteriorating during the Brezhnev years, and probably previously as well. The elimination of severe penalties for petty economic crime caused the underground economy to grow and increased the significance of kinship and friendship networks in all official markets. *Blat* and other forms of influence gathered increased importance during the Brezhnev period of "stagnation." The initial enterprise reform under Gorbachev actually worsened the problem because it freed up enterprises to take more initiative and failed to reform prices, to constrain access to credit, to control expenditures on capital account, or to restrict spending by households or deficit financing by the state budget itself. The creation of cooperatives added another legal competitor for retail and some wholesale goods. Public discussion of the need to raise prices or to confiscate private savings in order to reduce the "monetary overhang" further increased uncertainty, thereby encouraging anticipatory hoarding behavior and thus emptying even more stores. By 1990 both the official retail and wholesale markets were breaking down and increasingly being bypassed illegally. Gorbachev's decision not to revise retail prices in state stores (and to compensate those who would have fallen into, or deeper into, poverty as a result) was perhaps the primary fatal mistake of perestroika. The fear of a consumer and worker backlash to increased prices is, of course, understandable, for the result must be a massive redistribution of income (and eventually of wealth as well), but Yeltsin has now demonstrated that it can be done.

In the early fall of 1990 Gorbachev was apparently almost persuaded to accept the Shatalin Plan to establish a market-oriented economy within 500 days. The Shatalin Plan represented the most radical reform to that time, and Gorbachev drew back from it at

the very last moment. Until then the pace of reforms had been accelerating. As is usual in revolutionary situations, as the pace of change quickens, momentum shifts increasingly toward the more radical reformers and their programs, thereby increasing also the degree of polarization of society. The result of Gorbachev's change of heart was a stalemate that was not resolved until the fateful August 1991 putsch transferred power to Yeltsin and the other republic leaders.

By the time Yeltsin and Gaidar acted in January, 1992, the economic situation was largely out of control. The redistribution of real income and wealth was under way at the end of 1991 without the blessing of the state or of the reformers. Supply uncertainty was increasing, and more and more goods were subject to hoarding. Thus, there were more and more empty stores. Special distributions became increasingly important, which put an even bigger drain on the state retail network. Regions were trying to restrict consumers from outside their own, increasing pressures for geographical autarky. The retail network was breaking down altogether, and a very high proportion of goods and services was being distributed outside the state retail network by the time prices were liberalized in January 1992.

As political forces clashed in 1991 and economic reforms failed to be implemented, income, output, and trade declined drastically in the Soviet Union. Gross domestic product declined by an estimated 17 percent in 1991 (Table 2). The decline was distributed unevenly among republics (Table 3). Soviet foreign trade, both exports and imports to socialist as well as to the developed countries declined sharply too (Table 4). And the budget deficit grew apace and was essentially out of control (Table 5). Yeltsin was persuaded at the end of 1991 to use the political capital he accumulated by opposing the coup in August to introduce "shock therapy" to transform the Russian economy into a market system. Most of the other CIS states followed suit.

TABLE 2. Economic performance indicators, U.S.S.R., 1989–1991

(Percentage Change)

| Category | 1989 | 1990 | 1991 [a] |
|---|---|---|---|
| Gross domestic product | 3.0 | −2.0 | −17.0 |
| Net material product | 2.4 | −4.0 | −15.0 |
| Industry | 1.7 | −1.2 | −7.8 |
| Consumer goods | 4.9 | 4.4 | −4.5 |
| Producer goods | 0.6 | −3.2 | NA |
| Agriculture [b] | 1.3 | −2.3 | −7.0 |
| Transport [c] | 1.9 | −5.9 | NA |

Source: *Former USSR. Agriculture and Trade Report. Situation and Outlook Series.* USDA Economic Research Service RS–92–1, May 1992, p. 6. *Narodnoe khozyaistvo v 1989 and 1990*; *Ekonomika i zhizn'*, no. 6 (1992).

NA = Not available.

[a] Values for 1991 cover CIS republics.

[b] Gross production.

[c] Volume of freight.

## TABLE 3. National Income Produced [a]

(Percentage Change)

| Republic | NIP | Republic | NIP |
|---|---|---|---|
| Russia | −12 | Tajikistan | −8 |
| Ukraine | −12 | Turkmenistan | −2 |
| Byelarus | −4 | Uzbekistan | −3 |
| Moldova | −14 | Armenia | −12 |
| Kazakhstan | −10 | Azerbaijan | −1 |
| Kyrgyzstan | −6 | Georgia | −17 |

Source: *The New Russian Revolution: The Transition to Markets in Russia and the Other Commonwealth States.* CIA and DIA report to Joint Economic Committee, U.S. Congress—June 8, 1992.

[a] Official statistics.

## TABLE 4. Foreign trade, former U.S.S.R., 1990 and 1991

(Billions of Rubles) [a]

| Exports and Imports | 1990 | 1991 |
|---|---|---|
| Exports to: | | |
| Socialist countries [b] | 49.5 | 24.4 |
| Developed countries | 54.9 | 46.0 |
| Other countries | 15.5 | 11.0 |
| World | 119.8 | 81.4 |
| Imports from: | | |
| Socialist Countries [b] | 58.1 | 24.9 |
| Developed countries | 66.8 | 46.1 |
| Other countries | 12.8 | 8.2 |
| World | 137.6 | 79.2 |

Sources: *Ekonomicheskaya gazeta*, no. 13 (1992). and *Former USSR. Agriculture and Trade Report. Situation and Outlook Series.* USDA Economic Research Service RS–92–1 May 1992, p. 33.

[a] In recent years, the U.S.S.R. official exchange rate for the ruble had been in the $1.60–1.70 range. In 1991, the Soviets began to report using a new ruble valuation. This series is not comparable to series published in previous *USSR Agriculture and Trade* reports. The discontinuity is greatest for trade with the socialist countries where the change to world prices from administered prices has resulted in large changes in the data series. The exchange rate for 1991 was about $0.59 to a commercial rate ruble.

[b] Includes Eastern Europe, Cuba, Mongolia, North Korea, People's Republic of China, and Vietnam.

TABLE 5. State budget deficit and share of GDP, former U.S.S.R., 1985–91

(Billions of Rubles)

| Year | Deficit | Deficit as share of GDP (Percent) |
|---|---|---|
| 1985 | 13.9 | 1.8 |
| 1986 | 45.5 | 5.7 |
| 1987 | 52.5 | 6.4 |
| 1988 | 80.6 | 9.2 |
| 1989 | 80.7 | 8.7 |
| 1990 | 58.1 | 6.2 |
| 1991 | 200–240 [a] | 12–14 |

Sources: *Narodnoe khozyaistvo*, various years; *Ekonomika i zhizn'*, no. 6 (1992); and *Former USSR. Agriculture and Trade Report. Situation and Outlook Series*. USDA Economic Research Service RS–92-1 May 1992, p. 5.

[a] Value for 1991 covers 11 members of Commonwealth of Independent States (15 republics of former U.S.S.R. minus Baltic States and Georgia); estimate of former Soviet State Committee for Statistics.

## What is Shock Therapy?

Shock therapy is a highly conservative Western economic doctrine emphasizing monetary policy; it is primarily a formula for macroeconomic stabilization. Originally developed to stabilize and invigorate an economy with substantial capitalist aspects, it is here being modified to convert a planned or command economy to capitalism. By following an autarkic, Marxist policy, Russia and the other CIS states missed developing a modern market economy; they also missed out on the taming of market forces. Both are notable accomplishments of the twentieth century. Untamed capitalism is not recommended, but it will be difficult to develop a market and to learn to regulate it simultaneously.

The 1990 Shatalin Plan to transform the economy to market principles in 500 days was unacceptable in the end to Gorbachev in 1990 because it meant abandonment of both the Union and socialist economic principles. He was also skeptical about the feasibility of a rapid transition. Gorbachev was quoted in May 1990 in the *New York Times*, for example, criticizing a proposal raised in his cabinet for a leap directly into a market economy:

> "They want to take a gamble," he said. "Let everything be thrown open tomorrow. Let market conditions be put in place everywhere. Let's have free enterprise and give the green light to all forms of ownership. Let everything be private. Let us sell the land, everything. I cannot support such ideas, no matter how decisive and revolutionary they might appear. These are irresponsible ideas, irresponsible."

Thus, by mid-1990, Gorbachev was a man struggling mightily to hold back a process of reform that was quickly turning revolutionary. He had hoped to reform the economy and the party, not to

abandon them, but the central planning institutions and the political and police bureaucracies had completely lost any popular legitimacy.

Since Gorbachev's demise, however, all subsequent plans have been similar to the Shatalin Plan. They all are teleologically driven, that is, they have been based on the market economy as a goal, rather than being tailored to modify specific characteristics of the existing economic system. All, also, have called for a rapid transformation to a market economy.

The first step of shock treatment as being applied in Russia and several of the other successor states under tutelage of the IMF and certain Western economic advisors is a set of short-run policies designed to create a free market and to achieve macroeconomic stability. Ideally, they should be implemented *simultaneously*:

- Liberalizing prices to achieve rational relative prices and market-clearing price levels, to curtail aggregate demand, make hoarding unprofitable, destroy the population's financial assets, and undercut privilege and *blat*.
- Freezing money wages and income to cause real wages and incomes to fall. This is necessary to prevent a wage and price spiral and to reduce real costs of production; in short, providing an anchor for the economy against hyperinflation and making the economy more competitive internationally.
- Reducing and stabilizing government expenditures by cutting subsidies and entitlements and reducing defense spending;
- Restricting aggregate demand by reducing deficit spending and raising taxes (e.g., a VAT tax).
- Tightening bank credit, controlling the money supply, and creating a true central bank.
- Opening the economy to the world market by floating the exchange rate to establish convertibility, and eventually creating a stable exchange rate. It is also necessary for Russia and the other new states to create domestic convertibility so that anyone within Russia can buy any legal goods or services for rubles, regardless of rank, position, or citizenship.

The criteria for successful implementation of these short-run policies include:

- Transforming the economy from a seller's market into a buyer's market thereby ending hoarding, which will occur when prices rise to levels that no one expects to be exceeded. Shelves will fill up as hoarding ends, and reservation prices will fall sufficiently for people, enterprises, and governments to begin to stop hoarding.
- Establishing a rising rate of unemployment as enterprises rationalize their labor forces and reduce redundant labor supplies.
- Stabilizing wholesale and retail prices and money wages, opening the economy to the world market and stabilization of the exchange rate.
- Making the ruble convertible.

There is some evidence of a short-term supply response in Russia today following the introduction of shock therapy in January, but

most of the short-term criteria have not been satisfied. Prices for a large share of consumer goods were liberalized in early 1992. Some critical products, such as bread, milk, yogurt, baby food, and vodka remained under strict price control in all of the independent states. For uncontrolled goods, prices rose three- to five-fold on most goods and services, and there were ten-fold increases in the prices of highly prized items such as smoked pork filet, first-grade sausage, champagne, and the like. As a result, these goods have appeared for the first time in years in state retail outlets. Until price liberalization, these high-quality products were distributed almost exclusively through official special stores and special distributions for privileged members of Soviet society—or illegally through various black and gray markets.

The goods for which prices remain controlled are difficult to find and require queuing. Soviet vodka is not to be found at all on the shelves. Bread supplies appear eventually most days, but deliveries are erratic. Milk can be found, but yogurt (*keffir* and *smetana*) have disappeared almost completely. In response, the states are gradually allowing these prices to rise.

Hoarding has ended for price decontrolled products. In fact, getting rid of hoarded goods is so widespread that former Soviet cities look like giant flea markets, with citizens seeking to sell both hoarded goods and personal effects to generate ruble income. Hundreds of petty sellers surround metro exits, department store entrances, and the like seeking to sell one or two items.

Price liberalization has, therefore, achieved some degree of success, and most retail (and some wholesale) markets are now true buyers' markets. This, however, is the easy part and was readily predicted in advance. It is, of course, a short-run effect. Stores are filled with goods and private markets have sprung up everywhere like mushrooms because enterprises, people, stores, cities, and republics have stopped hoarding and begun to sell hoarded goods. But production has not increased. In fact, output continues to fall. In part, this reflects monopoly practice of raising prices and restricting output to generate increased profits. For shock therapy to work, however, what is needed is a long-run supply response. The short-run response is a kind of magician's trick—a rabbit being pulled out of a hat. It does not necessarily imply that a satisfactory long-run response will follow. That will depend upon structural changes in the economy—notably privatization and demonopolization.

Money wages and pensions have not been successfully frozen, but they have not thus far increased at the same rate that prices have. Thus, there is something of a price-wage spiral, but one that is not completely out of control. The slower growth of money wages than prices is serving as an anchor—a "dragging anchor" to be sure, but nonetheless one that is preventing hyperinflation for the moment. The pressures are great on the governments of the CIS to raise pensions and wages, and the outlook is not favorable. The basic minimum pension in Russia, for example, has increased eight-fold in the last 14 months.

According to the dictates of the model of shock therapy, unemployment should be increasing as industries trim and rationalize their labor forces in order to maximize profits. Essentially nothing

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has happened with respect to this criterion in any CIS state, including Russia, which is supposed to be taking the lead (Table 6). By Western standards unemployment is zero. Enterprise managers continue to see it as their prime responsibility to provide for the welfare of their employees, even at the expense of profits. Historically, enterprises have provided cheap hot meals, vacations in health spas, housing, special distributions of scarce commodities, and recreation facilities to their workers. And employment has been essentially guaranteed also.

Laying workers off in order to streamline and rationalize factory labor force deprives workers of more than their jobs. They may lose all of these special benefits, and employers are loath to assume the role of bad guy. Most are struggling to protect their workers from the ravages of shock therapy; their efforts of course, undermine government economic policies.

The aggregate price level has not been stabilized, although hyperinflation has thus far been avoided. The exchange rate cannot be stabilized either, and convertibility cannot be attempted until both are under control. It should be noted in this connection that the target date for achieving full convertibility of the ruble has been moved back from July 1, 1992, to fall 1992. Even that target is overly ambitious. Further postponements are to be expected.

A survey of all available data on the various independent states of the CIS indicates that, in general, the short-run objectives of shock therapy are not being attained (see Table 7). The textbook solution calls for an end to hoarding and queues and for rising unemployment in the short run. Inflation is supposed to come under control gradually. Russia has the best score, but it still does not receive a "passing grade." The other republics are doing much worse.

TABLE 6. Unemployment in Russia in 1991–1992.

| Population (Thousands) | Proportion of the Local Population in the Total Able-Bodied Russian Population | Economic Regions | Forecast for 1991 (Ministry of Labor and Employment of Russia) | | Real Situation in 1991 | | Forecast for 1992 | |
|---|---|---|---|---|---|---|---|---|
| | | | Thousands of People | Percentage [a] | Thousands of People | Percentage [a] | Thousands of People | Percentage [a] |
| N.A. [b] | N.A. [b] | Russia, total | 1,329.0 | 1.6 | 61.9 | 0.07 | 762.4 | 0.9 |
| 6,155.3 | 4.3 | Northern | 32.9 | 0.9 | 1.5 | 0.04 | 18.3 | 0.5 |
| 8,301.8 | 5.7 | North-West | 76.3 | 1.6 | 3.5 | 0.07 | 52.2 | 1.1 |
| 30,478.3 | 20.4 | Central | 257.1 | 1.5 | 12.0 | 0.07 | 119.5 | 0.7 |
| 8,476.5 | 5.6 | Volga-Vyatsky | 84.3 | 1.8 | 3.9 | 0.08 | 46.7 | 1.0 |
| 7,756.0 | 5.0 | Central Black Earth | 50.3 | 1.2 | 2.4 | 0.06 | 25.1 | 0.6 |
| 16,543.0 | 11.2 | Volga | 179.1 | 1.9 | 8.4 | 0.09 | 113.5 | 1.3 |
| 16,944.3 | 11.1 | North Caucasus | 149.5 | 1.6 | 6.9 | 0.07 | 102.6 | 0.9 |
| 15,127.6 | 10.4 | West-Siberian | 157.2 | 1.8 | 7.3 | 0.08 | 87.6 | 1.0 |
| 9,224.9 | 6.3 | East-Siberian | 106.4 | 2.0 | 4.9 | 0.09 | 80.2 | 1.5 |
| 8,032.4 | 5.9 | Far-East | 59.9 | 1.2 | 1.8 | 0.06 | 30.1 | 0.6 |
| N.A. [b] | 0.6 | Kaliningrad area | 4.8 | 0.9 | 0.3 | 0.05 | 2.1 | 0.4 |

Source: *Russian Business Monitor*, No. 1, 1992, p. 25.

[a] The number of registered unemployed against the total able-bodied population.

[b] Note: The source does not give the population figure for the Kaliningrad area (column 1). Columns 1 and 2 for Russia are also not specified. Finally, the percent figures given in Column 2 refer to a total able-bodied Russian population that is not identified. The text states (p. 24) that the regions listed in the table represent approximately 75% of the Russian population. The unemployed are defined here consonant with the April 19, 1991, Law on Employment as all "able-bodied citizens that have [no] job or earning, (excluding payments for public works on assignment of government employment agencies) . . . [and are] . . . registered in an employment agency as seeking an adequate (sic.) job and ready to take it."

TABLE 7. Success Criteria: A Visual Guide to Reform Progress in CIS [a]

| | Inflation | Unemploy-ment | Retail Rationing | Hoarding | Full Shelves | Output Increase |
|---|---|---|---|---|---|---|
| Textbook | X | X | 0 | 0 | X | X |
| Russia | X | 0 | 0 | 0 | Z | 0 |
| Ukraine | Z | 0 | 0 | 0 | Z | 0 |
| Belarus | Z | 0 | C | Z | C | 0 |
| Moldova | X | 0 | N/A | X | C | 0 |
| Uzbekistan | X | 0 | N/A | N/A | C | N/A |
| Tajikistan | X | 0 | N/A | N/A | X | N/A |
| Turkmenistan | Z | 0 | Z | N/A | N/A | N/A |
| Kyrgyzstan | X | 0 | N/A | N/A | C | 0 |
| Kazakhstan | X | 0 | Z | N/A | C | 0 |
| Azerbaijan | X | 0 | N/A | N/A | N/A | 0 |
| Armenia | N/A | 0 | N/A | N/A | N/A | N/A |
| Georgia | N/A | 0 | N/A | N/A | N/A | N/A |

[a] Compiled impressionistically from the following Russian and English language sources by my Research Assistant, Alexander Sulla: *USSR Today,* December 1991–January 1992; *CIS Today,* January–July 1992; *FBIS Daily Reports—Central Eurasia,* January–July 1992; *RFE/RL Daily Reports,* January–July 1992; *RFE/RL Research Report,* January 24, 1992; *The New York Times,* February 13, 1992; *The Washington Post,* February 2, 6, 7, and 8, 1992.

Legend:
X = full.
Z = partial.
C = minimal.
0 = zero.
N/A = not known.

## Long-Term Reform Success

The long-term process requires privatization, demonopolization, and the creation of an appropriate infrastructure for a modern capitalist system (e.g., legal protection of private property, business regulatory systems). This will be more difficult and will take, lots of time. The textbook says these measures should be initiated first, therefore, in order to ensure a long-run supply response to price and wage liberalization. But Russia's Yegor Gaidar, now acting Prime Minister, is going about the process in reverse in order to destroy the old system, which has resisted all previous attempts to reform the economy. Every reform attempt since 1965 has foundered on this issue. No Soviet leader ever felt strong enough to confront consumer anger over price increases. Yeltsin is unique. Now, at long last, the nettle of price reform has been grasped. The Rubicon has been crossed. This may be a good tactic, but it represents a very risky strategy on both economic and political grounds.

What can go wrong?

- Price liberalization may be constrained, with the result that hoarding continues and stores remain empty.
- Money wages (and pensions) may float along with retail prices. It is difficult for a government to let product prices rise to equilibrium levels because of the adverse impact this has on the distribution of income and wealth. Money wages must at least lag, but the pressures will be great to let money wages rise, to protect those on fixed incomes by upping pensions and

other benefits, and to maintain a broad social safety net, all of which will make it hard to reduce, or even restrain the state budget. More important, raising money wages and incomes weakens the anchor against hyperinflation.

- Budget deficits may continue to rise.
- The central bank may fail to restrict credit. In reality there is no true central bank yet in any member state of the CIS to manage and allocate credit, and the monetary authorities cannot, in any case, prevent legislative spending from spiralling if the elected legislature so chooses.
- Privatization and demonopolization may stall, which thus far is the case.
- Macroeconomic stabilization may fail. Convertibility of the ruble will require a large stabilization fund; otherwise like a run on an uninsured bank, the fund will be exhausted by insatiable demand for foreign exchange.

The conditions for shock therapy to succeed, therefore, are quite stringent on economic grounds alone. Moreover, the theory upon which it rests makes a number of questionable assumptions, especially for the Russian case. It is assumed by the theory that if monetary and pecuniary problems can be solved, production will be restored without central government intervention in production decisions. That is, if one gets retail and wholesale prices right, money wages right, the interest rate right, and the exchange rate right, production will take care of itself. Rational economic actors (enterprise managers and households) will, by maximizing profits and/or utility, create an efficient and productive market economy. Thus, paradoxically, shock therapy puts as much weight exclusively on pecuniary variables as the old command system did on quantitative variables. This purely monetarist solution is just as ideologically driven and one-sided as Soviet Marxism was.

Shock therapy focuses on financial and price issues, but it cannot succeed without privatization, demonopolization, and a well-conceived industrial policy. This last component is an essential but rarely discussed policy. The government must place a bet on certain existing industries and develop them for domestic and/or export purposes. Nor is there any reason to believe that inexperienced Russian "capitalist entrepreneurs" will know better than government economists which industries hold promise for profitable production in the new circumstances. They will not develop spontaneously, as the current theory presupposes. What is needed is something much more like the Marshall Plan than like shock therapy. The Marshall Plan focused on production and economic integration as well as on macroeconomic stabilization. It put the burden of organizing investment, production, and distribution on the shoulders of the potential beneficiaries, and it discouraged a mercantilist or beggar-thy-neighbor approach by beneficiaries. Unfortunately, the new independent states *all* believe that they were previously exploited economically, and they are reluctant now to cooperate freely in a common economic space.

## CONCLUSION

The Soviet economy was always a crisis management economy. The logical reaction in Russia and the other CIS states, if Gaidar's rapid transformation regime fails, will be to introduce central crisis management again. This will, of course, look like the old command economy in many ways, but no alternative is likely to be available. The market mechanism is still too weak in the CIS to carry the entire burden of allocation, production, and distribution. Shock therapy is creating the external features of a market economy but not necessarily its content, just as the native members of the Cargo Cult of the Pacific during World War II hoped to induce U.S. Air Force cargo aircraft to land on their simulated landing strips. The native cult members, of course, did not really understand the greater context, that is, where these great cargo birds came from or why. They only knew that should they succeed in luring one of them to land, they would be rich in goods. Many Russian economists do not understand the context of a market economy any better, and they are inclined to put too much faith in the claims of Western economists. Enormous external assistance, both financial and educational, will be necessary to avoid failure of the economic transformation process and backsliding into another variant of the crisis-administered economy. Meanwhile, Russian, Ukrainian, and other republic economists will have to gain their own seat-of-the-pants experience in the central management of a market economy. This will take many years.

The various other republics are following at different rates the pace set by Russia. The fact that the ruble is still currency in these other new states creates a special problem for implementing shock therapy in Russia. In effect, Russia faces a ruble overhang in the republics and must either renounce this "external debt" or secure cooperation and coordination in monetary policy and exchange rate stabilization among all of the republics. One course invites conflict, the other delay. No ready solution is in the offing. The most likely outcome is the first because each republic wants its own currency.

Yegor Gaidar is promising a turn around of the economy in a year or two. Most objective observers see the process as taking at least ten years or more if a stop-and-go approach infects policy implementation, which has been the fate of shock therapy experiments elsewhere in the world. The governments of the various new independent states do not have the political support required to carry out the necessary transformation in the short period they prefer. They will have to back down and adopt partial solutions. And Russia and the other successor states of the Soviet Union will have to develop their own unique transformation strategies based on their own peculiar economic circumstances, histories, and opportunities. Each needs its own Keynes to model an appropriate strategy for privatization and stabilization. They will have to realize also that economies are more like giant tankers than they are like rowboats. They cannot be maneuvered readily or turned about quickly.

Unfortunately, the problems that Yeltsin, Kravchuk, and other leaders of the newly independent states face are not purely domestic economic and political issues. The new states must now treat

their interrelations as foreign relations, and there are many sources of friction among them. First, each former republic appears to believe that it was previously exploited in its relations with the others. Trade within the former Soviet Union has declined drastically as a result, at great economic cost to all. The problem of maintaining a "common ruble space" for CIS members is complicated by the inability of the individual states to control inflation and their unwillingness to cooperate.

Second, the various former republics have concerns about national groups that are located in the other new states. Perhaps the most serious problem is the diaspora of native Russian population in the other states. We have seen in Yugoslavia how violent this issue can become — if the dominant nationality seeks "to protect" its own national group's rights beyond its borders. Conflict between Ukraine and Kazakhstan, on the one hand, and Russia, on the other, is particularly troubling at this time. The Crimea offers another source of potential conflict between Ukraine and Russia.

Meanwhile, Russia itself contains 31 self-conscious ethnic groups. They represent autonomous republics and regions that were established under Soviet rule. Their incorporation in the Russian empire goes back to Tsarist times. Some of these groups, who total 25 million citizens in all in Russia, have already sought independent or quasi-independent status. Others are sure to do so in the future. Thus, Yeltsin's government must seek a way to prevent the continued process of disintegration within Russia itself.

The specter of possible political conflict among the various former republics of the Soviet Union further complicates economic reform policies. So too does potential conflict within each new state. To the extent that the new states that compose the CIS focus on ancient rivalries, hatreds, and grudges, economic reform will be undercut. Russia's role as reform pathbreaker may also be undercut by the continued centrifugal forces generated by intense ethnic competition. We have seen in Yugoslavia the worst possible outcome of all these forces. Shock therapy was initially successful there—until ethnic rivalries made the question of economic reform moot. Military conflict has superseded economic concerns. A similar development in the CIS would be even more destructive.

A Yugoslav type outcome represents the worst case outcome for economic reform in the CIS. A rejection of shock therapy is the more likely outcome. The objectives of economic policy will remain the same as under shock therapy, but implementation will be slowed in order to maintain peace among the member states of the CIS and political stability within each state. Politics, it has been said, is "the art of the possible." A review of economic policy today in the CIS indicates that shock therapy is not within the realm of the "possible" politically or economically.

## Bibliography


1. Robert W. Campbell. *The Socialist Economies in Transition.* Indiana University Press. Bloomington, 1991.
2. Vladimir Capelik. "Yeltsin's Economic Reform: A pessimistic Appraisal," *RFE/RL Research Report*, vol. 1, no. 4 (24 January 1992), pp. 26–32.

3. CIA and DIA. "The New Russian Revolution: The Transition to Markets in Russia and the Other Commonwealth States," xerox copy of a paper presented to the Joint Economic Committee, U.S. Congress (8 June 1992).
4. Christopher Clague and Gordon C. Rausser (eds.). *The Emergence of Market Economies in Eastern Europe.* Blackwell Press, Cambridge, 1992.
5. EuroKosmos. *Russian Business Monitor*, no. 1, 1992.
6. Foreign Broadcast Information Service. *Central Eurasia* (29 May 1992).
7. Fred Hiatt. "Russian Bank Chief Calls Reforms Misguided," *The Washington Post*, January 14, 1992.
8. John Maynard Keynes. *The General Theory of Employment, Interest and Money.* Harcourt, Brace and Company, New York, 1956.
9. János Kornai. *The Socialist System. The Political Economy of Communism.* Princeton University Press, Princeton, 1992.
10. Abba P. Lerner. *Economics of Employment.* McGraw-Hill Book Company, New York, 1951.
11. Merton J. Peck and Thomas J. Richardson (eds.). *What Is To Be Done? Proposals for the Soviet Transition to the Market.* Yale University Press, New Haven, 1991.
12. Nicolas Spulber. *Restructuring the Soviet Economy. In Search of a Market.* The University of Michigan Press, Ann Arbor, 1991.
13. U.S. Department of Agriculture Economic Research Series. *Former USSR. Agriculture and Trade Report. Situation and Outlook Series.* RS-92-1, May 1992.
14. Jude Wanniski, "The Future of Russian Capitalism," *Foreign Affairs*, vol. 71, no. 2 (Spring 1992).

# POST-SOVIET ECONOMIC REFORMS IN PERSPECTIVE

By Gertrude E. Schroeder *

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## SUMMARY

The 15 sovereign states that replaced the Soviet Union in December 1991 are in the midst of an attempted societal transformation that is unprecedented in nature and scope. In the economic realm, these states begin the transition from socialist central planning to capitalist market economies with formidable legacies from failed communism. The legacies are found in the remnants of the institutions through which the economy was managed for many decades and in the mindsets and habits of the people whose behavior was molded by those institutions. Other legacies stem from the development strategies that were pursued and are physically embodied in the land use patterns, capital stocks, environment, and skills of the labor force. Past policies of extreme protectionism and Moscow-dictated approaches to regional development have produced large economic interdependencies among the new states. By their very nature, these legacies will take many years to overcome. Nonetheless, the old system, despite its manifest flaws, did generate economic growth, secular improvements in living standards, and an extraordinary degree of personal economic security. The failure to understand the nature of these legacies generates both good and

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bad results in unrealistic expectations about what is possible and biases evaluations of the pace of transition in each new state.

For several decades, the former Soviet republics experienced a treadmill of attempts to reform socialism. This futile process was ended in 1990 and 1991 as the unintended result of Gorbachev-initiated policies of glasnost and perestroika. In those years, reform programs were adopted that, if implemented, eventually would have eradicated the venerable institutions of socialism and replaced them with those of capitalism. The republics enacted a number of laws appropriate to that end and gained experience in managing their own affairs. Moreover, amidst the amounting disarray in the economy, governments, business firms, and individuals were beginning to alter their behavior and attitudes in ways essential for a market economy.

Given the revolutionary nature of the many-faceted transformation from subservience to independence, the speed with which it occurred, and the excessive burden on the new governments, the progress on economic reform made thus far is remarkable. The fledgling states in varying ways and degrees have been able to build on prior accomplishments. Most prices have been decontrolled, new fiscal systems have been instituted, the privatization process is in motion, and market processes are continuing to arise from below. There is much diversity among the states. That the reform programs are the subjects of intense political controversy, that implementation of some aspects is proceeding slowly, and that large elements of the old system are still in place are only to be expected in this brief period of independence. The ability of the new states to stay the course will depend primarily on whether they can maintain reasonably stable governments committed to reform and avoid consuming their energies in ethnic strife. Appropriate international support is essential. It would be a great tragedy if any of the Soviet Union's successor states were to become mired in a new treadmill of failed attempts to lay the foundations for a successful market economy. In contrast to the past, post-Soviet economic reforms do not aim to square the circle.

## INTRODUCTION

The Soviet Union, which played such a fateful role in world history for more than seven decades, is no more: in December 1991, it was replaced with 15 independent states, 11 of them loosely associated in a new entity called the Commonwealth of Independent States (CIS). The new states are in the throes of a societal transformation unprecedented in nature and scope. In essence, they are experiencing three, thus far largely peaceful revolutions—the transformation of governance from dictatorial rule to rule by participatory consensus, the transformation of the economic system from socialist central planning to one based on private enterprise and markets, and the transformation from units in a highly integrated and centrally managed empire to fully sovereign nation-states. Given the unique legacies of failed communism, successful completion of any one of these revolutions would be daunting; together, they pose challenges of such scope and complexity as almost to defy

comprehension, let alone succinct description of the ongoing processes.

As these intertwined revolutionary processes unfold in the coming years, the need to assess the progress of the three transformations will be ever present. Evidence of progress (or regress) will take the form of innumerable actions at all levels of society and in all arenas—political, economic, and social. The cacophony of daily happenings will need constantly to be put into a perspective framework, so as to avoid premature judgments based on the headline event of the moment. In assessing the pace of change, such perspective requires a clear picture of the state of affairs at the outset and of the legacies of the past. It requires an organized outline of what the transformations require in terms of institutions and physical and psychological reorientations based on understanding of the necessary underpinnings of the desired new order. And it requires that reasonable expectations be formed regarding the ease, speed, and smoothness of such fundamental changes in societal institutions and human behavior.

This paper aims to develop such a perspective, focusing on the economic transformation. We first review the key physical and institutional legacies and the shared experiences that define the economic starting point for each of the new states that have emerged from former Soviet republics—states that are widely diverse in history, culture, ethnic composition, resource endowments, and level of development. Next, we outline what must be done to accomplish a successful economic transformation from central planning to markets—the declared goal of all 15 states. Then we describe what has been accomplished thus far, for Russia in some detail and for the other states more summarily. The paper concludes with an evaluation of that brief record, putting it in perspective and speculating about the ability of the post-Soviet states to meet the many critical challenges that they face.

## The Legacies of Socialist Central Planning: A Common Inheritance

The Soviet system of governance has left formidable legacies for its successor states. These legacies are to be found in the remnants of the institutions through which the economy was managed for many decades and in the habits and mindsets of the people whose behavior was molded by those institutions. Other legacies, perhaps even more terrible, stem from the development strategies that were pursued and are embodied in the physical capital stocks of each new state, in its land and its environment, and in the skills of its labor force. Related to those institutions and strategies are the legacies that are primarily the result of protectionist policies that not only insulated business firms from foreign competition, but from domestic competition as well. Nonetheless, the old system, despite its manifest flaws, did generate economic growth, secular gains in living standards, and an extraordinary degree of personal economic security. To maintain perspective on the emerging new economic orders in the successor states, one needs to keep in mind the totality of the old monolithic order and its legacies, both good and bad.

## ECONOMIC INSTITUTIONS

Under the old regime, the economy functioned through a system that possessed its own internal logic and through institutions that were closely interconnected and mutually reinforcing. [1] Virtually all productive property was owned collectively, mainly by the state. Resources were formally allocated through centrally dictated plans for production and associated physical allocation of material inputs and capital to firms. Economic organization was hierarchical, with firms and farms functioning essentially as the lowest level units in a bureaucracy. Prices were set administratively, changed infrequently, and served mainly an accounting function, as was likewise the case with regard to money and bank credit. Thus, prices, money, and financial variables played only passive roles in the economy. Work incentives, while also job-related, were geared to meeting the centrally dictated production plans. Finally, the formal institutions were supplemented in practice by a variety of informal arrangements and behavioral norms, both semi-legal and illegal and market-like in character, that on balance facilitated the functioning of the formal arrangements that proved to be so deeply flawed in practice. This so-called "second economy" functioned in the sphere of production as well as in consumption. Queuing and black markets were perennial features of everyday life.

The presence of these institutions meant that socialized property became nobody's property, with no one having a personal stake in maximizing its income stream and its value over time. [2] It meant that firms throughout the production-distribution chain were oriented vertically toward satisfying their organizational superiors rather than horizontally toward pleasing their suppliers and customers. It meant that prices became accounting units that reflected neither relative costs nor relative scarcities even tolerably well. It meant that money was not real money in the sense of a universal carrier of options to buy goods and services of one's choice. It meant that there were no capital and financial markets and that banks acted essentially as accounting and money transfer agents for the government. Workers were educated and trained in the service of this institutional milieu. These institutions are the polar opposites of those characteristic of a well-functioning market economy.

## DEVELOPMENT STRATEGIES

A hallmark of Soviet development strategy was its long-continued addiction to unbalanced growth of the economy. To mobilize resources for economic growth, investment was pushed to a near-maximum at the expense of consumption. From the outset, investment was allocated disproportionately to the industrial sector and within that sector to heavy industry and defense at the expense of

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[1] For discussion of this point see in particular Alastair McAuley, "Central Planning, Market Socialism, and Rapid Innovation," in Mark E. Schaffer (ed.), *Technology Transfer and East-West Relations*, New York, St. Martin's Press, 1985, pp. 32-49. Richard C. Ericson, "The Classical Soviet-Type Economy: Nature of the System and Implications for Reform," *The Journal of Economic Perspectives*, Fall 1991, pp. 11-28.

[2] The many adverse consequences of the communist system of property are discussed in Gertrude Schroeder, "The Role of Property in Communist Countries," *In Depth*, Winter 1992, pp. 31-55.

consumer goods industries. Agriculture and the service sectors were relatively neglected, although in later years investment was directed disproportionately to agriculture as the perceived panacea for its perennial shortcomings. Moreover, Moscow-dictated regional development policies fostered specialization rather than diversification in each republic. The outcomes of this strategy are to be seen in the pattern of land use, in the nature and location of the physical capital stock, and in the deployment of the work force in each of the successor states; these are the physical facts of life with which they necessarily must begin their independent course. To one degree or another, their economies begin with overblown and distorted industrial sectors, unduly large amounts of resources tied up on farms, and grossly backward service sectors, where the accumulated backlog of neglect is awesome to behold. [3]

To speed up economic growth and to compensate for the manifest inability of Soviet-style institutions to economize resources, a mobilization strategy also was pursued. Capital stocks were accumulated beyond the point of diminishing returns and at excessive costs in terms of consumption forgone by the population. Working-age adults were drawn into the labor force to such an extent that labor force participation rates are a near maximum. Land was deployed and natural resources employed in the service of production, with scant attention paid to the environmental consequences. Although by the time of the Soviet Union's demise, this growth strategy was no longer viable, its legacies are visible and formidable. They are found in the massive and largely obsolescent stocks of machinery, equipment, and buildings often unsuitably located, in the fact that almost everyone has some job that he regards as his right, and in the parlous state of the environment. These are the characteristics of the physical inheritance, in varying degrees and configurations of each of the successor states.

## THE ULTIMATE IN PROTECTIONISM

The foreign trade institutions and policies in place in the U.S.S.R. over many decades effectively shielded producers from all foreign competition. Within a general policy of trade aversion and, after World War II, a strong orientation toward trade with other socialist countries, Moscow planners decided what products were to be imported and in what quantities; the idea that imports should be used to spur efficiency in firms was completely alien. Rather, imports were obtained to fill gaps in domestic production essential to meeting overall plans. Procurement of imports through specialized government agencies and their allocation through supervising ministries also meant that business firms were insulated from contacts with their own foreign suppliers. A bias toward import substitution figured importantly in planners' decisions about the expansion of domestic production capacities.

Similarly, firms were protected from having to try to sell their products on foreign markets. Planners decided what part of a firm's output was to be exported, and if need be, accorded the firm

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[3] These and other severe economic distortions brought about by socialist central planning are described in Jan Winiecki, *The Distorted World of Soviet-Type Economies*, Pittsburgh, Pa., University of Pittsburgh Press, 1988.

special benefits to make its products salable abroad. In any case, the firm knew that whatever was not exported would be allocated to domestic customers. Like firms acquiring imports, exporters did not deal directly with their foreign customers either; both dealt with state bureaucracies. In general, exports were viewed as a necessary evil, the price that had to be paid for unavoidable imports.

The protected environment for Soviet firms was enhanced by the fact that the majority of trade throughout the postwar period was conducted within the framework of the Council for Mutual Economic Assistance (CMEA) trading system. Essentially, under that arrangement Soviet energy and raw materials were bartered for relatively inferior East European machinery and manufactures. It was a system of largely captive markets, in which sizeable mutual economic interdependencies developed, but without the necessity to settle accounts in real money (hard currency). The accrued production interdependencies made all CMEA members and their firms highly vulnerable to any move to end the captive markets.

Extreme protectionism for business firms extended to the domestic arena as well. Firms did not have to compete with one another for customers or even to find them. Rather, a firm's products were "sold" or more aptly put, "distributed" for it via its plan for "sales." To make matters worse, many firms were endowed with the ultimate in protection—monopoly or near-monopoly in the production of particular products. This ubiquitous situation arose from planners' misguided notions about the economic efficiencies to be had from concentrating output in giant agglomerations. The legacy of such policies is a world of monopolies. For example, according to Soviet data for the late 1980s, more than one-third of all important machinery products (such as sewing machines, tram rails, locomotive cranes) was made by only one producer, and another third was made by only two firms. [4]

This policy of gigantomania created large and critical interdependencies, which were reinforced in their geographical impact among republics by the central government's regional development and industrial location policies. These policies fostered specialization rather than diversification in each republic. Plants were designed and sited predominantly in the interest of the country as a whole. In a sense, this approach maximized interrepublic trade in an institutional setting that permitted firms to exchange their products in a highly protected market—another "captive market," in effect. As with foreign trade, these exchanges were arranged by state bureaucracies (mainly the industrial ministries and the State Committee for Supply) rather than by the firms themselves. Again, this situation made each republic and its producers highly vulnerable to dissolution of the internal Soviet market. To cite only one set of statistics characterizing the mutual vulnerabilities, in 1989, imports (domestic and foreign) provided from 15.7 percent (Russia) to 31 percent (Armenia) of consumption in the republics, and exports accounted for from 10.7 percent (Russia) to 27.1 percent (Azerbaidz-

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[4] These and a variety of other statistics showing the high degree of industrial concentration in the Soviet Union are cited in Heidi Kroll, "Monopoly and Transition to the Market," *Soviet Economy*, April-June 1991, pp. 143-174.

han) of republic production. [5] These mutual trade dependencies are deeply embedded in the production profiles, capital stocks, and labor skills in each new state and cannot be altered in any major way in the short run.

Finally, enterprises as well as republic governments themselves were insulated from bankruptcy or insolvency through a complex network of monetary transfers and by the highly centralized financial system. Firms did not have to seek out investors or banks to obtain new capital; instead, funds were supplied to them virtually without charge. If firms ran into financial difficulties, they could expect to be rescued by their parent ministry. Bankruptcy and closure because of insolvency were unknown. Republic governments did not have to concern themselves with raising revenue and balancing their budgets. Rather, their role was to administer budget revenues and expenditures largely determined for them by the central government. Whenever planned expenditures exceeded allocated revenues, the central government simply re-jiggered the flows or provided subsidies. If republic governments wanted to increase investment or social expenditures, they needed to lobby the fiscal authorities and central economic ministries in Moscow.

Individuals, too, were protected from economic vicissitudes. The state guaranteed jobs for everyone who wanted one. School leavers could rely on the government to find them their first jobs. Reinforced by the fact that much housing and many welfare benefits were provided by employers, workers came to regard their particular jobs in particular firms as economic rights. Housing, health care, and education, although rationed in various ways, also came to be provided as social rights with only nominal charge, if any. To a large extent, also, an employee's job entitled him to housing, recreational facilities, and social benefits financed by his employer. Social security systems provided income for the aged, the disabled, and families who lost a breadwinner. Finally, in the postwar period the rate of inflation was low, wages rose much more rapidly, and social benefits were increased periodically. Such was the relatively secure and predictable postwar milieu that most people came to value and to associate with socialism.

## ECONOMIC PERFORMANCE

Although nowadays almost universally discredited, the socialist production system proved able to generate fairly steady economic growth, albeit at markedly declining rates after 1975. According to the best measures available either East or West—those of the U.S. Central Intelligence Agency—annual growth of GNP averaged 3.4 percent for the 40-year period from 1951 to 1990. [6] Growth was positive in every year but three—1963, 1979 and 1990. But while growth rates averaged about 5 percent in the 1950s and 1960s, the average rate fell to 2.5 percent in the 1970s and to 1.2 percent in

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[5] These and other data on interrepublic dependencies are presented in Gertrude Schroeder, "Economic Relations among the Soviet Republics," in Michael P. Claudon and Tamar L. Gutner (eds.), *Investing in Reform: Doing Business in a Changing Soviet Union*, New York, New York University Press, 1991, pp. 19–37.

[6] Laurie Kurtzweg, *Measures of Soviet Economic Growth in 1982 Prices, A Study Prepared for the Use of the Joint Economic Committee of the US Congress*, November 1990, pp. 54–57. CIA, *Handbook of Economic Statistics*, 1991, CPAS 91–1001, p. 34.

the 1980s. Over the whole period, however, the Soviet economy was not able to keep up with Western Europe and even ceased to gain on that of the United States after 1965. These relationships held true on a per capita basis as well. Thus, so-called "development gaps" were widening quantitatively and, as is now becoming ever more evident, qualitatively as well.

Moreover, in the postwar period, the Soviet people saw their lot improve dramatically, albeit from very low levels. With the higher priority accorded to consumption by post-Stalin leaderships, per capita consumption grew rapidly, registering an average annual growth of 2.8 percent during 1951–90. Again, however, the pace of gains in living standards slowed markedly—from a total gain of 35 percent in the 1950s to a mere 9 percent during the 1980s. Although "consumption gaps" with the West were widening, especially in qualitative terms, the Soviet people were able to perceive steady and palpable improvements in their living standards over the years in terms of more and better food, more clothing and footwear of more modern design, fast-growing stocks of consumer durables including much-coveted automobiles, more spacious housing with more amenities, and additional services of many kinds. Antiquated though it was by Western standards, the cumbersome retail distribution system did manage to make most daily necessities available for purchase most of the time, at least until the end of the 1980s. While queuing was commonplace, people found a variety of ways to better their lot through informal channels. Judging from an extensive Western survey of Soviet emigrees, people were moderately well satisfied with their overall standard of living. [7] The significance of all this is that in the midst of today's turmoil, people can remember that socialism did work after a fashion.

Also part of the performance legacy of socialist central planning, however, is the fact that those gains in economic growth and living standards were obtained at grossly excessive costs relative to the Western experience. Unlike in the West in general, Soviet growth was fueled by a massive buildup of capital stock, near-maximum mobilization of the population into the work force, profligate use of energy and raw materials, and an almost total disregard for the environmental consequences of what amounted to a policy of production at any cost. Whatever the disputes over the numerical calculations, it would be generally agreed that improvements in productivity beyond those embodied in the capital stock and a better-educated work force contributed little, if at all to Soviet growth, a situation markedly different from Western growth experience. [8] Also, it is now generally agreed that the "technology gap" as reflected in the quality and modernity of the physical technologies and processes used throughout the Soviet economy, and therefore embodied in present stocks of machinery and equipment, is large relative to the West and has been widening in recent years. There is no dispute either that the energy and raw materials intensiveness of Soviet production technologies exceeds those in the West by wide margins.

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[7] James R. Millar (ed.), *Politics, Work, and Daily Life in the USSR: A Survey of Former Soviet Citizens*, Cambridge, Cambridge University Press, 1987.

[8] For a masterful survey of Soviet growth experience see Gur Ofer, "Soviet Economic Growth, 1928–1985," *Journal of Economic Literature*, December 1987, pp. 1767–1833.

This lamentable outcome is mainly the result of the fact that technological progress had to be "introduced" from above, because the system lacked incentives to generate it from below. Finally, observers agree that damage to the physical environment and to human beings has been inordinate; witness is given by the Chernobyl disaster and the title of a recent book *Ecocide in the USSR: Health and Nature under Siege.* [9]

A TREADMILL OF ATTEMPTS TO REFORM SOCIALISM

Although the debilities of socialist central planning were visible from the start, they had become ever more evident by the mid-1960s, as economic performance indicators began to worsen and the sources of extensive growth began to dry up. Soviet leaderships from Khrushchev through Gorbachev believed that remedies could be found through within-system reforms. Their numerous actions were intended to make the system more efficient while leaving its essential features intact. Since it was those very features that influenced the behavior of economic agents and therefore economic outcomes, those efforts amounted to trying to square the circle and came to naught. [10] Despite the perennial changes, and perhaps to some degree because of them, economic performance worsened. Until almost the very end of this process, there were three untouchables—the role of the Communist Party in the economy, the communist system of property, and government determination of most production and prices. Within that framework, the numerous tinkerings reflected a ceaseless search for panaceas in three areas—economic organization, planning routines, and the degree of autonomy to be accorded to firms along with incentive schemes for their managers.

Planners seemed to believe that discovery of the "ideal" arrangements of economic organizations would solve the economy's problems. The ensuing search and experimentation concerned organizational relationships between the central government and republic and lower-level administrative units, the structures of the economic bureaucracies, and the organizational structures between them and the enterprises. The permutations and combinations that were tried out almost defy description. Some changes were major, such as Khrushchev's replacement of nearly all of the central economic ministries in 1957 with regional economic councils and Brezhnev's subsequent restoration of the ministries in 1965. Also of consequence was Brezhnev's drive in the 1970s to amalgamate enterprises into large associations and Gorbachev's establishment of seven supra-ministries (bureaus) during 1985–87 to coordinate the activities of several ministries with similar products or functions. Other innovations were of less consequence but were ubiquitous. For example, Gosplan underwent many reorganizations over the years; the responsibilities for central rationing and pricing were

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[9] Murray Feshbach and Alfred Friendly, Jr., New York, Basic Books, 1992.

[10] This section relies on the author's many papers on Soviet economic reforms, especially "Soviet Economy on a Treadmill of Reforms," in the Joint Economic Committee Compendium *Soviet Economy in a Time of Change,* 1979, pp. 312–340: "Soviet Economic Reform Decrees: More Steps on the Treadmill," in the Joint Economic Compendium *Soviet Economy in the 1980s: Problems and Prospects,* 1982, pp. 68–88: "Organizations and Hierarchies: the Perennial Search for Solutions," *Comparative Economic Studies,* Winter 1987, pp. 7–28.

handed about; the number of ministries was increased and then decreased; ministries were divided and then reunited; ministries were shifted from all-union to union-republic status and back again. Through all this the basic formal organizational structures endured, until Gorbachev's innovations brought about their destruction.

Another theme that pervaded the saga of reforms was the planners' seeming conviction that finding the "perfect" plan and planning routines would lead to similarly "perfect" performance by executants. In search of the optimal plan, postwar planners turned to modern computer technologies and mathematical models. Alterations often were made in planning procedures and routines. The number of plan targets set centrally for firms went through cycles of being decreased and then increased. Specific targets were redefined to make them more "scientific." Terminologies were changed—from mandatory "plan targets" to mandatory "state orders." Procedures were periodically altered in efforts to resolve the perennial tension between "branch" and "regional" planning. Planning through "program-goals" approaches and comprehensive planning for key industrial "complexes" and regions were added to Gosplan's burden and superimposed on the ordinary routines. The fecklessness of the persistent efforts to make central planning work better is shown by a growing divergence between plans and actual results. In the final Soviet five-year plan (the twelfth) for example, the plan called for an average annual growth of 4 percent in GNP, but the rate achieved was less than 1 percent, as was also true for industrial production, for which average annual growth of 4.6 percent was targeted.

A third focus of the treadmill of within-system reforms was the degree of autonomy that should be given to enterprises and the design of incentive schemes for their managers. The situation was one of ebb and flow, in which the planners broadened the decision-making authority for firms in varying degrees and areas, and then retracted all or parts of the newly delegated authority. Although by no means removed from the dictates of their ministries and central plans, firms were given by far the most extensive delegation of authority in Gorbachev's 1987 package of reforms with its new Statute on the State Enterprise. In the growing macro-disarray of the latter 1980s, firms in practice were able to exercise ever more independence. They found that they often could ignore the frantic efforts of their superiors to rein them in, behavior that contributed importantly to bringing down the system of centralized planning.

The frequent alterations in the permitted autonomy for enterprises were accompanied by alterations in the criteria for assessing their success and rewarding their managers. While Stalin and Khrushchev focused almost singlemindedly on meeting plans for production in physical and value terms, their successors in their subsequent packages of reforms tried out a seemingly endless number of other combinations. In the 1965 package, meeting the plan targets for key products in physical units was still required, but bonuses were made dependent on targets for sales and profitability. When that complicated scheme did not bring the desired results, other criteria were added—notably meeting plans for labor productivity and improved product quality. Later, the emphasis

shifted to contract fulfillment as the principal criterion for success. In effect, the planners sought to devise schemes that would induce socialist firms to increase production, improve efficiency across the board, improve the quality of products, and pay attention to customers. In a word, they were attempting to elicit capitalist behavior from socialist firms without placing them in a capitalist environment. This was one more failed attempt at squaring the circle.

ENDING THE TREADMILL OF SOVIET-TYPE REFORMS

While Mikhail Gorbachev was fond of characterizing his reform initiatives taken before 1990 as both "radical" and "revolutionary," as formally laid out they were neither; in fact, they were a continuation of the decades-long treadmill.[11] But they did contain elements of radicalism, and they set in motion forces that unintentionally catapulted the Soviet economy off the venerable treadmill and into an era of reforms that in concept really are both radical and revolutionary. The reforms adopted in Gorbachev's first few years of tenure contained two important innovations that were harbingers of things to come. First, he started a discussion about property ownership and launched an expansion of the private sector through legislation on private and cooperative economic activities. Second, he began the process of dismantling the state monopoly on foreign trade. But the real breakthrough occurred in 1990 in a series of developments that brought a sea change on the economic reform front. Since these events have been detailed elsewhere, a summary will suffice to make the point.[12]

In that momentous year, truly radical reform programs were promulgated and some of them were approved by more or less democratically elected legislative bodies. These programs were radical in the sense that if they had been implemented as intended, they would have dismantled the venerable institutions of socialist central planning and ultimately replaced them with those appropriate for a market economy with a sizeable public sector. The harbinger of those historic developments was the so-called "Abalkin Blueprint" set forth in the fall of 1989, which for the first time made property ownership the centerpiece of reform.[13] This theme also figured in a more subdued way in the more conservative programs set forth by the Ryzhkov government in December 1989 and in May and September 1990. The most radical of the programs, however, appeared in August 1990 as the much-touted "500 day" (Shatalin) Plan.[14] This program was unprecedented both for its stress on property ownership and for its fast timetables for "destatizing" and privatizing state property and for decontrolling prices—steps that are essential to creating a market economy.

The basic features of this plan were incorporated in more general terms in the so-called Presidential Plan that was adopted by the

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[11] Details are given in Gertrude Schroeder, "Gorbachev: Radically Implementing Brezhnev's Reforms," *Soviet Economy*, October-December 1986, pp. 289–301 and "Anatomy of Gorbachev's Economic Reforms," *Soviet Economy*, July-September 1987, pp. 219–241.

[12] Gertrude Schroeder, "A Critical Time for Perestroika," *Current History*, October 1991, pp. 323–327.

[13] See Ed A. Hewett, "Perestroika Plus: the Abalkin Reforms," *Plan Econ Report*, No. 48–49, December 1, 1989.

[14] See Ed A. Hewett, "The New Soviet Plan," *Foreign Affairs*, Winter 1990/91, pp. 146–167.

federal legislature on October 19, 1990.[15] The language and character of this document stand in marked contrast to those contained in the 1987 package of reforms. Thus, the document states, "The choice of switching to a market has been made, a choice of historic importance for the country." Unlike its many predecessors, this official document outlined measures appropriate to that goal. Under its general authority, the government in early 1991 sharply increased both wholesale and retail prices, but also freed some 40 to 45 percent of them to be determined through contractual negotiations or to have ceilings, which proved largely unenforceable. This unprecedented step by the central government made it easier for the successor republic governments to free most prices in January 1992.

In addition to comprehensive reform programs, the year 1990 also marked a watershed in the extent and kinds of reform legislation adopted by both the central and the republic governments. A mere list of their subjects shows their unprecedented nature. They concern: property ownership in general, ownership and disposition of land, operating rules for enterprises regardless of ownership, promotion of small businesses, prevention of monopoly and demonopolization, establishment of a Western-style central bank and commercial banks, creation of a uniform system of taxation of profits, setting up joint stock companies and securities markets, privatization of property, foreign investment, and entrepreneurship (private economic endeavors). Although legislative progress was uneven among republics and individual laws were flawed and sometimes conflicted with federal laws, this experience in 1990 and 1991 was a vital learning process for the new states-to-be; they did not have to start from scratch.

Other remarkable developments—and indeed essential ones—contributed to the breakthrough on the reform front in 1990 and its solidification in 1991. Above all, there was the meteoric ascendancy to power of republic governments. Even under the old order, this would have been required for effective economic reforms; in the new order, the republics gained experience for the first time in governing rather than merely administering their territories. Second, the central Communist Party's role in the economy and society was shattered, a *sine qua non* for market-oriented reforms. Third, the Marxist-Leninist ideology faded away, bringing with it a radical change in the language of economic discourse (although the ideology's mindset still seems to dominate much of the economics profession).[16] Fourth, the onrush of events dealt a fatal blow to the institutions of central planning, rendering them unable to enforce their will on economic agents. Fifth, the cumbersome and inefficient CMEA trading system was ended, along with the organization itself.

While these developments combined to bring about a fall in output, accelerating inflation, a sharp decline in trade among re-

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[15] The formal title of the Plan is "Basic Guidelines for Stabilization of the National Economy and Transition to a Market Economy." *Izvestia*, October 27, 1990.

[16] See Michael Alexeev, Clifford Gaddy and Jim Leitzel, "Economics in the Former Soviet Union," *Journal of Economic Perspectives*, Spring 1992, pp. 137–148 and Pekka Sutela, *Economic Thought and Economic Reform in the Soviet Union*, Cambridge, Cambridge University Press, 1991.

publics and foreign trade, and growing economic chaos,[17] they effectively ended Soviet-type reforms. From then on, economic reform would take a totally different character. Moreover, amidst the mounting disarray in the macro-economy, critically important things were happening that are essential to the future of the transition to the intended new economic order. At the micro-economic level, ordinary people began to take charge of their lives in myriad ways; entrepreneurs appeared in rapidly growing numbers; enterprises acted ever more on their own in pursuit of self-interest; local and regional governmental bodies started to take charge of their own affairs; foreign firms continued to invest in the region in increasing amounts and numbers (albeit still small in total); and a multitude of individuals and organizations at all levels in society were interacting with their counterparts abroad in a wide range of endeavors. In its totality, the scale of all of this is large and it is growing.

## From Central Planning to a Market Economy: What Is To Be Done?

Before its demise in late 1991, the Soviet central government had committed itself to a choice of historical importance—to institute a market economy with its radically different institutions to replace the failed economic system of socialist central planning. This decision was a recognition at long last of the futility of further attempts to reform socialism. As of now, each of the 15 successor states has made a similar commitment. Their aim is to join the international community as well-functioning market economies that can generate economic growth and improve living standards for the people. The goal is often put as one of creating a "normal economy." Economic theory and world experience define clearly the basic characteristics of a successful market economy. They are: the majority—three-quarters or more—of land and capital assets are in private hands with property rights that are clearly defined and legally protected; production is guided by consumers through flexible prices; the economic role of the state is limited to defining and enforcing property rights, ensuring macro-economic stability, and providing public goods as chosen by the political process. For the new states bent on creating a market economy, this means, simply put, privatization of most now state-owned property, removal of controls on prices and economic activity, and institution of a new role for the state.

Whereas economics delineates the essential characteristics of a market economy, it has no agreed-upon theoretical model that prescribes an optimal strategy for transforming one economic system into another one. But when that possibility became real in the late 1980s (first in Eastern Europe), mapping the transition presented a new and exciting challenge for mainstream economists. Many of them quickly took it up. The result was a lively debate among Western economists, and a subdued one by Soviet economists, about what steps must be taken to bring about a market economy

[17] For details on the performance of the economy in this period see the paper by James H. Noren and Laurie Kurtzweg in this volume.

and about the sequence and speed with which they ought to be taken.[18] Early on, the issues came to be discussed in terms of "Big Bang" versus gradualism and in terms of whether macro-economic stabilization should precede privatization or vice-versa. Western economists were quick to provide their own "optimal" recipes for accomplishing both of these major tasks. In the process of proffering policy advice to the post-communist governments and interacting with them, Western mainstream economists learned much about the entrenched economic and political legacies of socialism, and Soviet economists learned much about the desiderata for a market economy. In the meantime, the countries of Eastern Europe were providing models and experience in diverse transition paths and privatization schemes.

Out of these debates and experience has come a broad consensus about what must be done to transform a centrally planned economy into a market economy and to deal with the legacies of many decades of economic development under socialism. These tasks are the following, not necessarily in time sequence:

1. *Stabilization.* Inflation must be brought under control through drastic reduction in budget deficits and restricted credits.

2. *Liberalization.* Prices must be freed from controls, profit-seeking business firms and farms must be allowed to decide for themselves what to produce and how to produce it, and firms must be able to engage freely in foreign trade. The currency should be made convertible as soon as feasible.

3. *Privatization.* Most land and capital assets must be put into private hands and market arrangements set up for the exchange of such assets. Individuals and groups must be free to establish new private businesses with ease. Monopolies must be broken up.

4. *Regulation.* The state must assume the role of regulator of the macro-economy and of business activity using instruments that promote well-functioning markets through their influence on decisions of individuals and firms. The state itself should provide legal and social protection and supply public goods and services in amounts and kinds chosen by electorates.

5. *New institutions.* Legal, accounting, and statistical systems appropriate for a market economy must be established and new financial institutions created, such as a central bank and a network of private commercial banks, insurance companies, and securities exchanges.

6. *Restructuring of production.* The mix of goods and services produced must change and the land, capital, and labor resources must be redeployed in accord with the preferences of consumers at home and abroad. The state may play a role in such restructuring but

[18] There is already a large literature on the economics of transition. For example: "Symposium on Economic Transition in the Soviet Union and Eastern Europe," *Journal of Economic Perspectives,* Fall 1991, pp. 3–162. "The Economic Transition in Eastern Europe," *Comparative Economic Studies,* Summer 1991, pp. 9–177. Merton J. Peck and Thomas J. Richardson (eds.), *What is to be Done? Proposals For the Soviet Transition to the Market,* New Haven, Yale University Press, 1991. Christopher Clague and Gordon C. Rausser, *The Emergence of Market Economies in Eastern Europe,* Cambridge, Mass., Blackwell Publishers, 1992. Hans Bloomestein and Michael Marrese (eds.), *Transformation of Planned Economies: Property Rights Reform and Macroeconomic Stability,* Paris, OECD, 1991. OECD, *Reforming the Economies of Central and Eastern Europe,* Paris, OECD, 1992. Peter Murrell, "Big Bang versus Evolution," *Plan Econ Report,* no. 26, June 29, 1990. Entire special issue, *Economics of Planning,* vol. 25, no. 1, 1992. Janos Kornai, *The Road to a Free Economy,* New York, W. W. Norton, 1990.

ought not to dictate its directions, which should come from market signals.

Couched in summary form, these are the six major sets of tasks that must be carried out by each of the 15 successor states, if they are to create a reasonably well-functioning market economy starting from the physical, human, institutional, and economic legacies of central planning. Each of these major tasks encompasses a multitude of specific tasks and entails numerous and perhaps conflicting choices. What has to be done economically is gargantuan, and the tasks must be accomplished through political processes that are still in formation everywhere. While economists agree that stabilization—creating a credible currency—has to take precedence in the inflationary environment that was inherited from perestroika, the sheer magnitude and inter-connectedness of the tasks would seem to require that a start be made on almost all fronts simultaneously. The new states will choose their own particular paths and paces of reform. Even though they have common legacies and large economic interdependencies, these choices will be influenced by the political, social, and economic particularities in each state.

## WHAT HAS BEEN ACCOMPLISHED?

During late 1990 and 1991, before the breakup of the U.S.S.R., all the republics had adopted some of the kinds of legislation that represent steps toward a market economy. Several of them had promulgated their own comprehensive programs for economic reform. One republic—Estonia—had decontrolled most prices. Evidently convinced of the inability of the central government to spearhead reform, Russian President Boris Yeltsin in late October 1991 outlined a sweeping set of reforms that Russia intended to implement on its own within a short time. Following the center's demise, newly independent Russia began to carry out its program with vigor. Because of their interdependencies and the fact that the ruble is their common currency, the other new states have been forced to follow suit in some respects, notably in the decontrol of most prices. In other respects, the new states are going their own ways, most prominently in the methods and pace of privatization and in agricultural reform. With their independence now recognized by the international community, the former Soviet republics are being admitted to membership in the European Bank for Reconstruction and Development (EBRD), the IMF, and the World Bank with a speed that is unprecedented and astonishing. Delegations from these international organizations, along with many private advisors, are now working with the new states to further the process of reform.

Even at this very early stage, it is useful to review briefly what has been accomplished in the new states in less than a year of independence. In offering these brief surveys, we focus on major essentials and eschew a mass of detail. We also note the extraordinary difficulties in sorting out statements of intent, formal programs, laws passed, and implementation of legislated reforms in practice. The information was obtained from a wide variety of sources, including IMF surveys, Joint Publications Research Service (JPRS) Reports and the press; a few major sources are cited in

footnotes. Of course, each new state's progress deserves much fuller treatment than can be given in this paper, and no doubt will get it as time passes. We reserve overall evaluation of the state of the reform process in the post Soviet Union to a concluding section.

## RUSSIA

In the course of its struggle for sovereignty in 1990 and 1991, Russia began to lay the foundations for radical economic reform. In those years, legislation was adopted on property ownership, land use, privatization of state property, joint stock companies, demonopolization, and freedom of enterprise. Subsequently, some of this legislation was amended and new reform-related laws and presidential decrees adopted. President Yeltsin's reform initiative in October 1991 outlined plans for bold action in the areas of price liberalization, currency stabilization, and privatization. This program was amended in February 1992, and in June a three-year program to implement specified reforms was announced. [19]

Progress has been made on a broad front. Prices have been freed for some 90 percent of consumer goods and 80 percent of producer goods, with the prices of the others, most notably energy, being raised manyfold. The initial price explosion in January eliminated the money overhang in the consumer sector and returned many goods to the shelves. The rate of inflation was brought down through sizeable (albeit still insufficient) reductions in the budget deficit. Reducing subsidies and restricting credit for the large state enterprises is proving difficult to do. New value-added and generally uniform profits taxes were adopted. A start was made on banking reform, with interest rates raised sharply and a number of private commercial banks established. Many restrictions on freedom to found new businesses have been removed, most notably in the area of trade; moreover, all enterprises are now free to engage in foreign trade, with some products still subject to licensing and a requirement that half of all hard currency earnings be sold to the state at market rates of exchange. Foreign exchange rates have been unified and a nascent foreign exchange market is in being.

A program is under way for extensive privatization taking a variety of forms, with plans to adopt a voucher scheme later this year. [20] A process of voluntary decollectivization of agriculture has been started, involving the transformation by vote of the work force of collective and state farms into cooperatives, joint stock companies or associations of individual peasant farms. [21] As of July 1992, there were 130,000 of these farms, and the number has been growing rapidly. New pension, unemployment compensation, and worker retraining programs are in place, with partial index-

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[19] For a full description and analysis of Russia's economic reform see James H. Noren, "The Russian Economic Reforms: Progress and Prospects," *Soviet Economy*, January-March 1992, pp. 3-41. For another appraisal see Vladimir Capelik, "Yeltsin's Economic Reform: A Pessimistic Appraisal", RFE/RL *Research Report*, vol. 1, no. 4, 24 January 1992.

[20] For a status report on the private sector in Russia see the paper by Sandra Hughes and Scot Butler in this volume.

[21] For details see Kenneth R. Gray and Yuri Markish, "Russian Land Privatization: Two Decrees Forward, One Decree Backward?," USDA, *Economies in Transition Agriculture Report*, January/February 1992, pp. 7-16. Timothy N. Ash, Robert Lewis, and Tanya Skaldina, "Russia Sets the Pace of Agricultural Reform," *RFE/RL Research Report*, vol. 1, no. 25, 19 June 1992, pp. 55-63.

ation of wages being sanctioned. Finally, an impressive start has been made on the restructuring of production simply by virtue of a drastic reduction in military expenditures and a new program that allows defense enterprises to devise and execute their own strategies for conversion. It appears also that budgetary investment is being largely confined to financing economic and social infrastructure.

### WESTERN REPUBLICS

Ukraine, Belarus, and Moldova have much in common. The governments in all three states have stated their intention to create market economies and have taken significant steps to do so via legislation and programs, but implementation has been slow thus far. Most prices were freed in early January 1992, but more of them remain regulated than in Russia. All three states have tentative plans to introduce their own currencies, Ukraine being the farthest along on this path. Each has its own national bank and has made a little progress toward commercializing its banking system. In 1992, each state reformed its tax system, replacing the old turnover and profits taxes with new value-added taxes, uniform profits taxes and a variety of explicit excise taxes, but none has achieved adequate control over budgetary expenditures and bank crediting. All three have social safety nets in place, with that of Ukraine being the most generous and containing provisions for nearly total indexation of wages to compensate for price increases. By early 1992, the legislatures in the three states had adopted laws on ownership of property and land, freedom of economic activity, demonopolization, and privatization of state property. A law on privatization of housing took effect in Belarus on July 1, 1992. Although the change in ownership of property has been miniscule thus far, the governments have recently announced plans to implement the process. All three have yet to do much in the area of agricultural reform, although Ukraine had managed to create 10,000 private farms as of mid-year 1992, despite much resistance. Besides political conservatism, progress on reform in Moldova has been slowed by the military conflict over the status of the Dniester region and in Ukraine by sparring with Russia about jurisdiction over the Crimea and over the military forces of the former U.S.S.R.

### TRANSCAUCASIA

Like the Western republics, Georgia, Azerbaidzhan, and Armenia have managed to adopt some of the key legislation needed to accomplish their stated objective of marketizing their economies, but (except for land reform in Armenia) little has been done to implement these laws and decrees. In their brief period of independence, these three states have been plagued with ethnic strife and (in Georgia and Azerbaidzhan) by struggles over control of the government. Following Russia's lead, the three states decontrolled most prices in early 1992. Azerbaidzhan and Armenia have plans to adopt their own currencies ultimately, and the new Georgian reform program raises that possibility. All three states now have their own national banks and a few private commercial banks, and

all three have replaced the old turnover and profits tax arrangements with new value-added, profits, and excise taxes.

With regard to property ownership and privatization, the picture is one of diversity. Armenia has adopted such legislation, along with a program for land reform under which about 80 percent of all agricultural land formerly in the hands of state and collective farms has been privatized and some 165,000 individual farms established.[22] Azerbaidzhan in early 1992 adopted two major pieces of reform legislation—a new law on land use and a decree on "Urgent Measures" for demonopolization, destatization, and privatization of property. It seems, however, that the last has yet to be buttressed with specific legislation and a concrete plan for implementation. Although Georgia had adopted major legislation on property (mainly in 1991), only in mid-May 1992 did it manage to formulate a comprehensive reform program, which calls for extensive privatization by a variety of methods over the next several years. Under the earlier legislation, however, the republic has put state housing into private hands through gifts and has begun to give peasant families free plots of land of 1.25 hectares. Under this land reform program the government plans to privatize roughly half of all agricultural land by mid-1992 and later on to begin disbanding the large state farms.

### CENTRAL ASIA

Although there are important differences in the vigor of political support, the leaders of each of the Central Asian states including Kazakhstan have stated that they are committed to achieving a market-oriented economy. Up to now, their approaches have been conservative, and on the whole not much has been accomplished as yet. Nevertheless, most prices have been freed in each republic, but each has rolled back some consumer prices in early 1992. Each one has set up its own central bank, mainly based on laws adopted in 1991, but little has been done to commercialize the banking system. As of early 1992, however, all five republics had reformed their tax systems, with value-added profits and excise taxes replacing the old turnover tax and profits taxes. As of now, these states seem intent on remaining in the ruble zone, despite recent talk of setting up their own currencies in some of them.

With regard to property ownership, destatization, and privatization, there is considerable diversity. By early 1992, all states had adopted laws on land use, privatization and freedom of economic activity. They (except apparently Tajikistan) have taken initial steps to destatize the farm sector. Uzbekistan, for example, has distributed free parcels of land to peasant families on the principle of extended leasing with inheritance rights; it plans to deal with loss-making collective farms in this way. Turkmenistan is taking a similar approach. The region's frontrunners in the reform process—Kazakhstan and Kyrgyzstan—began agricultural reforms in 1991 with measures to create peasant farms, sell off or otherwise "privatize" loss-making farms, and transform collective farms and

[22] For details on the Armenian land reform see USDA, *Economies in Transition Agriculture Report*, May/June 1992, pp. 14–17.

state farms into true producers' cooperatives. [23] At the beginning of 1992, there were over 3,300 peasant farms in Kazakhstan and over 4,000 in Kyrgyzstan. A recent decree provides for rapid privatization of the food processing industries. These two states are out in front also in their programs for privatization of the nonagricultural sectors. [24] Both states are taking phased approaches that set ambitious targets for fairly speedy privatization of most state assets, including housing, in the next few years. Privatization is to be accomplished in a variety of ways including distribution of free vouchers to employees. According to an official of the Kazakh State Property Committee, 2,426 small and medium-size establishments had been sold as of June 1, 1992. Although progress has been slow, both states have recently publicized measures to speed up the process. In the other three republics, forward motion has been slowed by more conservative governments.

### THE BALTIC STATES

During their three-year struggle for independence, Estonia, Latvia, and Lithuania not only led the rest of the former Soviet Union in setting the goal of establishing a market economy, but also in conceptualizing programs for accomplishing the transition and starting the process. All three republics had freed most prices and abolished most consumer subsidies in 1991, earlier than elsewhere; Estonia dropped all subsidies on food and rents in May 1992, something not yet done even in Russia. All three states have independent budgets and central banks. In June 1992, Estonia adopted its own currency—the kroon pegged to the German mark—and the other two Baltic states are moving to do so, perhaps by the end of the year. All three have replaced their old Soviet-style tax systems with value-added, corporate income, and explicit excise taxes. The three states also have established their own social security systems and have taken measures to protect benefits from erosion by inflation.

With regard to fostering a private sector, again the Baltics led the way. When individual labor activity and the formation of cooperatives were sanctioned by new Soviet laws in the 1980s, their peoples responded with new businesses formed in numbers significantly greater than their relative shares in the Soviet population. Each state has adopted legislation and started implementing their stated intent to dismantle the state and collective farms and encourage peasant farming; their programs allow private ownership of land and involve restitution of property confiscated by Soviet authorities in the annexation of these states. [25] A Lithuanian law also provides for the privatization of agricultural equipment. In Latvia, some 45,000 private farms had been registered as of June 1992, compared with only 6,456 two years earlier. In the spring of 1992 there were 32,000 such farms in Lithuania and about 7,000 in Estonia. Latvia has nearly completed the transformation of state

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[23] For details see Bess Brown and John Tedstrom, "Kazakhstan and Kyrgyzstan: Central Asia's Leaders," *RFE/RL Research Report,* vol. 1, no. 17, 24 April 1992, pp. 58–63.

[24] For details about the programs and progress in Lithuania and Latvia see the articles by Saulius Girnius and Dzintra Bungs in *RFE/RL Research Report,* vol. 1, no. 17, pp. 67-79.

[25] For details see OECD Draft Report, *Agrarian Reform in the Baltic States,* Paris, June 1992.

and collective farms mainly into joint stock companies eventually to be privatized, and a similar process is actively under way in Lithuania.

The three states also have adopted a variety of legislation fostering the privatization of nonagricultural property and housing. Their approaches differ, but all involve restitution of confiscated property, some form of voucher scheme and privatization through several means, and the countries are proceeding to implement these programs. Under the Lithuanian program, according to the Prime Minister, two-thirds of the state's property was to be privatized by the end of 1992. Lithuania's legislation establishes investment accounts for citizens and indexes them partly for inflation. These funds can be used to purchase shares in firms or to buy housing. While sales of state firms have gotten off to a slow start, some 60 percent of eligible housing had been sold by the end of June 1992. Building on legislation passed in 1991, Latvia in February-March 1992 adopted an array of legislation providing the legal basis for privatization and actively promoting the process, but implementation has been slowed by the unresolved citizenship question. Although Estonia has managed to privatize a small part of its services establishment and to convert a sizeable number of firms to joint stock companies, the process here, as in agriculture, has been slowed by the complexities of restoring property to former owners. Finally, all three states have rather liberal laws designed to attract foreign investment, and they (especially Estonia) appear to have been somewhat more successful than the other former Soviet republics in obtaining it, mainly from the Nordic countries. While the reform agenda has by no means been neglected, the energies of Baltic governments have been severely taxed by the mechanics of establishing statehood, difficulties with the Russian government over trade and troop withdrawals, and problems of trying to cope with specific economic crises such as energy supplies.

## CONCLUSIONS

In its last year of existence, the U.S.S.R. witnessed the culmination of the combined failures of courses of action it had long pursued in two critical realms—its attachment to within-system economic reforms and its vaunted "nationalities policies." At long last the leadership was forced to recognize that Stalin's system of socialist central planning could not be reformed and that escape from a progressive deterioration in economic performance across the board required replacement of that venerable system with the institutions of capitalism. As a consequence, the decades-long series of attempts at within-system economic reform came to an end. Moreover, the spectacular failure of nationalities policies to create a cohesive nation-state on a territory populated by many diverse ethnic groups was manifested in the dissolution of the Soviet Union itself. Indeed, by creating an administrative structure—the union-republics—based on the traditional homelands of major ethnic groups, the Soviet state had sown the seeds of its own destruction. Once the union government's reins were loosened under the policies of glasnost and perestroika, the result was a bloodless revolt of the republics that proceeded swiftly and ended in replace-

ment on the world stage of the unitary Soviet state by 15 new sovereign states. Each is a nation-state in the sense that an indigenous ethnic group is dominant in its total population. The speed with which the Soviet state self-destructed gave its successor states—even giant Russia—scant time to assume the many tasks once performed by the center and to prepare for their new status in the international arena. The spearheading of economic reform and the overall management of the macro-economy were among the critical functions that had been assumed by the now defunct center.

In order to gain perspective on what the new states have accomplished thus far in the area of economic reforms, we must remind ourselves of what are the most urgent of the tasks of new statehood. The burden on their new inexperienced governments is immense. In the area of foreign relations, the new states must now formulate their own foreign policy, establish diplomatic relations with foreign states (among them the other former republics of the defunct U.S.S.R.), and negotiate new international agreements on a wide range of matters. They also must establish a presence in a multitude of international organizations. Related to these tasks, the new states must decide on matters of national defense, including how to disentangle the formerly unified Soviet defense establishment. In the domestic political arena, the new states need new constitutions, laws, and administrative structures suited to independence. The political processes need to be managed to ensure a reasonable degree of stability of government in order to formulate and execute policy over a broad spectrum. Among the most urgent issues for most of them is how to deal with their minority populations, including separatist demands in several states. In the social arena, the new states must revamp their social systems and formulate policies to deal with urgent problems in public health, criminal justice, and the environment.

In the economic realm, the tasks are even more daunting and also more pressing, since they concern the daily welfare of the entire population. Pursuing the complex tasks of systemic reform as sketched above is only one of them, albeit an urgent one, if economic viability is to be sustained in the long run. While pushing the reform process forward, the beleaguered governments must cope with the daily crises stemming from the deep recession into which their economies have been plunged by the collapse of the center with its ability to command, by the steep decline in defense spending, by the disarray in trade with former CMEA members and the former republics, by worker strikes or strike threats, and by ethnic strife. The new states must now manage their own public sectors and try to balance their own budgets. Moreover, they need to find ways to maintain social peace during the difficult period of transition and to build a political constituency for continuation of the reform process so as to maintain its credibility. In the international arena, they must forge new economic relationships with other countries, interact with them through international organizations, and seek economic aid and foreign investment. Finally, they must deal with the cacophony of voices, both from their own economists and from those in the West, espousing one or another program for reform. Fascinated and challenged by the issues of systemic transformation, the latter have pelted the new governments

with advice on how to do it, advice that is often conflicting and sometimes reflects inadequate understanding of the many legacies of the old ways and the political and societal constraints on the policymakers in these fledgling states.

Given the revolutionary nature of the many-faceted transformation from subservience to independence, the speed with which it occurred, and the excessive burden on the new governments, the progress on economic reform made thus far is remarkable. In varying ways and degrees, the new states have been able to build on what has been accomplished while the old regime (although increasingly ineffectual) was still in place. That severe difficulties have been encountered in putting legislated changes into practice is only to be expected. Human attitudes and habitual ways of doing things change slowly in all societies. But there is much evidence that such changes are indeed taking place. [26] That the details of specific facets of the reform agenda, e.g., privatization, are subjects of intense political controversy also is to be expected, since the new legislatures lack understanding of economics and are prone to populism. Despite all this, the reform process remains in motion everywhere as of now, even in those new states beset by ethnic conflict. Meanwhile, market processes are arising from below, as individuals and firms alter their traditional behavior to cope with the new situations that they face. That such behavior often may be suboptimal and may even seem unjust (so-called spontaneous privatization, for example) also should be expected, especially in the present chaotic macro-economic environment in all the new states, where governments are weak and legal systems unsettled.

Although systemic transformation is in process at long last in all of the successor states, large elements of the old system remain in place, a situation that could hardly be otherwise, given the brevity of their independence. While formal central planning is absent, all of the states have retained the system of state orders ostensibly backed up with state-guaranteed supplies, as part of their desperate effort to implement inter-republic trade agreements and to meet what are considered essential state needs, such as assuring food supplies for the cities and securing key products for export for hard currency. State orders are no longer mandatory in Russia, however, and most states have plans to reduce their role. Old-style bureaucratic structures are still in place to administer these remnants of the old central rationing system. But the use of state orders to dictate and allocate even a decreasing share of production is becoming increasingly ineffective, as producers ignore state orders if they see fit and as regional units of the supply bureaucracies do likewise. Governments are still trying to control the prices of some key products, notably energy, raw materials, and agricultural products, but such controls also are proving difficult to enforce. Moreover, their continuance is creating acute financial problems, as firms and farms struggle to survive in a milieu of prices, some free and some controlled. State ownership of property re-

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[26] Some of the strongest evidence on how popular attitudes are changing is provided by public opinion surveys. See in particular Tatiana Zaslavskaia, "The Economic Situation, Food Problems and Public Opinion in Russia," a paper given at the Geonomics Spring Seminar in Middlebury, Vermont, May 17–20, 1992.

mains overwhelmingly dominant, and the process of privatization is proceeding slowly. A stable currency has yet to be achieved. Reform of financial institutions, in particular, is at an embryonic stage. Only spotty progress has been made toward revamping the old legal, accounting, and statistical systems. As for restructuring the mix of production, however, much alteration is occurring willy-nilly, as defense production falls and conversion to civilian products is attempted, as firms and farms spontaneously or under government prodding alter their product mixes, as the private sector oriented toward consumers expands, and as such investment as is taking place in the present chaotic conditions gravitates toward consumer-oriented sectors.

The tasks still ahead in establishing the conditions and institutions of a viable market economy are awesome. They would severely tax the political and social fabric of even the most seasoned, stable, and ethnically homogeneous democracy. But there is no *economic* reason why they cannot be accomplished in time. Under the best circumstances, the transformation will require many years, and given the physical and psychological legacies, the full recovery of the economies will be slow in coming. As is already clear, the transformation process will be characterized by much diversity. The Baltic states are already going their own ways, driven by their goal of becoming a part of Europe as soon as possible. Ukraine seems determined to take its own path to cementing statehood and achieving economic reform. For the other non-Russian states, what happens in Russia likely will be critical. If Russia continues to push ahead with economic reforms, the smaller states will be compelled to follow suit, at least as long as they remain in the ruble zone and heavily trade-dependent on their giant neighbor. They can learn from its experience. [27]

In the final analysis, the future of the transformation process in each of the 15 former Soviet republics will depend on factors that have little to do with economics. [28] First and foremost is whether they will remain as states within their present borders; the demographic-ethnic inheritance contains much potential for conflict over territorial integrity, as is already evident. That factor aside, the sustainability of economic reform depends on whether the new entities can maintain reasonably stable and committed governments. Sustainability also depends on whether those governments and their populations can avoid consuming their energies and resources in ethnic conflict; up to now, this factor has hampered the reform process and damaged the economies in several republics.

Although many observers are deeply pessimistic about the future course of economic transformation in the former Soviet republics, this observer is more sanguine. It is true that even with substantial Western aid, the chances of substantial revival of their economies in the near term are slim. Given the likelihood of continued economic deprivation for much of the population and the consequent

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[27] Russia's innovative attempt to keep the social peace and forge support for reform through a mechanism called "social partnership" bears watching. For details see Elizabeth Teague, "Russian Government Seeks 'Social Partnership'," RFE/RL *Research Report*, vol. 1, no. 25, 19 June 1992, pp. 16–23.

[28] For an elaboration of this argument see Gertrude Schroeder, "On the Economic Viability of New Nation-States," *Journal of International Affairs*, Winter 1992, pp. 549–574.

strains on the political process, the course of economic transformation of course could stall. But progress by fits and starts is to be expected in any case and seems the most likely course of events. Patience by both participants and observers of this complex process is required.

The new states, whatever their configuration, have little choice, however, but to make haste slowly toward a market economy, the only economic system that has proved its long-run viability. With so many of the impediments to systemic transformation removed by actions taken in the past two years, it would be a great tragedy if the people and the political leadership of any of the successor states failed to capitalize on those historic achievements and allowed the reform process to bog down in another series of failed attempts to stay the course. Worse still would be attempts to restore the old socialist order. The new states need to hold fast long enough to cross the Rubicon; they must put a critical mass of market-oriented institutional changes in motion such that the behavior of most individuals and firms will change fundamentally so as to yield the fruits of the systemic transformation. But in contrast to the old treadmill of attempts to reform socialism, the goal of transition to a market economy is feasible and can have a high payoff, given time, patience, and appropriate international support.

# INDUSTRIAL GROWTH BY REPUBLIC IN THE FORMER U.S.S.R., 1981-90

by Douglas Diamond and Gregory Kisunko *

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## SUMMARY

The deficiencies of the official measure of industrial growth for the former Soviet Union are well documented. The official indicator is unacceptable because of twin biases of new-product pricing and double counting that normally exaggerates growth. In the first instance, prices assigned to new industrial products are often too high relative to prices for products to be replaced in view of the changes in technology and quality. In the second case, bias from double counting arises from increasing specialization in the production of a given commodity when enterprises increase their dependency on other enterprises for intermediate goods. [1]

This paper develops a series of synthetic measures of industrial output for each of the 15 republics of the former U.S.S.R., remembering that there is a wide difference in the regional distribution by branch of industry. [2] Patterns of specialization in industrial structure of the former republics were driven, in part, by the uneven distribution of resources and, in part, by the historical roots of economic development reaching into the pre-communist era. Because the bias in the officially published measure of growth is greater in some branches than others, a distorted view of past overall industrial growth for the several former republics would result if the All-Union discount for overall industry was applied to each of the republics.

## ALTERNATIVE WEIGHTING SCHEMES

Because of the biases in former Soviet Union measurement of industrial growth (generally upward), an alternative index of industrial production has been constructed by the CIA. This independent measure (referred to as "synthetic") presents a picture of Soviet industrial growth different from that given by the official indicator (see table 1).

[1] The problems with the official measure are discussed in CIA, *Comparing Planned and Actual Growth of Industrial Output in Centrally Planned Economies*, ER 80–10461, August 1980; Rush V. Greenslade, "Industrial Production in the USSR", Vladimir G. Treml and John P. Hardt (eds.), *Soviet Economic Statistics* (Durham: Duke University Press, 1972), pp. 155–194; Ray Converse, "An Index of Industrial Production in the USSR", U.S. Congress, Joint Economic Committee. *USSR: Measures of Economic Growth and Development, 1950–80*. Washington, DC: U.S. Government Printing Office, December, 1982, p. 169.

[2] If the bias in the official rate of growth was the same for all branches of industry, the corrective adjustment in the official measure for overall industrial growth by republic would be the same as for the All-Union measure.

TABLE 1. U.S.S.R.: Comparative Measures of Growth in Industrial Output, Selected Periods.

| Period | Average Annual Rate of Growth (Percent) | |
|---|---|---|
| | CIA Measure [a] | Official Measure [b] |
| 1971–75 | 5.5 | 7.4 |
| 1976–80 | 2.3 | 4.7 |
| 1981–85 | 1.9 | 3.6 |
| 1986–90 | 0.9 | 2.5 |

Source: CIA data.
[a] Tabular materials from the Office of Slavic and Eurasian Analysis, CIA.
[b] *Narodnoye Khozyaystvo SSSR* (various years).

Underlying the indicator for total industrial growth is a substantial divergence by branch between the official and synthetic measures. As would be expected, the upward bias for a branch with a relatively homogeneous and technically unchanging product mix (e.g. fuels) would be less than for a branch with a widely diverse and technically changing product mix (e.g., machinery). The comparative measures of average annual growth by branch of industry for 1981–85 demonstrate this difference (see table 2).

TABLE 2. U.S.S.R.: Official and CIA Growth Measures by Branch of Industry, 1981–85.

| | Average Annual Rate of Growth (Percent) | | |
|---|---|---|---|
| | Measure | | Difference |
| | Official | CIA | (1) minus (2) |
| Branch | (1) | (2) | (3) |
| Total Industry | 3.6 | 1.9 | 1.7 |
| Electric power | 3.7 | 3.1 | 0.6 |
| Fuels | 1.2 | 0.8 | 0.4 |
| Metallurgy | 2.1 | 1.5 | 0.6 |
| Machinery [a] | 6.2 | 1.7 | 4.5 |
| Chemicals | 4.9 | 3.8 | 1.1 |
| Wood, pulp and paper | 3.5 | 1.9 | 1.6 |
| Construction materials | 3.0 | 1.8 | 1.2 |
| Light industry | 1.6 | 1.6 | 0.0 |
| Food industry | 2.7 | 1.8 | 0.9 |

Source: CIA data.
[a] Both columns 1 and 2 measures include output of defense durables as well as producer and consumer durables.

In calibrating industrial growth for each of the republics the appropriate measure requires counting only the net contribution or value added. The value added for each branch of industry is the summation of value added for each enterprise (i.e. profits, wages, and payments to other factors of production). This requires the

elimination of the cost of materials and services purchased from other enterprises (the "intermediate" product) because these are included in the measure of output of the enterprise producing them. The substantial difference in the structure of industry depending on whether value added or gross output weights are used is shown in table 3.

TABLE 3. U.S.S.R.: Shares by Branch of Industry Expressed in Gross Output and Value Added Terms, 1988.

(Percentage)

| Branch | Gross Value of Output | Value Added |
|---|---|---|
| Total Industry | 100.0 | 100.0 |
| Electric power | 3.8 | 8.1 |
| Fuels | 7.4 | 12.2 |
| Metallurgy | 9.6 | 9.0 |
| Machinery | 28.3 | 33.9 |
| Chemicals | 6.8 | 7.8 |
| Wood, pulp, and paper | 4.5 | 5.5 |
| Construction materials | 3.8 | 6.2 |
| Light industry | 14.3 | 6.2 |
| Food industry | 14.4 | 7.7 |
| Other Industries [a] | 7.1 | 3.4 |

Source: see table A1.5 for source note on Gross value and table A3.1 for value added source.
[a] Not elsewhere classified.

In aggregating estimates of the value of output and indexes of growth by branch of industry for the constituent republics of the former Soviet Union a circuitous procedure is required. First, estimates of ruble and growth measures by branch of industry for the republics are derived according to official Soviet accounting procedures. Indexes of growth for each of the industrial branches in each republic are adjusted by the ratios of official to CIA synthetically derived measures for the former U.S.S.R. as a whole. The assumption is made that regardless of the product (e.g., iron ore) and sector (e.g., ferrous ores) composition, the relevant synthetically derived adjustment factor for the branch (e.g., metallurgy) for the country as a whole is applicable to each of the republics. To the extent that product and sector composition within a branch of industry differ by republic, the appropriate adjustment for bias in the official measures also differs. As a result, application of "correction" factors derived from All-Union branch data will lead to a less than full adjustment.

Second, in order to achieve a more complete adjustment of CIA's synthetic measure and the adjusted official measure, the several branches of industry of the *adjusted* official measure are aggregated by use of ruble weights that avoid double counting of product. The latter is inherent in the *unadjusted* official measure that employs *gross values* of output (GVO) capturing the value of both the *intermediate product* used (e.g., metals in machinery) and the added value achieved by processing materials into final product (e.g., converting metals into machinery). A rough measure of the

value added from the processing of raw materials and other intermediate product can by found in the officially constructed input-output tables. For this purpose, the 1988 input-output table in producer prices for each republic was employed to derive *value added* weights by branch. This approach corrects for the distortion that would result in deriving an overall measure of industrial growth for each republic if indexes of growth by branch were aggregated by use of *gross values* of output in the base year.

Finally, the time series of *official indexes of gross value of output* by branch and by republic were weighted with *value added* rubles by branch from the officially constructed input-output table for each republic to achieve a synthetic official growth measure of total industrial output. This permits achieving parallelism with the "corrected" measures described above, i.e., both the official and synthetic measures have the same weighting schemes.

The derivation of synthetic measures of overall industrial growth for the 15 republics by the disaggregated method does lead to substantial differences and more accurate indicators of growth for each of the republics (see Figure 1).

## RESULTS OF THE REVISIONS ON INDUSTRIAL PERFORMANCE BY REPUBLIC

The two supplemental tables (A1.1 and A1.2) to Appendix table A1 provide the basis for deriving the Soviet official gross ruble series of total industrial output by republic expressed in constant prices. The derivation of the official gross ruble series for each branch of industry for the 15 republics is carried out in Appendix tables A1.4 and A1.5. The results of substituting branch of industry *value added weights* for the *gross value weights* in aggregating the official GVO indexes for each republic is shown in Appendix tables A2 and A2.1.

The required "correction" factors by branch were derived from the relationship between the official indicators of growth by branch and the CIA indicators for the same branches, both for the Soviet Union as a whole (Appendix table A5). These, in turn, are applied to official indexes for each branch by republic to derive the weighted results of the revised synthetic measures. The difference between total industrial output for each republic obtained by the two synthetic methods is graphically shown in Figure 1 based on the numerical results depicted in Appendix tables A6 and A7. [3]

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[3] To supplement the change in industrial output as a measure of performance, indicators of change in use of resources in obtaining the new level of output is often used. This measure of productivity is defined as the difference between the rate of increase in inputs committed to industry and the rate of increase in output. If the rates of growth of synthetic measures of output derived in this paper are lower than the rates officially claimed, productivity performance worsens. In short, the growth of output not explained by growth in labor, plant and equipment and other inputs declines proportionally. The derivation of productivity measures is beyond the scope of this paper.

FIGURE 1. U.S.S.R.: ALTERNATIVE MEASURES OF GROWTH IN INDUSTRIAL OUTPUT BY REPUBLIC, 1981–90.

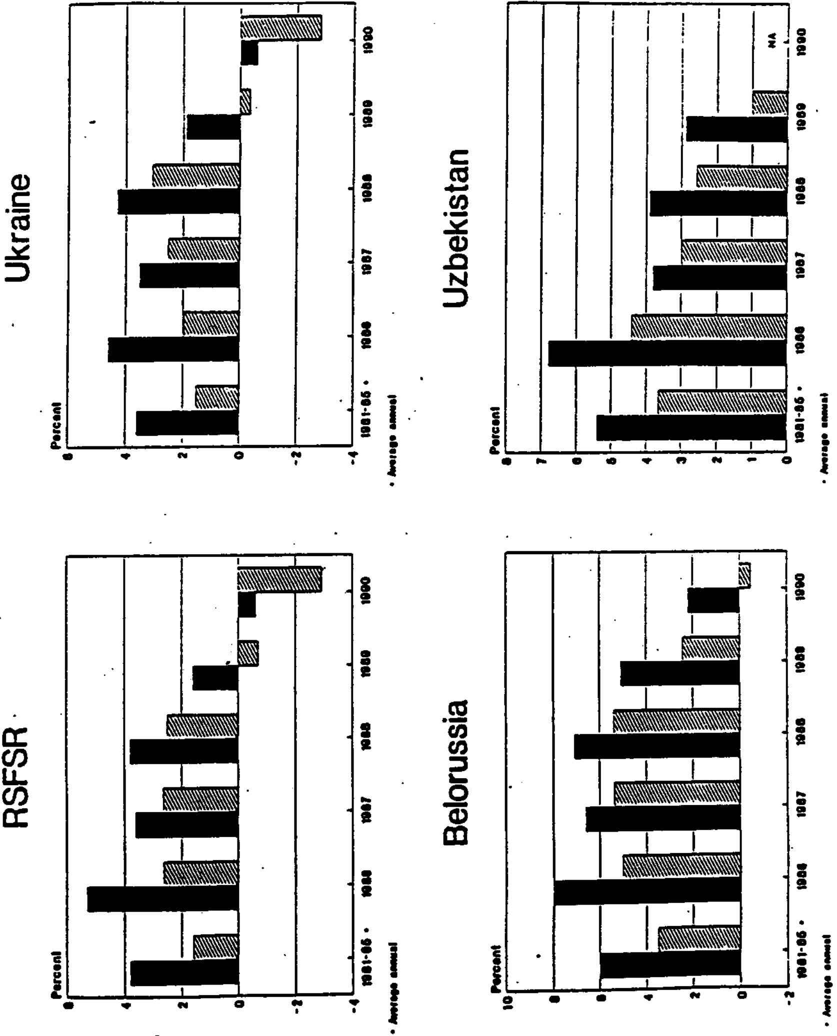


FIGURE 1. U.S.S.R.: ALTERNATIVE MEASURES OF GROWTH IN INDUSTRIAL OUTPUT BY REPUBLIC, 1981-90.—CONTINUED

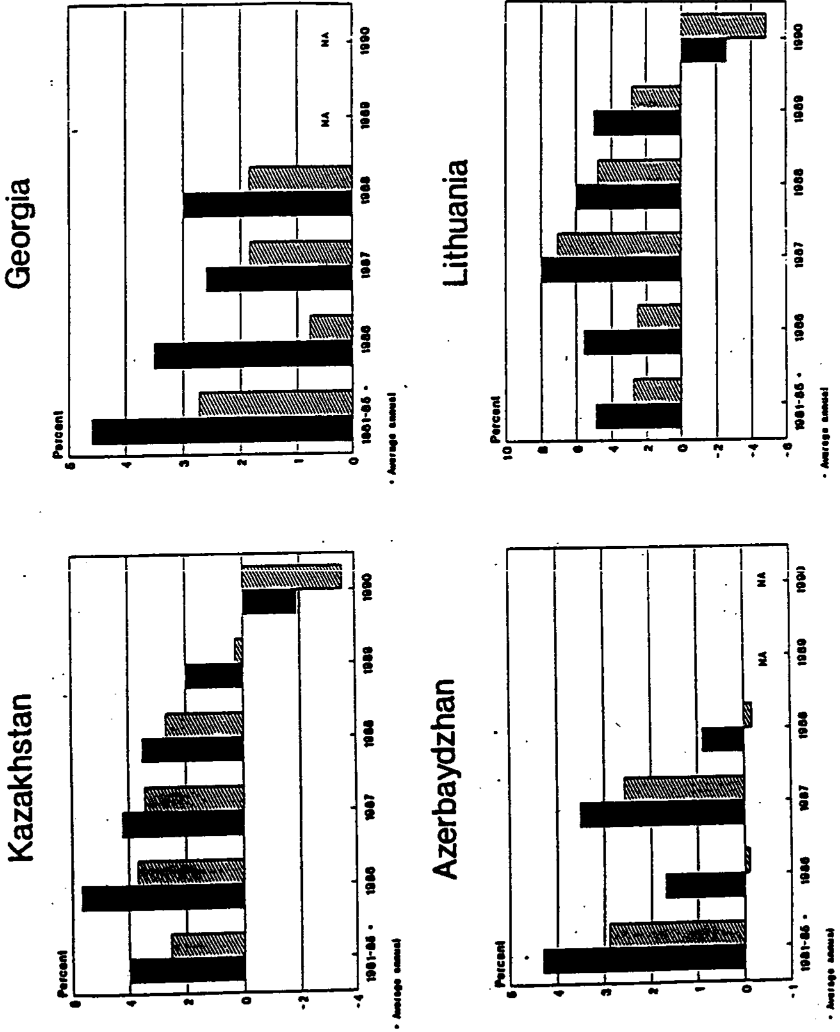
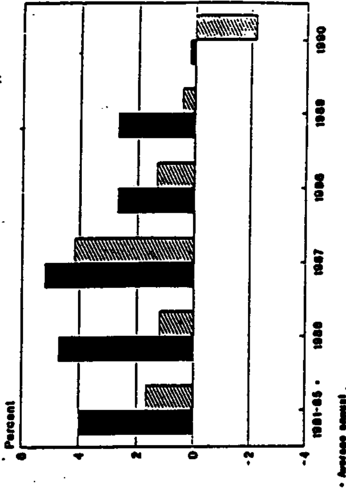
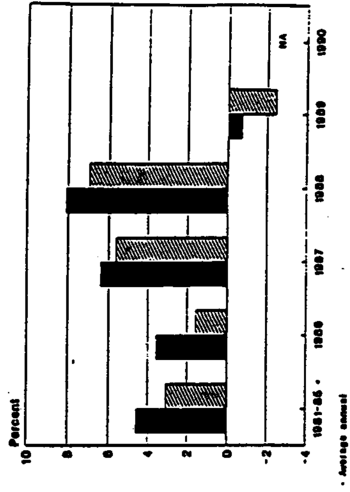
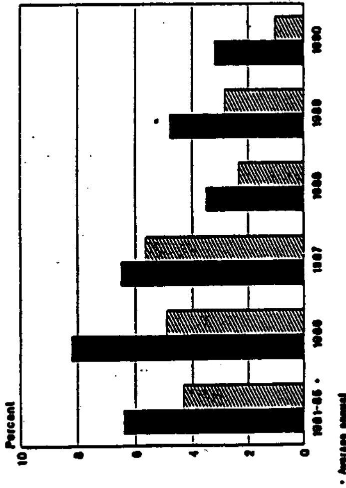


**FIGURE 1. U.S.S.R.: ALTERNATIVE MEASURES OF GROWTH IN INDUSTRIAL OUTPUT BY REPUBLIC, 1981–90.—CONTINUED**



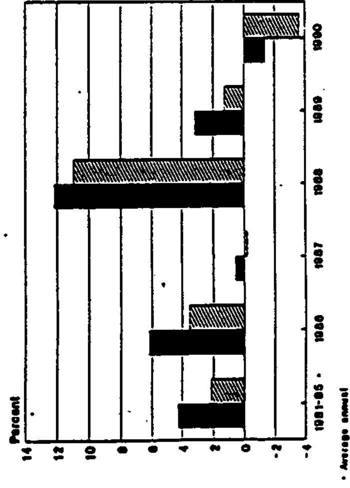



FIGURE 1. U.S.S.R.: ALTERNATIVE MEASURES OF GROWTH IN INDUSTRIAL OUTPUT BY REPUBLIC, 1981–90.—CONTINUED

Legend for Figure

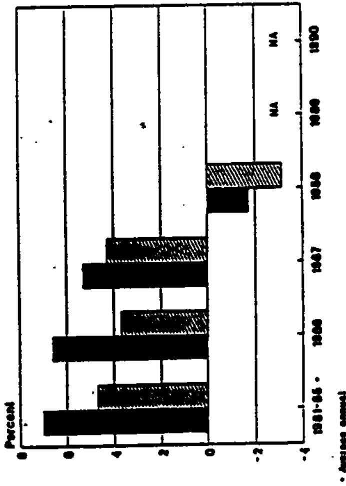
Figure

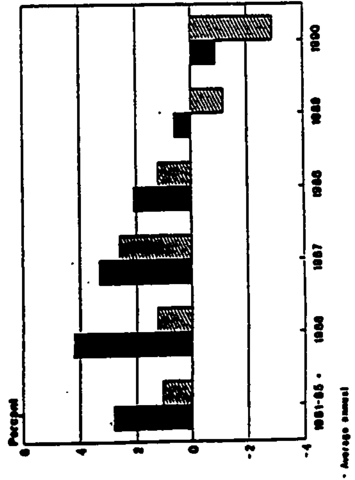
USSR: Alternative Measures of Growth in Industrial Output by Republic

-- Official Soviet measure of growth (branches combined with republican structure of value added weights)

-- CIA type estimates of growth (branches combined with republican structure of value added weights)

Source: Table 6.



## OTHER RESULTS

### COMPOSITION OF OUTPUT IN THE REPUBLICS

As indicated above, the composition of industrial output by branch differs widely by republic. As a measure of republic specialization, location quotients were derived. The quotients shown in table 4 measure shares in total industrial output in each republic related to the corresponding shares for the country as a whole (U.S.S.R.=1.00). As expected, the largest disparities in regional location are in those industries with large extractive components exemplified by selective republics that had little or no production in fuels and metallurgy.

The three Slavic republics (Russia, Ukraine, and Belorussia) dominated machinery with all quotients above 1.00. Somewhat surprisingly, the three Baltic states with their technically literate labor forces and relatively high level of sophistication in manufacturing processes and quality control had quotients below 1.00 for machinery. This may have been a function of the large defense-related component in the machinery branch at the All-Union level and the traditional emphasis on heavy industry in the three Slavic republics. These same three republics had the lowest quotients among the 15 in light industry (soft goods). The three republics of Central Asia (Uzbekistan, Tadzhikistan, and Turkmenistan) with their cotton-supported textile industries had light industry quotients above 2.50. Because of the highly dispersed demand for its product and its relatively low value per unit of weight, construction materials among the republics had the narrowest range of location quotients (0.76—1.62 for 1988).

TABLE 4. U.S.S.R.: Republic Shares of Total Industrial Output and Location Quotients Based on Output by Branch, 1988.

| Republic | Share of Total Output (percent) [a] | Location Quotients [b] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Electric Power | Fuels | Metallurgy | Machinery | Chemicals | Wood, Pulp, and Paper | Construction Materials | Light Industry | Food Industry |
| U.S.S.R. | 100.0 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| R.S.F.S.R. | 63.9 | 1.13 | 1.16 | 1.23 | 1.08 | 1.10 | 1.17 | 1.01 | 0.88 | 1.04 |
| Ukraine | 16.4 | 0.91 | 0.78 | 1.46 | 1.09 | 0.94 | 0.65 | 0.97 | 0.82 | 1.23 |
| Belorussia | 3.4 | 0.68 | 0.94 | 0.12 | 1.05 | 1.25 | 0.89 | 1.15 | 1.44 | 1.33 |
| Uzbekistan | 2.5 | 1.02 | 0.68 | 0.47 | 0.60 | 0.96 | 0.43 | 1.49 | 2.64 | 0.97 |
| Kazakhstan | 4.4 | 1.56 | 1.47 | 1.75 | 0.57 | 1.00 | 0.56 | 1.58 | 1.10 | 1.06 |
| Georgia | 1.2 | 0.49 | 0.13 | 0.49 | 0.54 | 0.59 | 0.79 | 1.38 | 1.59 | 2.58 |
| Azerbaydzhan | 1.8 | 0.91 | 1.46 | 0.43 | 0.62 | 0.94 | 0.36 | 0.76 | 1.34 | 2.29 |
| Lithuania | 1.3 | 1.15 | 0.60 | — | 0.85 | 0.60 | 1.23 | 1.32 | 1.52 | 1.90 |
| Moldavia | 0.8 | 0.85 | — | 0.12 | 0.71 | 0.43 | 0.75 | 1.21 | 1.69 | 2.48 |
| Latvia | 1.0 | 0.35 | 0.06 | 0.20 | 1.00 | 1.10 | 1.32 | 0.95 | 1.46 | 1.85 |
| Kirgizia | 0.6 | 0.91 | 0.12 | — | 0.93 | 0.08 | 0.42 | 1.21 | 2.07 | 1.46 |
| Tadzhikistan | 0.5 | 1.50 | 0.09 | — | 0.34 | 0.90 | 0.12 | 1.41 | 3.07 | 1.03 |
| Armenia | 0.9 | 0.94 | — | — | 1.11 | 0.96 | 0.49 | 1.46 | 1.74 | 1.34 |
| Turkmenia | 0.6 | 1.19 | 2.69 | — | 0.18 | 0.66 | 0.24 | 1.62 | 2.84 | 0.96 |
| Estonia | 0.7 | 1.62 | 0.37 | — | 0.52 | 1.32 | 2.04 | 0.98 | 1.94 | 1.68 |

Source: See table 8.
[a] Based on ruble values in Appendix table 3.
[b] Location quotients are in total industrial output in a republic related to the *corresponding* shares for the U.S.S.R. as a whole.
— = Zero or negligible output.

### INTERNATIONAL COMPARISONS

The official GVO indexes give a distorted view of industrial growth when compared to other countries. Table 5 below provides the two measures of overall industrial growth for the 1980s for the three Baltic republics and compares them to the growth rates for the same period for the neighboring economies of Finland and Sweden. When the inflated growth indicators are discounted to parallel measures of the two Nordic countries, the industrial growth performance of the three Baltic republics roughly matches that of Finland and Sweden.

TABLE 5. Comparative Measures of Industrial Growth, 1981–89.

| Country | Average Annual Rate of Growth (percent) | |
|---|---|---|
| | Official | Revised |
| Latvia | 3.4 | 1.5 |
| Estonia | 2.7 | 1.4 |
| Lithuania | 4.8 | 3.5 |
| Finland | 3.0 | 3.0 |
| Sweden | 1.7 | 1.7 |

Sources: Baltics—Appendix tables A1.2 and A7; Finland and Sweden—Annual Statistical Abstracts.

### USE OF INDEXES IN POLICYMAKING

Given the misleading aspects of the official GVO indicator of growth for industry and its component branches, the question arises as to whether the systems directors (e.g., Politburo members, planners) used these measures in judging success in meeting plan targets and in making decisions affecting resource allocations. The limited evidence, on balance, strongly indicates that the relevant authorities: (1) were well aware of the shortcomings of the aggregate performance indicators and (2) focused their attention on physical measures at a much lower level of aggregation. As Stanley Cohn has pointed out:

> the stress on administrative allocation of resources is necessarily microeconomic in concept. The party leadership has been accustomed to conceive their goals in terms of key intermediate products and perhaps final military products, but not the overall growth of the economy or of its major expenditure components. Given both the preferences of the leadership and the command principle of organization it is not surprising that GNP indicators [and other aggregates] have played a minor role in the formulation and implementation of Soviet economic policies. [4]

[4] Stanley H. Cohn, "National Income Growth Statistics," in Vladimir G. Treml and John P. Hardt (eds.), *Soviet Economic Statistics*, p. 146.

The strongest evidence that the system directors were well aware of the upward bias in the claimed rate of industrial growth comes from a 1980 study comparing plans and plan fulfillment indicators:

> Comparison of the planned rate of growth of total industrial production with what the statistical authorities eventually claim creates the mistaken impression that plans are generally fulfilled. Yet when the achieved output levels of industrial products are compared with plan figures in physical terms, it becomes apparent that the overall plans could not possibly have been achieved. [5]

[5] National Foreign Assessment Center, CIA, *Comparing Planned and Actual Growth of Industrial Output in Centrally Planned Economies*, ER80-10461, August, 1980, p. iii.

## APPENDIX TABLES

The tabular materials use the following abbreviations for the Soviet Union and the former republics: [6]

USSR—Union of Soviet Socialist Republics
RSFSR—Russia
UkSSR—Ukraine
BSSR—Belorussia
UzSSR—Uzbekistan
KSSR—Kazakhstan
GSSR—Georgia
AzSSR—Azerbaydzhan
LSSR—Lithuania
MSSR—Moldavia
LaSSR—Latvia
KirSSR—Kirgizia
TSSR—Tadzhikistan
ArSSR—Armenia
TurSSR—Turkmenistan
ESSR—Estonia

[6] These republic designators are those used in the Soviet era. The new designators, reflecting the advent of the Commonwealth of Independent States, were formally accepted by the Board of Geographic Names in January 1992.

## TABLE A1. U.S.S.R.: Official Measure of *Gross Value* of Total Industrial Output by Republic, 1980, 1985–90. [a]

(Billions of Rubles)

| Year | Sum of Republics (1) | USSR (2) | RSFSR (3) | UkSSR (4) | BSSR (5) | UzSSR (6) | KSSR (7) | GSSR (8) | AzSSR (9) | LiSSR (10) | MSSR (11) | LaSSR (12) | KiSSR (13) | TaSSR (14) | ArSSR (15) | TuSSR (16) | ESSR (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1980 | 669.0 | 666.8 | 401.4 | 126.8 | 26.8 | 19.7 | 22.4 | 9.1 | 10.2 | 10.5 | 8.2 | 9.0 | 5.3 | 4.9 | 6.0 | 3.6 | 5.3 |
| 1985 | 800.8 | 801.0 | 474.7 | 150.7 | 35.2 | 24.8 | 26.6 | 11.2 | 12.7 | 13.2 | 10.2 | 10.6 | 6.7 | 5.9 | 8.0 | 4.1 | 6.1 |
| 1986 | 836.1 | 836.2 | 496.1 | 157.0 | 37.6 | 26.2 | 27.9 | 11.4 | 12.5 | 13.8 | 10.5 | 11.0 | 7.0 | 6.0 | 8.4 | 4.3 | 6.4 |
| 1987 | 867.4 | 868.0 | 513.5 | 163.2 | 40.1 | 26.8 | 29.1 | 11.7 | 12.9 | 14.4 | 11.0 | 11.5 | 7.1 | 6.3 | 8.8 | 4.4 | 6.6 |
| 1988 | 901.6 | 901.9 | 533.0 | 169.9 | 42.7 | 27.7 | 30.2 | 12.1 | 13.4 | 15.3 | 11.4 | 11.9 | 7.6 | 6.6 | 8.7 | 4.6 | 6.8 |
| 1989 | 919.4 | 917.2 | 540.4 | 174.6 | 44.6 | 28.7 | 31.0 | 12.2 | 13.5 | 15.9 | 12.0 | 12.2 | 8.0 | 6.8 | 8.0 | 4.7 | 6.8 |
| 1990 | 917.8 | 906.2 | 539.9 | 174.4 | 45.6 | 29.3 | 30.7 | 11.5 | 12.6 | 15.5 | 12.4 | 12.2 | 7.9 | 6.8 | 7.4 | 4.9 | 6.8 |

Source and Methodology:

Column 1: Sum of columns 3 to 17.

Column 2: Gross value of output derived from data reported in various editions of the annual Soviet statistical abstract (*Narkhoz*). T3Note to columns 1 and 2: The slight difference between the sums in columns 1 and 2 can be explained by the derivation procedure for the republics (see table 1.2). The use of index numbers to extrapolate the ruble values obtained for 1986 by republic leads to small rounding errors. The largest difference in the time series is for 1988 when the 13.5 billion ruble gap between columns 1 and 2 comes to 1.5 percent of the All-Union control total of 908.6 billion rubles.

Columns 3 to 17: *Voprosy Ekonomiki*, no. 4, 1990, p. 52. Source presented data for 1986 on industrial output for All-Union and union republics expressed in per capita index number form. Using these data, taken together with the per capita ruble value of industrial output for the USSR from the same source, and the average population in 1986, gross value of industrial output was derived for each republic (see table 1.1). All other years are obtained by extrapolating the 1986 values with the index series set forth in table 1.2.

[a] Official measure of gross output expressed in 1982 established prices.

TABLE A1.1. U.S.S.R.: Derivation of Gross Value of Total Industrial Output by Republic, 1986.[a]

| Republic | Per Capita Industrial Output (USSR=100) | Population (mln. persons) | | | Per Capita Industrial Output (rubles) | Total Output (billion rubles) | Republic Share in All-Union Output (percent) |
|---|---|---|---|---|---|---|---|
| | | 1/1/1986 | 1/1/1987 | Average for 1986 | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| USSR | 100.0 | 278.784 | 281.689 | 280.237 | 2984.0 | 836.226 | 100.0 |
| RSFSR | 114.9 | 144.080 | 145.311 | 144.696 | 3428.6 | 496.105 | 59.3 |
| Ukraine | 103.0 | 50.994 | 51.201 | 51.098 | 3073.5 | 157.049 | 18.8 |
| Belorrusia | 125.5 | 10.008 | 10.078 | 10.043 | 3744.9 | 37.610 | 4.5 |
| Uzbekistan | 46.8 | 18.487 | 19.026 | 18.757 | 1396.5 | 26.194 | 3.1 |
| Kazakhstan | 58.0 | 16.028 | 16.244 | 16.136 | 1730.7 | 27.927 | 3.3 |
| Georgia | 73.0 | 5.234 | 5.266 | 5.250 | 2178.3 | 11.436 | 1.4 |
| Azerbaydzhan | 61.8 | 6.708 | 6.811 | 6.760 | 1844.1 | 12.465 | 1.5 |
| Lithuania | 127.8 | 3.603 | 3.641 | 3.622 | 3813.6 | 13.813 | 1.7 |
| Moldavia | 84.3 | 4.147 | 4.185 | 4.166 | 2515.5 | 10.480 | 1.3 |
| Latvia | 139.9 | 2.622 | 2.647 | 2.635 | 4174.6 | 10.998 | 1.3 |
| Kirgizia | 57.1 | 4.051 | 4.143 | 4.097 | 1703.9 | 6.981 | 0.8 |
| Tadzhikistan | 42.5 | 4.648 | 4.807 | 4.728 | 1268.2 | 5.995 | 0.7 |
| Armenia | 82.9 | 3.362 | 3.412 | 3.387 | 2473.7 | 8.379 | 1.0 |
| Turkmenistan | 43.1 | 3.270 | 3.361 | 3.316 | 1286.1 | 4.264 | 0.5 |
| Estonia | 137.7 | 1.542 | 1.556 | 1.549 | 4109.0 | 6.365 | 0.8 |

Source and Methodology:

Column 1: *Voprosy Ekonomiki*, no.4, 1990, p. 52.

Columns 2 and 3: *Narkhoz 85*, p. 8, for 1 January, 1986; *Narkhoz za 70 let*, p. 374, for 1 January, 1987.

Column 4: Arithmetic mean of data in columns 2 and 3.

Column 5: Ruble data for the USSR from *Voprosy Ekonomiki*, no.4, 1990, p. 56, applied to per capita indexes for the republics in column 1 (USSR=100).

Column 6: Column 4 multiplied by column 5.

Column 7: Values by republic in column 6 divided by total for the U.S.S.R.

[a] Official measure of gross output expressed in 1982 established prices.

TABLE A1.2. U.S.S.R.: Official Indexes of Growth of Gross Industrial Output by Republic and by Branch, 1980, 1985–90. [a]

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Output | 1980 | 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 |
| | 1985 | 119.3 | 117.6 | 118.2 | 129.5 | 124.6 | 118.2 | 121.7 | 124.0 | 124.6 | 124.0 | 117.6 | 125.2 | 119.9 | 131.9 | 113.7 | 114.8 |
| | 1986 | 124.6 | 122.9 | 123.2 | 138.1 | 131.6 | 124.2 | 124.5 | 121.5 | 130.6 | 127.2 | 122.0 | 130.6 | 122.0 | 137.9 | 119.2 | 119.2 |
| | 1987 | 129.3 | 127.2 | 128.0 | 147.4 | 134.9 | 129.6 | 127.6 | 126.0 | 136.6 | 133.6 | 127.1 | 132.4 | 128.1 | 144.4 | 122.8 | 122.7 |
| | 1988 | 134.4 | 132.1 | 133.2 | 156.7 | 139.3 | 134.4 | 131.7 | 130.3 | 144.4 | 138.0 | 131.5 | 141.4 | 135.1 | 142.8 | 128.1 | 126.5 |
| | 1989 | 136.7 | 133.9 | 136.9 | 163.9 | 144.4 | 137.7 | 132.6 | 131.2 | 150.5 | 145.9 | 135.6 | 148.8 | 137.5 | 130.9 | 132.4 | 127.4 |
| | 1990 | 135.0 | 133.8 | 136.8 | 167.3 | 147.0 | 136.6 | 125.0 | 123.0 | 146.2 | 150.6 | 135.4 | 147.9 | 139.2 | 121.1 | 136.6 | 127.6 |
| Electric power | 1980 | 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 |
| | 1985 | 120.0 | 120.0 | 117.0 | 105.0 | 139.0 | 133.0 | 98.0 | 127.0 | 107.1 | 111.0 | 112.0 | 117.0 | 111.0 | 114.0 | 162.0 | 98.0 |
| | 1986 | 123.6 | 124.8 | 117.1 | 111.3 | 151.0 | 138.3 | 99.3 | 131.0 | 109.4 | 116.6 | 114.2 | 126.4 | 94.0 | 114.0 | 181.0 | 98.0 |
| | 1987 | 129.6 | 130.8 | 122.9 | 117.6 | 157.0 | 143.6 | 99.6 | 139.0 | 161.7 | 117.7 | 129.9 | 107.6 | 108.0 | 118.0 | 194.0 | 99.0 |
| | 1988 | 132.0 | 132.0 | 128.7 | 118.7 | 148.0 | 143.6 | 99.8 | 144.0 | 179.4 | 115.4 | 117.6 | 155.6 | 127.0 | 118.0 | 189.0 | 96.0 |
| | 1989 | 133.2 | 134.4 | 127.5 | 117.6 | 164.0 | 147.6 | NA | NA | 199.8 | 114.3 | 126.6 | 166.1 | 106.0 | NA | 212.0 | 96.0 |
| | 1990 | 135.6 | 136.8 | 128.7 | 120.8 | NA | 145.0 | NA | NA | 194.2 | 106.6 | 140.0 | 150.9 | NA | NA | NA | 80.0 |
| Fuels | 1980 | 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 |
| | 1985 | 106.0 | 106.0 | 105.0 | 102.0 | 107.0 | 118.0 | 66.0 | 100.4 | 750.0 | — | 116.0 | 94.0 | 87.0 | — | 105.0 | 104.0 |
| | 1986 | 110.2 | 110.2 | 107.1 | 105.1 | 118.0 | 127.4 | 62.0 | 104.0 | 792.0 | — | 121.8 | 94.9 | 96.0 | — | 106.0 | 108.0 |
| | 1987 | 112.4 | 112.4 | 106.1 | 106.1 | 120.0 | 132.2 | 59.0 | 105.0 | 828.0 | — | 116.2 | 92.1 | 90.0 | — | 108.0 | 106.0 |
| | 1988 | 113.4 | 114.5 | 108.2 | 110.2 | 126.0 | 134.5 | 48.0 | 103.0 | 876.0 | — | 111.4 | 95.9 | 86.0 | — | 107.0 | 104.0 |
| | 1989 | 112.4 | 113.4 | 105.3 | 112.2 | 133.0 | 132.2 | NA | NA | 868.6 | — | 118.3 | 94.7 | 67.0 | — | 109.0 | 104.4 |
| | 1990 | 108.1 | 109.2 | 99.8 | 109.1 | NA | 128.6 | NA | NA | 675.4 | — | 105.6 | 89.3 | NA | — | NA | 84.9 |
| Metallurgy | 1980 | 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 | — | — |
| | 1985 | 111.0 | 112.0 | 107.0 | 155.0 | 111.0 | 107.0 | 104.0 | 133.0 | — | 489.0 | 108.0 | 130.0 | 173.0 | 144.0 | — | — |
| | 1986 | 115.4 | 116.5 | 111.3 | 196.9 | 116.0 | 111.3 | 104.0 | 134.0 | — | 1,271.4 | 110.2 | 149.5 | 200.0 | 160.0 | — | — |
| | 1987 | 117.7 | 118.7 | 112.4 | 206.2 | 119.0 | 113.4 | 103.0 | 142.0 | — | 1,613.7 | 111.2 | 175.5 | 218.0 | 177.0 | — | — |
| | 1988 | 121.0 | 122.1 | 115.6 | 254.2 | 117.0 | 118.8 | 103.0 | 146.0 | — | 1,662.6 | 113.4 | 202.8 | 250.0 | 184.0 | — | — |
| | 1989 | 122.1 | 123.2 | 114.5 | 302.3 | 124.0 | 119.8 | NA | NA | — | 1,613.7 | 113.4 | 213.2 | 259.0 | NA | — | — |
| | 1990 | 118.8 | 121.0 | 110.2 | 328.6 | NA | 115.6 | NA | NA | — | 1,809.3 | 109.1 | 227.5 | NA | NA | — | — |

TABLE A1.2. U.S.S.R.: Official Indexes of Growth of Gross Industrial Output by Republic and by Branch, 1980, 1985–90. [a] —Continued

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Machinery | 1980 | 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 |
| | 1985 | 135.0 | 133.0 | 135.0 | 151.0 | 136.0 | 132.0 | 154.0 | 159.0 | 123.9 | 155.0 | 134.0 | 132.0 | 125.0 | 172.0 | 136.0 | 127.0 |
| | 1986 | 144.5 | 142.3 | 145.8 | 166.1 | 145.0 | 139.9 | 161.0 | 173.0 | 134.8 | 169.0 | 143.4 | 141.2 | 137.0 | 187.0 | 135.0 | 135.0 |
| | 1987 | 152.6 | 149.0 | 153.9 | 179.7 | 153.0 | 143.9 | 168.0 | 187.0 | 140.9 | 187.6 | 151.4 | 147.8 | 145.0 | 199.0 | 145.0 | 143.0 |
| | 1988 | 160.7 | 156.9 | 163.4 | 194.8 | 165.0 | 146.5 | 181.0 | 195.0 | 152.9 | 198.4 | 156.8 | 157.1 | 156.0 | 195.0 | 146.0 | 148.0 |
| | 1989 | 164.7 | 159.6 | 170.1 | 208.4 | 165.0 | 150.5 | NA | NA | 166.9 | 215.5 | 160.8 | 157.1 | 160.0 | NA | 145.0 | 151.0 |
| | 1990 | 166.1 | 160.9 | 172.8 | 215.9 | NA | 146.5 | NA | NA | 167.9 | 224.8 | 163.5 | 155.8 | NA | NA | NA | 170.2 |
| Chemicals | 1980 | 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 |
| | 1985 | 127.0 | 127.0 | 123.0 | 133.0 | 147.0 | 158.0 | 140.0 | 121.0 | 114.1 | 153.0 | 138.0 | 127.0 | 154.0 | 98.0 | 119.0 | 126.0 |
| | 1986 | 134.6 | 133.4 | 129.2 | 145.0 | 169.0 | 173.8 | 157.0 | 123.0 | 123.4 | 163.7 | 147.7 | 134.6 | 171.0 | 108.0 | 135.0 | 134.0 |
| | 1987 | 141.0 | 138.4 | 136.5 | 155.6 | 183.0 | 188.0 | 172.0 | 126.0 | 126.0 | 176.0 | 155.9 | 142.2 | 185.0 | 115.0 | 156.0 | 140.0 |
| | 1988 | 147.3 | 144.8 | 141.5 | 166.3 | 197.0 | 203.8 | 178.0 | 124.0 | 130.1 | 208.1 | 161.5 | 156.2 | 207.0 | 107.0 | 159.0 | 146.0 |
| | 1989 | 148.6 | 146.1 | 143.9 | 171.6 | 196.0 | 207.0 | NA | NA | 125.6 | 226.4 | 165.6 | 149.9 | 213.0 | NA | 155.0 | 150.0 |
| | 1990 | 144.8 | 142.2 | 142.5 | 170.2 | NA | 206.4 | NA | NA | 115.6 | 238.7 | 168.4 | 154.9 | NA | NA | NA | 126.3 |
| Wood, pulp, and paper | 1980 | 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 |
| | 1985 | 119.0 | 115.0 | 126.0 | 123.0 | 135.0 | 130.0 | 146.0 | 141.0 | 129.5 | 128.0 | 127.0 | 130.0 | 125.0 | 140.0 | 122.0 | 123.0 |
| | 1986 | 125.0 | 120.8 | 132.3 | 129.2 | 142.0 | 139.1 | 151.0 | 150.0 | 136.8 | 134.4 | 132.1 | 128.7 | 135.0 | 149.0 | 140.0 | 130.0 |
| | 1987 | 128.5 | 125.4 | 136.1 | 136.5 | 151.0 | 146.9 | 154.0 | 152.0 | 140.5 | 140.8 | 137.2 | 130.7 | 144.0 | 158.0 | 145.0 | 135.0 |
| | 1988 | 133.3 | 127.7 | 146.2 | 145.1 | 160.0 | 152.1 | 151.0 | 154.0 | 146.0 | 148.5 | 143.5 | 140.4 | 141.0 | 153.0 | 150.0 | 144.0 |
| | 1989 | 135.7 | 132.3 | 151.2 | 150.1 | 170.0 | 156.0 | NA | NA | 146.5 | 154.9 | 142.2 | 140.4 | 143.0 | NA | 151.0 | 145.0 |
| | 1990 | 134.5 | 127.7 | 155.0 | 153.8 | NA | 158.6 | NA | NA | 139.7 | 166.4 | 139.7 | 133.9 | NA | NA | NA | 147.0 |
| Construction materials | 1980 | 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 |
| | 1985 | 116.0 | 115.0 | 111.0 | 120.0 | 128.0 | 108.0 | 132.0 | 136.0 | 138.0 | 119.0 | 108.0 | 116.0 | 118.0 | 115.0 | 137.0 | 112.0 |
| | 1986 | 121.8 | 121.9 | 115.4 | 126.0 | 128.0 | 111.2 | 143.0 | 141.0 | 143.0 | 129.7 | 114.5 | 126.4 | 125.0 | 122.0 | 143.0 | 116.0 |
| | 1987 | 126.4 | 126.5 | 116.6 | 134.4 | 133.0 | 118.8 | 149.0 | 148.0 | 146.6 | 138.0 | 119.9 | 131.1 | 133.0 | 129.0 | 151.0 | 121.0 |
| | 1988 | 132.2 | 132.3 | 123.2 | 144.0 | 137.0 | 127.4 | 152.0 | 141.0 | 152.1 | 142.8 | 124.2 | 136.9 | 141.0 | 122.0 | 153.0 | 127.0 |
| | 1989 | 134.6 | 135.7 | 125.4 | 151.2 | 139.0 | 132.8 | NA | NA | 158.3 | 139.2 | 125.3 | 140.4 | 143.0 | NA | 159.0 | 127.0 |
| | 1990 | 133.4 | 134.6 | 122.9 | 153.6 | NA | 129.6 | NA | NA | 150.8 | 147.6 | 123.1 | 141.5 | NA | NA | NA | 147.9 |

TABLE A1.2. U.S.S.R.: Official Indexes of Growth of Gross Industrial Output by Republic and by Branch, 1980, 1985–90.[a] —Continued

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Light industry | 1980 | 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 |
| | 1985 | 108.0 | 102.0 | 109.0 | 119.0 | 120.0 | 110.0 | 121.0 | 115.0 | 118.1 | 127.0 | 103.0 | 111.0 | 117.0 | 141.0 | 104.0 | 113.0 |
| | 1986 | 110.2 | 103.0 | 110.1 | 122.6 | 126.0 | 112.2 | 125.0 | 116.0 | 122.4 | 129.5 | 105.1 | 113.2 | 116.0 | 143.0 | 113.0 | 117.0 |
| | 1987 | 111.2 | 104.0 | 112.3 | 126.1 | 124.0 | 115.5 | 127.0 | 116.0 | 126.2 | 137.2 | 107.1 | 114.3 | 119.0 | 147.0 | 112.0 | 121.0 |
| | 1988 | 115.6 | 108.1 | 116.6 | 132.1 | 127.0 | 121.0 | 134.0 | 115.0 | 131.0 | 146.1 | 109.2 | 124.3 | 121.0 | 149.0 | 122.0 | 124.0 |
| | 1989 | 117.7 | 110.2 | 119.9 | 135.7 | 132.0 | 126.5 | NA | NA | 135.1 | 153.7 | 110.2 | 131.0 | 126.0 | NA | 126.0 | 124.0 |
| | 1990 | 117.7 | 110.2 | 120.4 | 136.9 | NA | 127.6 | NA | NA | 138.3 | 158.8 | 109.2 | 129.9 | NA | NA | NA | 102.8 |
| Food industry | 1980 | 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 |
| | 1985 | 114.0 | 116.0 | 113.0 | 120.0 | 129.0 | 113.0 | 115.0 | 123.0 | 118.2 | 119.0 | 112.0 | 141.0 | 106.0 | 121.0 | 129.0 | 111.0 |
| | 1986 | 116.3 | 121.8 | 115.3 | 123.6 | 136.0 | 120.9 | 116.0 | 99.0 | 122.2 | 115.4 | 114.2 | 146.6 | 107.0 | 130.0 | 127.0 | 115.0 |
| | 1987 | 120.8 | 126.4 | 122.0 | 130.8 | 143.0 | 128.8 | 118.0 | 103.0 | 123.8 | 116.6 | 119.8 | 142.4 | 107.0 | 131.0 | 137.0 | 118.0 |
| | 1988 | 125.4 | 131.1 | 123.2 | 136.8 | 148.0 | 132.2 | 120.0 | 117.0 | 127.2 | 115.4 | 124.3 | 142.0 | 110.0 | 129.0 | 146.0 | 119.0 |
| | 1989 | 130.0 | 136.9 | 130.0 | 142.8 | 152.0 | 139.0 | NA | NA | 127.6 | 121.4 | 129.9 | 155.1 | 115.0 | NA | 156.0 | 118.0 |
| | 1990 | 130.0 | 138.0 | 130.9 | 145.2 | NA | 139.1 | NA | NA | 119.7 | 125.0 | 125.4 | 160.7 | NA | NA | NA | 122.7 |
| Other industries[b] | 1980 | 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 |
| | 1985 | 119.3 | 117.6 | 118.2 | 129.5 | 124.6 | 118.2 | 121.7 | 124.0 | 124.6 | 124.0 | 117.6 | 125.2 | 119.9 | 131.9 | 113.7 | 114.8 |
| | 1986 | 124.6 | 122.9 | 123.2 | 138.1 | 131.6 | 124.2 | 124.5 | 121.5 | 130.6 | 127.2 | 122.0 | 130.6 | 122.0 | 137.9 | 119.2 | 119.2 |
| | 1987 | 129.3 | 127.2 | 128.0 | 147.4 | 134.9 | 129.6 | 127.6 | 126.0 | 136.6 | 133.6 | 127.1 | 132.4 | 128.1 | 144.4 | 122.8 | 122.7 |
| | 1988 | 134.4 | 132.1 | 133.2 | 156.7 | 139.3 | 134.4 | 131.7 | 130.3 | 144.4 | 138.0 | 131.5 | 141.4 | 135.1 | 142.8 | 128.1 | 126.5 |
| | 1989 | 136.7 | 133.9 | 136.9 | 163.9 | 144.4 | 137.7 | 132.6 | 131.2 | 150.5 | 145.9 | 135.6 | 148.8 | 137.5 | 130.9 | 132.4 | 127.4 |
| | 1990 | 135.0 | 133.8 | 136.8 | 167.3 | 147.0 | 136.6 | 125.0 | 123.0 | 146.2 | 150.6 | 135.4 | 147.9 | 139.2 | 121.1 | 136.6 | 127.6 |

Source and Methodology:

Data in columns 1 to 16 were taken from various statistical abstracts published by All-Union and republican statistical administrations (*Goskomstat*). (Sources available upon request).

The indexes of growth for "industries n.e.c." are those for total industry. This category includes miscellaneous products such as musical instruments, pencils, pens and ink. The use of the overall industry indicator of growth has the effect of allocating "other industry" proportionaly among all of the branches.

[a] Based on ruble values of gross output expressed in 1982 established prices (1980=100).

[b] Not elsewhere classified.

NA = Not available.

— = Zero or negligible.

TABLE A1.3. U.S.S.R.: Official Soviet Measure of Annual Growth by Republic and by Branch of Industry, 1981–90. [a]

(Percent)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total industry | 1981–85 [b] | 3.6 | 3.3 | 3.4 | 5.3 | 4.5 | 3.4 | 4.0 | 4.4 | 4.5 | 4.4 | 3.3 | 4.6 | 3.7 | 5.7 | 2.6 | 2.8 |
| | 1986 | 4.4 | 4.5 | 4.2 | 6.7 | 5.6 | 5.1 | 2.3 | −2.0 | 4.8 | 2.6 | 3.7 | 4.3 | 1.7 | 4.5 | 4.8 | 3.8 |
| | 1987 | 3.8 | 3.5 | 3.9 | 6.7 | 2.5 | 4.3 | 2.5 | 3.7 | 4.6 | 5.0 | 4.2 | 1.4 | 5.0 | 4.7 | 3.1 | 3.0 |
| | 1988 | 3.9 | 3.8 | 4.1 | 6.3 | 3.3 | 3.7 | 3.2 | 3.4 | 5.7 | 3.3 | 3.5 | 6.8 | 5.5 | −1.1 | 4.3 | 3.1 |
| | 1989 | 1.7 | 1.4 | 2.8 | 4.6 | 3.6 | 2.5 | 0.7 | 0.7 | 4.2 | 5.7 | 3.1 | 5.2 | 1.8 | −8.3 | 3.3 | 0.7 |
| | 1990 | −1.2 | −0.1 | −0.1 | 2.1 | 1.8 | −0.8 | −5.7 | −6.3 | −2.8 | 3.2 | −0.2 | −0.6 | 1.2 | −7.5 | 3.2 | 0.1 |
| Electric power | 1981–85 [b] | 3.7 | 3.7 | 3.2 | 1.0 | 6.8 | 5.9 | −0.4 | 4.9 | 1.4 | 2.1 | 2.3 | 3.2 | 2.1 | 2.7 | 10.1 | −0.4 |
| | 1986 | 3.0 | 4.0 | 0.1 | 6.0 | 8.6 | 4.0 | 1.3 | 3.1 | 2.1 | 5.0 | 2.0 | 8.0 | −15.3 | 0.0 | 11.7 | 0.0 |
| | 1987 | 4.9 | 4.8 | 4.9 | 5.7 | 4.0 | 3.8 | 0.3 | 6.1 | 47.8 | 1.0 | 13.7 | −14.8 | 14.9 | 3.5 | 7.2 | 1.0 |
| | 1988 | 1.9 | 0.9 | 4.8 | 0.9 | −5.7 | 0.0 | 0.2 | 3.6 | 11.0 | −1.9 | −9.5 | 44.6 | 17.6 | 0.0 | −2.6 | −3.0 |
| | 1989 | 0.9 | 1.8 | −0.9 | −0.9 | 10.8 | 2.8 | NA | NA | 11.4 | −1.0 | 7.6 | 6.8 | −16.5 | NA | 12.2 | 0.0 |
| | 1990 | 1.8 | 1.8 | 0.9 | 2.7 | NA | −1.8 | NA | NA | −2.8 | −6.8 | 10.6 | −9.2 | NA | NA | NA | −16.6 |
| Fuels | 1981–85 [b] | 1.2 | 1.2 | 1.0 | 0.4 | 1.4 | 3.4 | −8.0 | 0.1 | 49.6 | — | 3.0 | −1.2 | −2.7 | — | 1.0 | 0.8 |
| | 1986 | 4.0 | 4.0 | 2.0 | 3.0 | 10.3 | 8.0 | −6.1 | 3.6 | 5.6 | — | 5.0 | 1.0 | 10.3 | — | 1.0 | 3.8 |
| | 1987 | 1.9 | 1.9 | −1.0 | 1.0 | 1.7 | 3.7 | −4.8 | 1.0 | 4.5 | — | −4.6 | −3.0 | −6.3 | — | 1.9 | −1.9 |
| | 1988 | 0.9 | 1.9 | 2.0 | 3.8 | 5.0 | 1.8 | −18.6 | −1.9 | 5.8 | — | −4.2 | 4.1 | −4.4 | — | −0.9 | −1.9 |
| | 1989 | −0.9 | −0.9 | −2.6 | 1.9 | 5.6 | −1.8 | NA | NA | −0.8 | — | 6.3 | −1.3 | −22.1 | — | 1.9 | 0.4 |
| | 1990 | −3.8 | −3.7 | −5.3 | −2.7 | NA | −2.7 | NA | NA | −22.2 | — | −10.8 | −5.7 | NA | — | NA | −18.7 |
| Metallurgy | 1981–85 [b] | 2.1 | 2.3 | 1.4 | 9.2 | 2.1 | 1.4 | 0.8 | 5.9 | — | 37.4 | 1.6 | 5.4 | 11.6 | 7.6 | — | — |
| | 1986 | 4.0 | 4.0 | 4.0 | 27.0 | 4.5 | 4.0 | 0.0 | 0.8 | — | 160.0 | 2.0 | 15.0 | 15.6 | 11.1 | — | — |
| | 1987 | 1.9 | 1.9 | 1.0 | 4.7 | 2.6 | 1.9 | −1.0 | 6.0 | — | 26.9 | 1.0 | 17.4 | 9.0 | 10.6 | — | — |
| | 1988 | 2.8 | 2.8 | 2.9 | 23.3 | −1.7 | 4.7 | 0.0 | 2.8 | — | 3.0 | 1.9 | 15.6 | 14.7 | 4.0 | — | — |
| | 1989 | 0.9 | 0.9 | −0.9 | 18.9 | 6.0 | 0.9 | NA | NA | — | −2.9 | 0.0 | 5.1 | 3.6 | NA | — | — |
| | 1990 | −2.7 | −1.8 | −3.7 | 8.7 | NA | −3.6 | NA | NA | — | 12.1 | −3.8 | 6.7 | NA | NA | — | — |
| Machinery | 1981–85 [b] | 6.2 | 5.9 | 6.2 | 8.6 | 6.3 | 5.7 | 9.0 | 9.7 | 4.4 | 9.2 | 6.0 | 5.7 | 4.6 | 11.5 | 6.3 | 4.9 |
| | 1986 | 7.0 | 7.0 | 8.0 | 10.0 | 6.6 | 6.0 | 4.5 | 8.8 | 8.8 | 9.0 | 7.0 | 7.0 | 9.6 | 8.7 | −0.7 | 6.3 |
| | 1987 | 5.6 | 4.7 | 5.6 | 8.2 | 5.5 | 2.8 | 4.3 | 8.1 | 4.5 | 11.0 | 5.6 | 4.7 | 5.8 | 6.4 | 7.4 | 5.9 |
| | 1988 | 5.3 | 5.4 | 6.1 | 8.4 | 7.8 | 1.8 | 7.7 | 4.3 | 8.5 | 5.8 | 3.5 | 6.3 | 7.6 | −2.0 | 0.7 | 3.5 |
| | 1989 | 2.5 | 1.7 | 4.1 | 7.0 | 0.0 | 2.7 | NA | NA | 9.2 | 8.6 | 2.6 | 0.0 | 2.6 | NA | −0.7 | 2.0 |
| | 1990 | 0.8 | 0.8 | 1.6 | 3.6 | NA | −2.6 | NA | NA | 0.6 | 4.3 | 1.7 | −0.8 | NA | NA | NA | 12.7 |

## TABLE A1.3. U.S.S R.: Official Soviet Measure of Annual Growth by Republic and by Branch of Industry, 1981–90. [a] — Continued

(Percent)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemicals | 1981–85 [b] | 4.9 | 4.9 | 4.2 | 5.9 | 8.0 | 9.6 | 7.0 | 3.9 | 2.7 | 8.9 | 6.7 | 4.9 | 9.0 | −0.4 | 3.5 | 4.7 |
| | 1986 | 6.0 | 5.0 | 5.0 | 9.0 | 15.0 | 10.0 | 12.1 | 1.7 | 8.1 | 7.0 | 7.0 | 6.0 | 11.0 | 10.2 | 13.4 | 6.3 |
| | 1987 | 4.7 | 3.8 | 5.7 | 7.3 | 8.3 | 8.2 | 9.6 | 2.4 | 2.1 | 7.5 | 5.6 | 5.7 | 8.2 | 6.5 | 15.6 | 4.5 |
| | 1988 | 4.5 | 4.6 | 3.6 | 6.8 | 7.7 | 8.4 | 3.5 | −1.6 | 3.3 | 18.3 | 3.5 | 9.8 | 11.9 | −7.0 | 1.9 | 4.3 |
| | 1989 | 0.9 | 0.9 | 1.7 | 3.2 | −0.5 | 1.6 | NA | NA | −3.5 | 8.8 | 2.6 | −4.1 | 2.9 | NA | −2.5 | 2.7 |
| | 1990 | −2.6 | −2.6 | −1.0 | −0.8 | NA | −0.3 | NA | NA | −7.9 | 5.4 | 1.7 | 3.4 | NA | NA | NA | −15.8 |
| Wood, pulp and paper | 1981–85 [b] | 3.5 | 2.8 | 4.7 | 4.2 | 6.2 | 5.4 | 7.9 | 7.1 | 5.3 | 5.1 | 4.9 | 5.4 | 4.6 | 7.0 | 4.1 | 4.2 |
| | 1986 | 5.0 | 5.0 | 5.0 | 5.0 | 5.2 | 7.0 | 3.4 | 6.4 | 5.6 | 5.0 | 4.0 | −1.0 | 8.0 | 6.4 | 14.8 | 5.7 |
| | 1987 | 2.9 | 3.8 | 2.9 | 5.7 | 6.3 | 5.6 | 2.0 | 1.3 | 2.7 | 4.8 | 3.8 | 1.5 | 6.7 | 6.0 | 3.6 | 3.8 |
| | 1988 | 3.7 | 1.8 | 7.4 | 6.3 | 6.0 | 3.5 | −1.9 | 1.3 | 3.9 | 5.5 | 4.6 | 7.5 | −2.1 | −3.2 | 3.4 | 6.7 |
| | 1989 | 1.8 | 3.6 | 3.4 | 3.4 | 6.3 | 2.6 | NA | NA | 0.3 | 4.3 | −0.9 | 0.0 | 1.4 | NA | 0.7 | 0.7 |
| | 1990 | −0.9 | −3.5 | 2.5 | 2.5 | NA | 1.7 | NA | NA | −4.6 | 7.4 | −1.8 | −4.6 | NA | NA | NA | 1.4 |
| Construction materials | 1981–85 [b] | 3.0 | 2.8 | 2.1 | 3.7 | 5.1 | 1.6 | 5.7 | 6.3 | 6.7 | 3.5 | 1.6 | 3.0 | 3.4 | 2.8 | 6.5 | 2.3 |
| | 1986 | 5.0 | 6.0 | 4.0 | 5.0 | 0.0 | 3.0 | 8.3 | 3.7 | 3.6 | 9.0 | 6.0 | 9.0 | 5.9 | 6.1 | 4.4 | 3.6 |
| | 1987 | 3.8 | 3.8 | 1.0 | 6.7 | 3.9 | 6.8 | 4.2 | 5.0 | 2.5 | 6.4 | 4.7 | 3.7 | 6.4 | 5.7 | 5.6 | 4.3 |
| | 1988 | 4.6 | 4.5 | 5.7 | 7.1 | 3.0 | 7.3 | 2.0 | −4.7 | 3.7 | 3.4 | 3.6 | 4.4 | 6.0 | −5.4 | 1.3 | 5.0 |
| | 1989 | 1.8 | 2.6 | 1.8 | 5.0 | 1.5 | 4.2 | NA | NA | 4.1 | −2.5 | 0.9 | 2.5 | 1.4 | NA | 3.9 | 0.0 |
| | 1990 | −0.9 | −0.8 | −2.0 | 1.6 | NA | −2.4 | NA | NA | −4.7 | 6.0 | −1.7 | 0.8 | NA | NA | NA | 16.5 |
| Light industry | 1981–85 [b] | 1.6 | 0.4 | 1.7 | 3.5 | 3.7 | 1.9 | 3.9 | 2.8 | 3.4 | 4.9 | 0.6 | 2.1 | 3.2 | 7.1 | 0.8 | 2.5 |
| | 1986 | 2.0 | 1.0 | 1.0 | 3.0 | 5.0 | 2.0 | 3.3 | 0.9 | 3.7 | 2.0 | 2.0 | 2.0 | −0.9 | 1.4 | 8.7 | 3.5 |
| | 1987 | 1.0 | 1.0 | 2.0 | 2.9 | −1.6 | 2.9 | 1.6 | 0.0 | 3.1 | 5.9 | 2.0 | 1.0 | 2.6 | 2.8 | −0.9 | 3.4 |
| | 1988 | 3.9 | 3.9 | 3.9 | 4.7 | 2.4 | 4.8 | 5.5 | −0.9 | 3.8 | 6.5 | 1.9 | 8.7 | 1.7 | 1.4 | 8.9 | 2.5 |
| | 1989 | 1.9 | 1.9 | 2.8 | 2.7 | 3.9 | 4.5 | NA | NA | 3.1 | 5.2 | 0.9 | 5.4 | 4.1 | NA | 3.3 | 0.0 |
| | 1990 | 0.0 | 0.0 | 0.4 | 0.9 | NA | 0.9 | NA | NA | 2.3 | 3.3 | −0.9 | −0.8 | NA | NA | NA | −17.1 |

TABLE A1.3. U.S.S.R.: Official Soviet Measure of Annual Growth by Republic and by Branch of Industry, 1981–90. [a] — Continued

(Percent)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Food industry | 1981–85 [b] | 2.7 | 3.0 | 2.5 | 3.7 | 5.2 | 2.5 | 2.8 | 4.2 | 3.4 | 3.5 | 2.3 | 7.1 | 1.2 | 3.9 | 5.2 | 2.1 |
| | 1986 | 2.0 | 5.0 | 2.0 | 3.0 | 5.4 | 7.0 | 0.9 | −19.5 | 3.4 | −3.0 | 2.0 | 4.0 | 0.9 | 7.4 | −1.6 | 3.6 |
| | 1987 | 3.9 | 3.8 | 5.9 | 5.8 | 5.1 | 6.5 | 1.7 | 4.0 | 1.3 | 1.0 | 4.9 | −2.9 | 0.0 | 0.8 | 7.9 | 2.6 |
| | 1988 | 3.8 | 3.7 | 0.9 | 4.6 | 3.5 | 2.6 | 1.7 | 13.6 | 2.8 | −1.0 | 3.7 | −0.3 | 2.8 | −1.5 | 6.6 | 0.8 |
| | 1989 | 3.6 | 4.4 | 5.5 | 4.4 | 2.7 | 5.1 | NA | NA | 0.3 | 5.2 | 4.5 | 9.2 | 4.5 | NA | 6.8 | −0.8 |
| | 1990 | 0.0 | 0.8 | 0.7 | 1.7 | NA | 0.1 | NA | NA | −6.2 | 2.9 | −3.4 | 3.6 | NA | NA | NA | 4.0 |
| Other industries [c] | 1981–85 [b] | 3.6 | 3.3 | 3.4 | 5.3 | 4.5 | 3.4 | 4.0 | 4.4 | 4.5 | 4.4 | 3.3 | 4.6 | 3.7 | 5.7 | 2.6 | 2.8 |
| | 1986 | 4.4 | 4.5 | 4.2 | 6.7 | 5.6 | 5.1 | 2.3 | −2.0 | 4.8 | 2.6 | 3.7 | 4.3 | 1.7 | 4.5 | 4.8 | 3.8 |
| | 1987 | 3.8 | 3.5 | 3.9 | 6.7 | 2.5 | 4.3 | 2.5 | 3.7 | 4.6 | 5.0 | 4.2 | 1.4 | 5.0 | 4.7 | 3.1 | 3.0 |
| | 1988 | 3.9 | 3.8 | 4.1 | 6.3 | 3.3 | 3.7 | 3.2 | 3.4 | 5.7 | 3.3 | 3.5 | 6.8 | 5.5 | −1.1 | 4.3 | 3.1 |
| | 1989 | 1.7 | 1.4 | 2.8 | 4.6 | 3.6 | 2.5 | 0.7 | 0.7 | 4.2 | 5.7 | 3.1 | 5.2 | 1.8 | −8.3 | 3.3 | 0.7 |
| | 1990 | −1.2 | −0.1 | −0.1 | 2.1 | 1.8 | −0.8 | −5.7 | −6.3 | −2.8 | 3.2 | −0.2 | −0.6 | 1.2 | −7.5 | 3.2 | 0.1 |

Source: Based on cumulative indexes given in table A1.2.

[a] Based on ruble measures of gross output expressed in 1982 established prices.

[b] Average annual.

[c] Not elsewhere classified.

## TABLE A1.4. U.S.S.R.: Gross Value of Industrial Output by Republic and by Branch of Industry, 1980, 1985–90. [a]

(Billions of Rubles)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Electric power | 1980 | 25.676 | 16.900 | 4.425 | 0.913 | 0.713 | 1.230 | 0.219 | 0.314 | 0.366 | 0.303 | 0.132 | 0.164 | 0.288 | 0.257 | 0.107 | 0.421 |
| | 1985 | 30.811 | 20.280 | 5.177 | 0.959 | 0.991 | 1.637 | 0.214 | 0.399 | 0.392 | 0.336 | 0.148 | 0.192 | 0.320 | 0.293 | 0.174 | 0.413 |
| | 1986 | 31.735 | 21.091 | 5.183 | 1.016 | 1.077 | 1.702 | 0.217 | 0.411 | 0.401 | 0.353 | 0.151 | 0.207 | 0.271 | 0.293 | 0.195 | 0.413 |
| | 1987 | 33.276 | 22.105 | 5.436 | 1.074 | 1.119 | 1.767 | 0.218 | 0.436 | 0.592 | 0.356 | 0.171 | 0.176 | 0.311 | 0.304 | 0.209 | 0.417 |
| | 1988 | 33.892 | 22.308 | 5.695 | 1.083 | 1.055 | 1.767 | 0.218 | 0.452 | 0.657 | 0.349 | 0.155 | 0.255 | 0.366 | 0.304 | 0.203 | 0.404 |
| | 1989 | 34.200 | 22.714 | 5.643 | 1.074 | 1.169 | 1.817 | NA | NA | 0.732 | 0.346 | 0.167 | 0.272 | 0.306 | NA | 0.228 | 0.404 |
| | 1990 | 34.817 | 23.119 | 5.695 | 1.102 | NA | 1.784 | NA | NA | 0.711 | 0.323 | 0.185 | 0.247 | NA | NA | NA | 0.337 |
| Fuels | 1980 | 56.082 | 37.426 | 8.505 | 2.547 | 1.045 | 2.324 | 0.219 | 1.330 | 0.073 | — | 0.045 | 0.063 | 0.049 | — | 0.806 | 0.167 |
| | 1985 | 59.447 | 39.672 | 8.930 | 2.598 | 1.118 | 2.742 | 0.144 | 1.336 | 0.549 | — | 0.053 | 0.060 | 0.042 | — | 0.847 | 0.173 |
| | 1986 | 61.824 | 41.259 | 9.109 | 2.676 | 1.233 | 2.962 | 0.136 | 1.384 | 0.580 | — | 0.055 | 0.060 | 0.047 | — | 0.855 | 0.180 |
| | 1987 | 63.013 | 42.052 | 9.020 | 2.702 | 1.254 | 3.071 | 0.129 | 1.397 | 0.607 | — | 0.053 | 0.058 | 0.044 | — | 0.871 | 0.177 |
| | 1988 | 63.608 | 42.845 | 9.198 | 2.806 | 1.317 | 3.126 | 0.105 | 1.370 | 0.642 | — | 0.051 | 0.061 | 0.042 | — | 0.863 | 0.173 |
| | 1989 | 63.013 | 42.449 | 8.957 | 2.858 | 1.390 | 3.071 | NA | NA | 0.636 | — | 0.054 | 0.060 | 0.033 | — | 0.879 | 0.174 |
| | 1990 | 60.636 | 40.862 | 8.484 | 2.780 | NA | 2.989 | NA | NA | 0.495 | — | 0.048 | 0.057 | NA | — | NA | 0.142 |
| Metallurgy | 1980 | 69.541 | 49.404 | 19.758 | 0.180 | 1.039 | 4.141 | 0.517 | 0.363 | — | 0.007 | 0.193 | — | — | — | — | — |
| | 1985 | 77.190 | 55.332 | 21.141 | 0.279 | 1.153 | 4.431 | 0.538 | 0.483 | — | 0.036 | 0.209 | — | — | — | — | — |
| | 1986 | 80.278 | 57.546 | 21.987 | 0.354 | 1.205 | 4.608 | 0.538 | 0.486 | — | 0.094 | 0.213 | — | — | — | — | — |
| | 1987 | 81.821 | 58.652 | 22.198 | 0.371 | 1.236 | 4.697 | 0.532 | 0.515 | — | 0.120 | 0.215 | — | — | — | — | — |
| | 1988 | 84.137 | 60.312 | 22.833 | 0.458 | 1.215 | 4.918 | 0.532 | 0.530 | — | 0.123 | 0.219 | — | — | — | — | — |
| | 1989 | 84.909 | 60.866 | 22.621 | 0.544 | 1.288 | 4.962 | NA | NA | — | 0.120 | 0.219 | — | — | — | — | — |
| | 1990 | 82.593 | 59.759 | 21.775 | 0.592 | NA | 4.785 | NA | NA | — | 0.134 | 0.211 | — | — | — | — | — |
| Machinery | 1980 | 163.830 | 105.324 | 32.422 | 6.665 | 2.908 | 3.393 | 1.030 | 1.232 | 2.449 | 1.148 | 2.175 | 1.295 | 0.416 | 1.456 | 0.167 | 0.678 |
| | 1985 | 221.170 | 140.081 | 43.770 | 10.064 | 3.955 | 4.479 | 1.536 | 1.959 | 3.035 | 1.779 | 2.914 | 1.709 | 0.520 | 2.461 | 0.228 | 0.861 |
| | 1986 | 236.652 | 149.887 | 47.272 | 11.070 | 4.217 | 4.748 | 1.658 | 2.132 | 3.301 | 1.939 | 3.118 | 1.829 | 0.570 | 2.664 | 0.226 | 0.915 |
| | 1987 | 249.922 | 156.891 | 49.898 | 11.976 | 4.450 | 4.882 | 1.730 | 2.304 | 3.451 | 2.152 | 3.293 | 1.914 | 0.603 | 2.854 | 0.243 | 0.969 |
| | 1988 | 263.192 | 165.296 | 52.962 | 12.982 | 4.799 | 4.972 | 1.864 | 2.403 | 3.743 | 2.277 | 3.410 | 2.034 | 0.649 | 2.781 | 0.244 | 1.003 |
| | 1989 | 269.827 | 168.098 | 55.150 | 13.888 | 4.799 | 5.106 | NA | NA | 4.088 | 2.472 | 3.497 | 2.034 | 0.665 | NA | 0.243 | 1.023 |
| | 1990 | 272.039 | 169.498 | 56.026 | 14.391 | NA | 4.972 | NA | NA | 4.112 | 2.579 | 3.556 | 2.017 | NA | NA | NA | 1.153 |
| Chemicals | 1980 | 42.011 | 27.241 | 7.661 | 2.181 | 0.924 | 1.016 | 0.269 | 0.689 | 0.481 | 0.156 | 0.548 | 0.026 | 0.194 | 0.528 | 0.129 | 0.411 |
| | 1985 | 53.353 | 34.597 | 9.423 | 2.901 | 1.359 | 1.605 | 0.377 | 0.834 | 0.549 | 0.238 | 0.756 | 0.033 | 0.298 | 0.517 | 0.154 | 0.518 |
| | 1986 | 56.555 | 36.327 | 9.894 | 3.162 | 1.562 | 1.765 | 0.422 | 0.848 | 0.594 | 0.255 | 0.809 | 0.035 | 0.331 | 0.570 | 0.174 | 0.551 |
| | 1987 | 59.222 | 37.710 | 10.459 | 3.394 | 1.691 | 1.909 | 0.463 | 0.868 | 0.607 | 0.274 | 0.855 | 0.038 | 0.358 | 0.607 | 0.201 | 0.575 |
| | 1988 | 61.890 | 39.440 | 10.836 | 3.627 | 1.821 | 2.070 | 0.479 | 0.855 | 0.626 | 0.324 | 0.885 | 0.041 | 0.401 | 0.564 | 0.205 | 0.600 |
| | 1989 | 62.424 | 39.786 | 11.025 | 3.743 | 1.811 | 2.102 | NA | NA | 0.604 | 0.352 | 0.908 | 0.040 | 0.413 | NA | 0.200 | 0.617 |
| | 1990 | 60.823 | 38.748 | 10.915 | 3.714 | NA | 2.096 | NA | NA | 0.557 | 0.371 | 0.923 | 0.041 | NA | NA | NA | 0.519 |

## TABLE A1.4. U.S.S.R.: Gross Value of Industrial Output by Republic and by Branch of Industry, 1980, 1985–90. [a]—Continued

(Billions of Rubles)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wood, pulp, and paper | 1980 | 30.418 | 21.636 | 3.324 | 1.166 | 0.335 | 0.498 | 0.277 | 0.141 | 0.576 | 0.250 | 0.483 | 0.100 | 0.025 | 0.124 | 0.032 | 0.422 |
| | 1985 | 36.197 | 24.881 | 4.188 | 1.434 | 0.453 | 0.647 | 0.405 | 0.199 | 0.746 | 0.319 | 0.613 | 0.130 | 0.032 | 0.173 | 0.039 | 0.519 |
| | 1986 | 38.007 | 26.125 | 4.397 | 1.505 | 0.476 | 0.693 | 0.419 | 0.212 | 0.787 | 0.335 | 0.638 | 0.128 | 0.034 | 0.184 | 0.045 | 0.548 |
| | 1987 | 39.093 | 27.120 | 4.523 | 1.591 | 0.507 | 0.731 | 0.427 | 0.215 | 0.809 | 0.351 | 0.662 | 0.130 | 0.037 | 0.195 | 0.047 | 0.570 |
| | 1988 | 40.541 | 27.618 | 4.858 | 1.692 | 0.537 | 0.757 | 0.419 | 0.218 | 0.840 | 0.370 | 0.693 | 0.140 | 0.036 | 0.189 | 0.048 | 0.608 |
| | 1989 | 41.265 | 28.613 | 5.026 | 1.749 | 0.570 | 0.777 | NA | NA | 0.843 | 0.386 | 0.687 | 0.140 | 0.036 | NA | 0.049 | 0.612 |
| | 1990 | 40.903 | 27.618 | 5.151 | 1.792 | NA | 0.790 | NA | NA | 0.804 | 0.415 | 0.675 | 0.134 | NA | NA | NA | 0.620 |
| Construction materials | 1980 | 26.089 | 15.343 | 5.034 | 1.286 | 1.146 | 1.431 | 0.408 | 0.274 | 0.502 | 0.355 | 0.341 | 0.254 | 0.249 | 0.391 | 0.185 | 0.196 |
| | 1985 | 30.263 | 17.644 | 5.587 | 1.544 | 1.467 | 1.545 | 0.538 | 0.373 | 0.693 | 0.423 | 0.369 | 0.295 | 0.294 | 0.450 | 0.253 | 0.220 |
| | 1986 | 31.777 | 18.703 | 5.811 | 1.621 | 1.467 | 1.592 | 0.583 | 0.386 | 0.718 | 0.461 | 0.391 | 0.321 | 0.312 | 0.478 | 0.264 | 0.227 |
| | 1987 | 32.987 | 19.409 | 5.867 | 1.729 | 1.524 | 1.700 | 0.608 | 0.406 | 0.736 | 0.491 | 0.409 | 0.333 | 0.332 | 0.505 | 0.279 | 0.237 |
| | 1988 | 34.500 | 20.291 | 6.202 | 1.852 | 1.570 | 1.824 | 0.620 | 0.386 | 0.764 | 0.508 | 0.424 | 0.348 | 0.352 | 0.478 | 0.283 | 0.249 |
| | 1989 | 35.106 | 20.820 | 6.314 | 1.945 | 1.593 | 1.901 | NA | NA | 0.795 | 0.495 | 0.428 | 0.356 | 0.357 | NA | 0.294 | 0.249 |
| | 1990 | 34.803 | 20.644 | 6.187 | 1.976 | NA | 1.855 | NA | NA | 0.758 | 0.525 | 0.420 | 0.359 | NA | NA | NA | 0.290 |
| Light industry | 1980 | 108.551 | 59.672 | 16.405 | 6.379 | 7.983 | 3.808 | 1.940 | 2.149 | 2.449 | 1.756 | 2.178 | 1.733 | 2.295 | 1.389 | 1.475 | 1.444 |
| | 1985 | 117.236 | 60.866 | 17.882 | 7.590 | 9.579 | 4.189 | 2.347 | 2.472 | 2.891 | 2.229 | 2.244 | 1.923 | 2.685 | 1.958 | 1.534 | 1.631 |
| | 1986 | 119.580 | 61.474 | 18.061 | 7.818 | 10.058 | 4.273 | 2.424 | 2.493 | 2.997 | 2.274 | 2.288 | 1.962 | 2.662 | 1.986 | 1.667 | 1.689 |
| | 1987 | 120.753 | 62.083 | 18.418 | 8.046 | 9.899 | 4.398 | 2.463 | 2.493 | 3.090 | 2.408 | 2.333 | 1.981 | 2.731 | 2.041 | 1.652 | 1.747 |
| | 1988 | 125.442 | 64.518 | 19.134 | 8.425 | 10.138 | 4.608 | 2.599 | 2.472 | 3.208 | 2.564 | 2.378 | 2.154 | 2.777 | 2.069 | 1.800 | 1.790 |
| | 1989 | 127.787 | 65.735 | 19.670 | 8.653 | 10.537 | 4.817 | NA | NA | 3.308 | 2.698 | 2.401 | 2.269 | 2.891 | NA | 1.859 | 1.790 |
| | 1990 | 127.787 | 65.735 | 19.749 | 8.729 | NA | 4.859 | NA | NA | 3.386 | 2.787 | 2.378 | 2.250 | NA | NA | NA | 1.483 |
| Food industry | 1980 | 103.557 | 59.820 | 24.117 | 5.918 | 2.600 | 3.488 | 3.638 | 3.740 | 3.254 | 3.377 | 2.509 | 1.104 | 0.874 | 1.276 | 0.433 | 1.346 |
| | 1985 | 118.055 | 69.392 | 27.253 | 7.102 | 3.354 | 3.941 | 4.184 | 4.600 | 3.846 | 4.019 | 2.810 | 1.557 | 0.927 | 1.544 | 0.559 | 1.494 |
| | 1986 | 120.417 | 72.861 | 27.798 | 7.315 | 3.536 | 4.217 | 4.220 | 3.702 | 3.978 | 3.898 | 2.866 | 1.620 | 0.935 | 1.659 | 0.550 | 1.548 |
| | 1987 | 125.139 | 75.637 | 29.433 | 7.741 | 3.718 | 4.493 | 4.293 | 3.852 | 4.029 | 3.939 | 3.006 | 1.573 | 0.935 | 1.672 | 0.593 | 1.588 |
| | 1988 | 129.861 | 78.413 | 29.705 | 8.096 | 3.848 | 4.611 | 4.365 | 4.375 | 4.140 | 3.898 | 3.119 | 1.568 | 0.962 | 1.646 | 0.632 | 1.602 |
| | 1989 | 134.583 | 81.882 | 31.341 | 8.451 | 3.952 | 4.848 | NA | NA | 4.151 | 4.099 | 3.259 | 1.713 | 1.005 | NA | 0.676 | 1.588 |
| | 1990 | 134.583 | 82.576 | 31.560 | 8.593 | NA | 4.852 | NA | NA | 3.896 | 4.220 | 3.147 | 1.775 | NA | NA | NA | 1.652 |

Source and Methodology:
1986 : Calculated by using total output from table A1 (column 2) and branch shares by republic from table A1.5.
1980, 1985, 1987–90: 1986 values extrapolated by official indexes of gross output from Table A1.2.
[a] Expressed in 1982 established prices.
NA = Not available.
— = Zero or negligible.

## TABLE A1.5. U.S.S.R.: Republic Shares of the Official Measure of Gross Industrial Output by Branch, 1986.

(Percent)

| Type of Output | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Electric power | 3.8 | 4.3 | 3.3 | 2.7 | 4.1 | 6.1 | 1.9 | 3.3 | 2.9 | 3.4 | 1.4 | 3.0 | 4.5 | 3.5 | 4.6 | 6.5 |
| Fuels | 7.4 | 8.3 | 5.8 | 7.1 | 4.7 | 10.6 | 1.2 | 11.1 | 4.2 | — | 0.5 | 0.9 | 0.8 | — | 20.0 | 2.8 |
| Metallurgy [a] | 9.6 | 11.6 | 14.0 | 0.9 | 4.6 | 16.5 | 4.7 | 3.9 | — | 0.9 | 1.9 | — | — | — | — | — |
| Machinery | 28.3 | 30.2 | 30.1 | 29.4 | 16.1 | 17.0 | 14.5 | 17.1 | 23.9 | 18.5 | 28.4 | 26.2 | 9.5 | 31.8 | 5.3 | 14.4 |
| Chemicals | 6.8 | 7.3 | 6.3 | 8.4 | 6.0 | 6.3 | 3.7 | 6.8 | 4.3 | 2.4 | 7.4 | 0.5 | 5.5 | 6.8 | 4.1 | 8.7 |
| Wood, pulp, and paper | 4.5 | 5.3 | 2.8 | 4.0 | 1.8 | 2.5 | 3.7 | 1.7 | 5.7 | 3.2 | 5.8 | 1.8 | 0.6 | 2.2 | 1.1 | 8.6 |
| Construction materials | 3.8 | 3.8 | 3.7 | 4.3 | 5.6 | 5.7 | 5.1 | 3.1 | 5.2 | 4.4 | 3.6 | 4.6 | 5.2 | 5.7 | 6.2 | 3.6 |
| Light industry | 14.3 | 12.4 | 11.5 | 20.8 | 38.4 | 15.3 | 21.2 | 20.0 | 21.7 | 21.7 | 20.8 | 28.1 | 44.4 | 23.7 | 39.1 | 26.5 |
| *Food industry* | 14.4 | 14.7 | 17.7 | 19.4 | 13.5 | 15.1 | 36.9 | 29.7 | 28.8 | 37.2 | 26.1 | 23.2 | 15.6 | 19.8 | 12.9 | 24.3 |

Source: All-Union and Republic *Narkhozy* for selected years.

[a] Lithuania, Turkmenia and Estonia have negligible output of metallurgical products (see table 2). Although Armenia, Tadzhikistan and Kirgizia produced unknown amounts, the official abstracts do not publish shares of this branch in total output. Hence, we assumed that for valuing gross industrial output for the latter republics shares of metallurgy were added to industry not included elsewhere.

— = Zero or negligible.

TABLE A2. U.S.S.R.: "Hybrid" Measure of the Official Concept of Value Added by Branch of Industry, Total and by Republic, 1980, 1985–90 [a]

(Billions of Rubles)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total industry | 1980 | 224.308 | 145.782 | 37.017 | 6.531 | 5.308 | 9.770 | 2.787 | 4.232 | 2.672 | 1.767 | 2.250 | 1.330 | 1.189 | 1.965 | 1.492 | 1.725 |
| | 1985 | 267.697 | 171.477 | 43.753 | 8.455 | 6.614 | 11.548 | 3.391 | 5.249 | 3.330 | 2.192 | 2.647 | 1.665 | 1.426 | 2.593 | 1.696 | 1.980 |
| | 1986 | 279.475 | 179.194 | 45.591 | 9.022 | 6.985 | 12.137 | 3.469 | 5.144 | 3.490 | 2.249 | 2.745 | 1.736 | 1.451 | 2.710 | 1.777 | 2.055 |
| | 1987 | 290.095 | 185.465 | 47.369 | 9.626 | 7.159 | 12.659 | 3.556 | 5.334 | 3.650 | 2.361 | 2.860 | 1.761 | 1.523 | 2.837 | 1.832 | 2.117 |
| | 1988 | 301.409 | 192.513 | 49.311 | 10.233 | 7.395 | 13.127 | 3.669 | 5.515 | 3.858 | 2.439 | 2.960 | 1.880 | 1.607 | 2.806 | 1.911 | 2.183 |
| | 1989 | 306.533 | 195.208 | 50.692 | 10.704 | 7.662 | 13.455 | 3.695 | 5.554 | 4.020 | 2.578 | 3.052 | 1.978 | 1.636 | 2.573 | 1.974 | 2.198 |
| | 1990 | 302.855 | 195.013 | 50.641 | 10.928 | 7.800 | 13.348 | 3.485 | 5.204 | 3.908 | 2.661 | 3.046 | 1.966 | 1.655 | 2.380 | 2.037 | 2.200 |
| Electric power | 1980 | 18.449 | 11.505 | 2.816 | 0.518 | 0.478 | 1.017 | 0.383 | 0.277 | 0.226 | 0.203 | 0.147 | 0.181 | 0.188 | 0.198 | 0.085 | 0.263 |
| | 1985 | 22.139 | 13.806 | 3.295 | 0.544 | 0.664 | 1.353 | 0.376 | 0.352 | 0.243 | 0.225 | 0.164 | 0.212 | 0.208 | 0.225 | 0.137 | 0.257 |
| | 1986 | 22.803 | 14.358 | 3.298 | 0.577 | 0.721 | 1.407 | 0.381 | 0.363 | 0.248 | 0.236 | 0.168 | 0.229 | 0.176 | 0.225 | 0.153 | 0.257 |
| | 1987 | 23.910 | 15.048 | 3.459 | 0.609 | 0.750 | 1.461 | 0.382 | 0.385 | 0.366 | 0.239 | 0.191 | 0.195 | 0.203 | 0.233 | 0.164 | 0.260 |
| | 1988 | 24.353 | 15.186 | 3.624 | 0.615 | 0.707 | 1.461 | 0.382 | 0.399 | 0.406 | 0.234 | 0.172 | 0.282 | 0.238 | 0.233 | 0.160 | 0.252 |
| | 1989 | 24.574 | 15.462 | 3.591 | 0.609 | 0.783 | 1.502 | NA | NA | 0.452 | 0.232 | 0.186 | 0.301 | 0.199 | NA | 0.179 | 0.252 |
| | 1990 | 25.017 | 15.738 | 3.624 | 0.626 | NA | 1.475 | NA | NA | 0.440 | 0.216 | 0.205 | 0.274 | NA | NA | NA | 0.210 |
| Fuels | 1980 | 32.316 | 21.772 | 5.973 | 0.296 | 0.343 | 1.507 | 0.211 | 1.084 | 0.009 | — | 0.018 | 0.103 | 0.064 | — | 0.813 | 0.137 |
| | 1985 | 34.255 | 23.078 | 6.272 | 0.302 | 0.367 | 1.778 | 0.139 | 1.089 | 0.068 | — | 0.021 | 0.097 | 0.055 | — | 0.854 | 0.142 |
| | 1986 | 35.626 | 24.001 | 6.397 | 0.311 | 0.404 | 1.920 | 0.131 | 1.128 | 0.072 | — | 0.022 | 0.098 | 0.061 | — | 0.862 | 0.148 |
| | 1987 | 36.311 | 24.463 | 6.334 | 0.314 | 0.411 | 1.991 | 0.125 | 1.138 | 0.075 | — | 0.021 | 0.095 | 0.057 | — | 0.878 | 0.145 |
| | 1988 | 36.653 | 24.925 | 6.460 | 0.326 | 0.432 | 2.027 | 0.101 | 1.117 | 0.080 | — | 0.020 | 0.099 | 0.055 | — | 0.870 | 0.142 |
| | 1989 | 36.311 | 24.694 | 6.290 | 0.332 | 0.456 | 1.991 | NA | NA | 0.079 | — | 0.022 | 0.098 | 0.043 | — | 0.887 | 0.143 |
| | 1990 | 34.940 | 23.771 | 5.958 | 0.323 | NA | 1.938 | NA | NA | 0.061 | — | 0.019 | 0.092 | NA | — | NA | 0.116 |
| Metallurgy | 1980 | 22.525 | 13.777 | 5.341 | 0.125 | 0.229 | 2.133 | 0.276 | 0.173 | — | 0.004 | 0.029 | 0.057 | 0.080 | 0.091 | — | — |
| | 1985 | 25.003 | 15.430 | 5.715 | 0.194 | 0.254 | 2.282 | 0.287 | 0.230 | — | 0.018 | 0.032 | 0.073 | 0.138 | 0.132 | — | — |
| | 1986 | 26.003 | 16.047 | 5.943 | 0.247 | 0.266 | 2.374 | 0.287 | 0.232 | — | 0.046 | 0.032 | 0.084 | 0.160 | 0.146 | — | — |
| | 1987 | 26.503 | 16.356 | 6.001 | 0.258 | 0.273 | 2.419 | 0.284 | 0.246 | — | 0.059 | 0.033 | 0.099 | 0.174 | 0.162 | — | — |
| | 1988 | 27.253 | 16.819 | 6.172 | 0.318 | 0.268 | 2.534 | 0.284 | 0.253 | — | 0.061 | 0.033 | 0.115 | 0.200 | 0.168 | — | — |
| | 1989 | 27.503 | 16.973 | 6.115 | 0.379 | 0.284 | 2.556 | NA | NA | — | 0.059 | 0.033 | 0.120 | 0.207 | NA | — | — |
| | 1990 | 26.753 | 16.664 | 5.886 | 0.412 | NA | 2.465 | NA | NA | — | 0.066 | 0.032 | 0.129 | NA | NA | — | — |

## TABLE A2. U.S.S.R.: "Hybrid" Measure of the Official Concept of Value Added by Branch of Industry, Total and by Republic, 1980, 1985–90 [a]—Continued

(Billions of Rubles)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Machinery | 1980 | 63.539 | 44.164 | 10.370 | 2.126 | 1.075 | 1.572 | 0.553 | 0.427 | 0.801 | 0.383 | 0.684 | 0.425 | 0.205 | 0.541 | 0.114 | 0.346 |
| | 1985 | 85.777 | 58.738 | 13.999 | 3.210 | 1.462 | 2.075 | 0.851 | 0.678 | 0.992 | 0.594 | 0.916 | 0.562 | 0.256 | 0.930 | 0.155 | 0.439 |
| | 1986 | 91.782 | 62.850 | 15.119 | 3.531 | 1.558 | 2.200 | 0.890 | 0.738 | 1.080 | 0.647 | 0.980 | 0.601 | 0.280 | 1.011 | 0.154 | 0.467 |
| | 1987 | 96.928 | 65.786 | 15.959 | 3.820 | 1.644 | 2.262 | 0.929 | 0.798 | 1.129 | 0.719 | 1.035 | 0.629 | 0.297 | 1.076 | 0.165 | 0.494 |
| | 1988 | 102.075 | 69.311 | 16.939 | 4.141 | 1.773 | 2.303 | 1.001 | 0.832 | 1.224 | 0.760 | 1.072 | 0.668 | 0.319 | 1.054 | 0.166 | 0.512 |
| | 1989 | 104.648 | 70.485 | 17.639 | 4.430 | 1.773 | 2.366 | NA | NA | 1.337 | 0.826 | 1.099 | 0.668 | 0.327 | NA | 0.165 | 0.522 |
| | 1990 | 105.506 | 71.073 | 17.919 | 4.590 | NA | 2.303 | NA | NA | 1.345 | 0.861 | 1.118 | 0.663 | NA | NA | NA | 0.588 |
| Chemicals | 1980 | 15.872 | 9.392 | 2.410 | 0.871 | 0.467 | 0.559 | 0.117 | 1.239 | 0.164 | 0.025 | 0.113 | 0.006 | 0.070 | 0.245 | 0.092 | 0.076 |
| | 1985 | 20.158 | 11.928 | 2.964 | 1.158 | 0.687 | 0.883 | 0.164 | 1.499 | 0.187 | 0.039 | 0.156 | 0.008 | 0.107 | 0.240 | 0.110 | 0.096 |
| | 1986 | 21.367 | 12.524 | 3.113 | 1.263 | 0.790 | 0.971 | 0.184 | 1.524 | 0.202 | 0.041 | 0.167 | 0.009 | 0.119 | 0.265 | 0.124 | 0.102 |
| | 1987 | 22.375 | 13.002 | 3.291 | 1.355 | 0.855 | 1.051 | 0.202 | 1.561 | 0.206 | 0.044 | 0.176 | 0.009 | 0.129 | 0.282 | 0.144 | 0.107 |
| | 1988 | 23.383 | 13.598 | 3.409 | 1.448 | 0.921 | 1.139 | 0.209 | 1.536 | 0.213 | 0.052 | 0.182 | 0.010 | 0.144 | 0.262 | 0.147 | 0.112 |
| | 1989 | 23.584 | 13.717 | 3.468 | 1.494 | 0.916 | 1.157 | NA | NA | 0.206 | 0.057 | 0.187 | 0.010 | 0.148 | NA | 0.143 | 0.115 |
| | 1990 | 22.980 | 13.359 | 3.434 | 1.483 | NA | 1.153 | NA | NA | 0.189 | 0.060 | 0.190 | 0.010 | NA | NA | NA | 0.097 |
| Wood, pulp and paper | 1980 | 12.508 | 10.146 | 1.011 | 0.352 | 0.099 | 0.238 | 0.101 | 0.049 | 0.183 | 0.067 | 0.173 | 0.032 | 0.025 | 0.042 | 0.016 | 0.137 |
| | 1985 | 14.885 | 11.668 | 1.274 | 0.433 | 0.134 | 0.310 | 0.148 | 0.070 | 0.237 | 0.086 | 0.220 | 0.042 | 0.032 | 0.059 | 0.019 | 0.169 |
| | 1986 | 15.629 | 12.251 | 1.337 | 0.455 | 0.141 | 0.331 | 0.153 | 0.074 | 0.250 | 0.090 | 0.228 | 0.041 | 0.034 | 0.063 | 0.022 | 0.179 |
| | 1987 | 16.076 | 12.718 | 1.375 | 0.481 | 0.150 | 0.350 | 0.156 | 0.075 | 0.257 | 0.094 | 0.237 | 0.042 | 0.037 | 0.067 | 0.023 | 0.186 |
| | 1988 | 16.671 | 12.951 | 1.477 | 0.511 | 0.159 | 0.362 | 0.153 | 0.076 | 0.267 | 0.099 | 0.248 | 0.045 | 0.036 | 0.065 | 0.024 | 0.198 |
| | 1989 | 16.969 | 13.418 | 1.528 | 0.529 | 0.169 | 0.372 | NA | NA | 0.268 | 0.104 | 0.246 | 0.045 | 0.036 | NA | 0.024 | 0.199 |
| | 1990 | 16.820 | 12.951 | 1.566 | 0.542 | NA | 0.378 | NA | NA | 0.255 | 0.111 | 0.242 | 0.043 | NA | NA | NA | 0.202 |
| Construction materials | 1980 | 14.192 | 8.281 | 2.428 | 0.467 | 0.624 | 0.802 | 0.256 | 0.236 | 0.201 | 0.159 | 0.146 | 0.104 | 0.093 | 0.206 | 0.111 | 0.114 |
| | 1985 | 16.463 | 9.523 | 2.695 | 0.560 | 0.799 | 0.866 | 0.338 | 0.321 | 0.278 | 0.190 | 0.157 | 0.121 | 0.110 | 0.236 | 0.152 | 0.128 |
| | 1986 | 17.286 | 10.094 | 2.803 | 0.588 | 0.799 | 0.892 | 0.366 | 0.332 | 0.288 | 0.207 | 0.167 | 0.131 | 0.117 | 0.251 | 0.158 | 0.133 |
| | 1987 | 17.944 | 10.475 | 2.830 | 0.627 | 0.830 | 0.953 | 0.381 | 0.349 | 0.295 | 0.220 | 0.175 | 0.136 | 0.124 | 0.265 | 0.167 | 0.138 |
| | 1988 | 18.768 | 10.951 | 2.992 | 0.672 | 0.855 | 1.022 | 0.389 | 0.332 | 0.306 | 0.228 | 0.181 | 0.142 | 0.131 | 0.251 | 0.169 | 0.145 |
| | 1989 | 19.097 | 11.237 | 3.046 | 0.706 | 0.868 | 1.065 | NA | NA | 0.319 | 0.222 | 0.183 | 0.146 | 0.133 | NA | 0.176 | 0.145 |
| | 1990 | 18.932 | 11.142 | 2.985 | 0.717 | NA | 1.039 | NA | NA | 0.303 | 0.235 | 0.179 | 0.147 | NA | NA | NA | 0.169 |

## TABLE A2. U.S.S.R.: "Hybrid" Measure of the Official Concept of Value Added by Branch of Industry, Total and by Republic, 1980, 1985–90 [a]—Continued

(Billions of Rubles)

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Light industry | 1980 | 16.064 | 8.796 | 2.207 | 0.793 | 1.061 | 0.582 | 0.328 | 0.345 | 0.331 | 0.233 | 0.277 | 0.206 | 0.235 | 0.307 | 0.179 | 0.202 |
| | 1985 | 17.349 | 8.972 | 2.406 | 0.944 | 1.273 | 0.640 | 0.397 | 0.397 | 0.391 | 0.297 | 0.286 | 0.228 | 0.275 | 0.433 | 0.186 | 0.229 |
| | 1986 | 17.696 | 9.062 | 2.430 | 0.972 | 1.337 | 0.653 | 0.410 | 0.400 | 0.405 | 0.302 | 0.291 | 0.233 | 0.272 | 0.439 | 0.202 | 0.237 |
| | 1987 | 17.869 | 9.152 | 2.478 | 1.000 | 1.316 | 0.672 | 0.416 | 0.400 | 0.418 | 0.320 | 0.297 | 0.235 | 0.279 | 0.451 | 0.200 | 0.245 |
| | 1988 | 18.563 | 9.511 | 2.574 | 1.047 | 1.348 | 0.704 | 0.439 | 0.397 | 0.434 | 0.341 | 0.303 | 0.256 | 0.284 | 0.457 | 0.218 | 0.251 |
| | 1989 | 18.910 | 9.690 | 2.646 | 1.076 | 1.401 | 0.736 | NA | NA | 0.447 | 0.359 | 0.306 | 0.269 | 0.296 | NA | 0.225 | 0.251 |
| | 1990 | 18.910 | 9.690 | 2.657 | 1.085 | NA | 0.743 | NA | NA | 0.458 | 0.371 | 0.303 | 0.267 | NA | NA | NA | 0.208 |
| Food industry | 1980 | 18.614 | 9.981 | 3.127 | 0.493 | 0.445 | 0.986 | 0.487 | 0.329 | 0.478 | 0.458 | 0.453 | 0.113 | 0.117 | 0.177 | 0.099 | 0.369 |
| | 1985 | 21.220 | 11.578 | 3.534 | 0.592 | 0.574 | 1.115 | 0.560 | 0.404 | 0.565 | 0.545 | 0.507 | 0.160 | 0.124 | 0.214 | 0.128 | 0.409 |
| | 1986 | 21.644 | 12.157 | 3.604 | 0.610 | 0.605 | 1.193 | 0.565 | 0.325 | 0.584 | 0.529 | 0.517 | 0.166 | 0.125 | 0.230 | 0.126 | 0.424 |
| | 1987 | 22.493 | 12.620 | 3.816 | 0.645 | 0.636 | 1.271 | 0.574 | 0.339 | 0.592 | 0.534 | 0.542 | 0.161 | 0.125 | 0.231 | 0.136 | 0.435 |
| | 1988 | 23.342 | 13.083 | 3.852 | 0.675 | 0.659 | 1.304 | 0.584 | 0.385 | 0.608 | 0.529 | 0.563 | 0.161 | 0.129 | 0.228 | 0.145 | 0.439 |
| | 1989 | 24.190 | 13.662 | 4.064 | 0.705 | 0.676 | 1.371 | NA | NA | 0.610 | 0.556 | 0.588 | 0.176 | 0.135 | NA | 0.155 | 0.435 |
| | 1990 | 24.190 | 13.778 | 4.092 | 0.717 | NA | 1.372 | NA | NA | 0.572 | 0.572 | 0.568 | 0.182 | NA | NA | NA | 0.452 |
| Other Industries [b] | 1980 | 7.622 | 4.679 | 1.360 | 0.306 | 0.197 | 0.122 | 0.096 | 0.145 | 0.222 | 0.098 | 0.141 | 0.072 | 0.052 | 0.062 | 0.010 | 0.104 |
| | 1985 | 9.097 | 5.504 | 1.608 | 0.396 | 0.245 | 0.144 | 0.117 | 0.179 | 0.276 | 0.121 | 0.166 | 0.091 | 0.062 | 0.081 | 0.012 | 0.120 |
| | 1986 | 9.497 | 5.752 | 1.675 | 0.423 | 0.259 | 0.152 | 0.120 | 0.176 | 0.289 | 0.125 | 0.172 | 0.095 | 0.063 | 0.085 | 0.012 | 0.124 |
| | 1987 | 9.858 | 5.953 | 1.741 | 0.451 | 0.265 | 0.158 | 0.123 | 0.182 | 0.303 | 0.131 | 0.179 | 0.096 | 0.067 | 0.089 | 0.012 | 0.128 |
| | 1988 | 10.242 | 6.179 | 1.812 | 0.479 | 0.274 | 0.164 | 0.127 | 0.188 | 0.320 | 0.135 | 0.185 | 0.102 | 0.070 | 0.088 | 0.013 | 0.132 |
| | 1989 | 10.416 | 6.266 | 1.863 | 0.501 | 0.284 | 0.168 | NA | NA | 0.333 | 0.143 | 0.191 | 0.108 | 0.072 | NA | 0.013 | 0.133 |
| | 1990 | 10.291 | 6.260 | 1.861 | 0.512 | NA | 0.167 | NA | NA | 0.324 | 0.147 | 0.191 | 0.107 | NA | NA | NA | 0.133 |

Source and Methodology:

Value added obtained by moving ruble output for each branch of industry for each republic in 1988. These 1988 weights reflect factor incomes (wages etc.) but also *include* turnover (excise) taxes and subsidies but *exclude* the value of industrial materials and other intermediate product. These are from the official input-output tables for each republic for 1988 (see table 3). Years other than 1988 were derived by extrapolating with official indexes of gross value of output set forth in table 1.2. The latter are based on gross values of output expressed in 1982 established prices.

These values are termed "hybrid" because they reflect the extrapolation of *value added* weights by the use of official *gross value of output* indexes. This artificial construct is undertaken in order to achieve parallelism in weighting procedures in comparing *official measures* of growth with *CIA type* measures of growth.

1. Total output for USSR and by republic: 1988—Table 3; 1980, 1985–87, 1989–90: Summation of value added entries for 1988 moved by the *gross value of output* index for total industry shown in table 1.2.
2. Output by branch: 1988 — Table 3; 1980, 1985–87, 1989–90: Value added entries for 1988 moved by *gross value of output* indexes shown in table 1.2.

[a] Expressed in 1988 producer's prices. See footnote to table 2.1 and methodological note above.

[b] Not elsewhere classified.

NA = Not available.

— = Zero or negligible.

## TABLE A2.1. U.S.S.R.: Derivation of CIA Type Synthetic Measures of Industrial Growth by Republic and by Branch, 1981–90.

(Annual Rates of Growth, Percent)

| Type of Output | RSFSR (1) | UkSSR (2) | BSSR (3) | UzSSR (4) | KSSR (5) | GSSR (6) | AzSSR (7) | LiSSR (8) | MSSR (9) | LaSSR (10) | KiSSR (11) | TaSSR (12) | ArSSR (13) | TuSSR (14) | ESSR (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total industry | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 1.6 | 1.5 | 3.5 | 3.6 | 2.5 | 2.7 | 2.9 | 2.8 | 4.3 | 1.7 | 2.2 | 3.1 | 4.7 | 2.3 | 1.0 |
| 1986 | 2.6 | 2.0 | 5.0 | 4.4 | 3.7 | 0.8 | −0.1 | 2.5 | 4.9 | 1.2 | 3.5 | 1.6 | 3.7 | 2.4 | 1.3 |
| 1987 | 2.6 | 2.5 | 5.4 | 3.0 | 3.4 | 1.8 | 2.6 | 7.1 | 5.6 | 4.2 | −0.2 | 5.6 | 4.3 | 4.0 | 2.6 |
| 1988 | 2.5 | 3.1 | 5.4 | 2.6 | 2.7 | 1.8 | −0.2 | 4.8 | 2.3 | 1.3 | 11.0 | 6.9 | −3.1 | 0.9 | 1.2 |
| 1989 | −0.7 | −0.4 | 2.4 | 1.0 | 0.3 | NA | NA | 2.8 | 2.8 | 0.4 | 1.3 | −2.4 | NA | 1.7 | −1.2 |
| 1990 | −2.9 | −2.8 | −0.5 | NA | −3.5 | NA | NA | −4.8 | 1.0 | −2.2 | −3.6 | NA | NA | NA | −2.9 |
| Electric power | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 3.0 | 2.5 | 0.3 | 6.1 | 5.2 | −1.1 | 4.2 | 0.7 | 1.4 | 1.6 | 2.5 | 1.4 | 2.0 | 9.4 | −1.1 |
| 1986 | 4.6 | 0.6 | 6.6 | 9.2 | 4.6 | 1.9 | 3.7 | 2.6 | 5.6 | 2.6 | 8.6 | −14.9 | 0.5 | 12.3 | 0.5 |
| 1987 | 4.0 | 4.1 | 4.9 | 3.2 | 3.1 | −0.4 | 5.3 | 46.7 | 0.2 | 12.9 | −15.4 | 14.1 | 2.8 | 6.4 | 0.3 |
| 1988 | 1.5 | 5.3 | 1.5 | −5.2 | 0.6 | 0.8 | 4.2 | 11.6 | −1.3 | −9.0 | 45.4 | 18.3 | 0.6 | −2.0 | −2.5 |
| 1989 | 1.9 | −0.8 | −0.8 | 10.9 | 2.8 | NA | NA | 11.4 | −0.9 | 7.7 | 6.8 | −16.5 | NA | 12.2 | 0.1 |
| 1990 | 0.3 | −0.5 | 1.2 | NA | −3.2 | NA | NA | −4.2 | −8.2 | 9.0 | −10.5 | NA | NA | NA | −17.8 |
| Fuels | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 0.8 | 0.6 | 0.0 | 1.0 | 3.0 | −8.3 | −0.3 | 49.1 | — | 2.6 | −1.6 | −3.1 | — | 0.6 | 0.4 |
| 1986 | 3.3 | 1.3 | 2.3 | 9.5 | 7.2 | −6.7 | 2.9 | 4.9 | — | 4.3 | 0.3 | 9.6 | — | 0.2 | 3.1 |
| 1987 | 1.9 | −1.0 | 0.9 | 1.7 | 3.7 | −4.9 | 0.9 | 4.5 | — | −4.6 | −3.0 | −6.3 | — | 1.9 | −1.9 |
| 1988 | 2.4 | 2.4 | 4.3 | 5.5 | 2.3 | −18.3 | −1.5 | 6.3 | — | −3.8 | 4.6 | −4.0 | — | −0.5 | −1.4 |
| 1989 | −1.6 | −3.3 | 1.2 | 4.9 | −2.4 | NA | NA | −1.5 | — | 5.5 | −1.9 | −22.6 | — | 1.2 | −0.3 |
| 1990 | −4.0 | −5.5 | −2.9 | NA | −2.9 | NA | NA | −22.4 | — | −11.0 | −5.9 | NA | — | NA | −18.9 |
| Metallurgy | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 1.7 | 0.8 | 8.5 | 1.5 | 0.8 | 0.2 | 5.2 | — | 36.5 | 0.9 | 4.8 | 10.9 | 6.9 | — | — |
| 1986 | 3.4 | 3.4 | 26.2 | 3.9 | 3.4 | −0.6 | 0.1 | — | 158.4 | 1.4 | 14.3 | 14.9 | 10.4 | — | — |
| 1987 | 1.4 | 0.4 | 4.2 | 2.1 | 1.4 | −1.5 | 5.4 | — | 26.3 | 0.5 | 16.8 | 8.4 | 10.0 | — | — |
| 1988 | 2.1 | 2.2 | 22.5 | −2.3 | 4.0 | −0.7 | 2.1 | — | 2.3 | 1.3 | 14.8 | 13.9 | 3.3 | — | — |
| 1989 | −0.9 | −2.7 | 16.8 | 4.1 | −0.9 | NA | NA | — | −4.7 | −1.8 | 3.3 | 1.8 | NA | — | — |
| 1990 | −2.3 | −4.2 | 8.2 | NA | −4.1 | NA | NA | — | 11.5 | −4.3 | 6.2 | NA | NA | — | — |

## TABLE A2.1. U.S.S.R.: Derivation of CIA Type Synthetic Measures of Industrial Growth by Republic and by Branch, 1981–90.—Continued

(Annual Rates of Growth, Percent)

| Type of Output | RSFSR (1) | UkSSR (2) | BSSR (3) | UzSSR (4) | KSSR (5) | GSSR (6) | AzSSR (7) | LiSSR (8) | MSSR (9) | LaSSR (10) | KiSSR (11) | TaSSR (12) | ArSSR (13) | TuSSR (14) | ESSR (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Machinery** | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 1.2 | 1.5 | 3.8 | 1.6 | 1.0 | 4.2 | 4.8 | −0.3 | 4.3 | 1.3 | 1.0 | −0.1 | 6.5 | 1.6 | 0.2 |
| 1986 | 2.0 | 3.0 | 4.9 | 1.7 | 1.1 | −0.3 | 3.7 | 3.7 | 3.9 | 2.0 | 2.0 | 4.5 | 3.7 | −5.3 | 1.4 |
| 1987 | 2.7 | 3.6 | 6.2 | 3.5 | 0.9 | 2.4 | 6.1 | 2.6 | 8.9 | 3.6 | 2.7 | 3.9 | 4.4 | 5.4 | 3.9 |
| 1988 | 2.6 | 3.3 | 5.5 | 5.0 | −0.8 | 4.9 | 1.5 | 5.6 | 3.0 | 0.8 | 3.5 | 4.8 | −4.6 | −2.0 | 0.8 |
| 1989 | −2.3 | 0.0 | 2.8 | −3.9 | −1.3 | NA | NA | 4.9 | 4.3 | −1.5 | −3.9 | −1.5 | NA | −4.6 | −2.0 |
| 1990 | −3.5 | −2.8 | −0.8 | NA | −6.8 | NA | NA | −3.7 | −0.1 | −2.7 | −5.1 | NA | NA | NA | 7.9 |
| **Chemicals** | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 3.8 | 3.1 | 4.7 | 6.8 | 8.4 | 5.8 | 2.8 | 1.6 | 7.7 | 5.5 | 3.8 | 7.8 | −1.5 | 2.4 | 3.6 |
| 1986 | 3.6 | 3.6 | 7.6 | 13.5 | 8.6 | 10.7 | 0.3 | 6.7 | 5.6 | 5.6 | 4.6 | 9.6 | 8.8 | 12.0 | 5.0 |
| 1987 | 1.7 | 3.6 | 5.2 | 6.1 | 6.0 | 7.4 | 0.4 | 0.1 | 5.3 | 3.5 | 3.6 | 6.0 | 4.4 | 13.3 | 2.4 |
| 1988 | 2.1 | 1.2 | 4.3 | 5.1 | 5.9 | 1.1 | −3.9 | 0.9 | 15.5 | 1.1 | 7.2 | 9.3 | −9.1 | −0.5 | 1.8 |
| 1989 | −2.9 | −2.1 | −0.7 | −4.3 | −2.3 | NA | NA | −7.2 | 4.7 | −1.3 | −7.7 | −1.0 | NA | −6.2 | −1.1 |
| 1990 | −5.3 | −3.8 | −3.5 | NA | −3.1 | NA | NA | −10.5 | 2.5 | −1.2 | 0.5 | NA | NA | NA | −18.1 |
| **Wood, pulp, and paper** | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 1.2 | 3.0 | 2.5 | 4.5 | 3.7 | 6.1 | 5.4 | 3.6 | 3.4 | 3.2 | 3.7 | 2.9 | 5.2 | 2.4 | 2.5 |
| 1986 | 4.5 | 4.5 | 4.5 | 4.7 | 6.5 | 2.9 | 5.8 | 5.1 | 4.5 | 3.5 | −1.5 | 7.5 | 5.9 | 14.2 | 5.2 |
| 1987 | 3.2 | 2.2 | 5.1 | 5.7 | 4.9 | 1.4 | 0.7 | 2.1 | 4.1 | 3.2 | 0.9 | 6.0 | 5.4 | 2.9 | 3.2 |
| 1988 | 1.3 | 6.8 | 5.8 | 5.4 | 3.0 | −2.5 | 0.8 | 3.4 | 4.9 | 4.1 | 6.9 | −2.6 | −3.7 | 2.9 | 6.1 |
| 1989 | 1.3 | 1.1 | 1.1 | 3.8 | 0.2 | NA | NA | −1.9 | 2.0 | −3.1 | −2.3 | −0.9 | NA | −1.6 | −1.6 |
| 1990 | −4.7 | 1.2 | 1.1 | NA | 0.3 | NA | NA | −5.9 | 6.0 | −3.1 | −5.9 | NA | NA | NA | 0.1 |
| **Construction materials** | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 1.6 | 0.9 | 2.4 | 3.8 | 0.3 | 4.4 | 5.0 | 5.4 | 2.3 | 0.3 | 1.8 | 2.1 | 1.6 | 5.2 | 1.0 |
| 1986 | 4.9 | 2.9 | 3.9 | −1.0 | 1.9 | 7.2 | 2.6 | 2.5 | 7.9 | 4.9 | 7.9 | 4.8 | 5.0 | 3.3 | 2.5 |
| 1987 | 3.7 | 0.9 | 6.6 | 3.8 | 6.7 | 4.1 | 4.9 | 2.4 | 6.3 | 4.6 | 3.6 | 6.3 | 5.6 | 5.5 | 4.2 |
| 1988 | 4.1 | 5.3 | 6.7 | 2.6 | 6.8 | 1.6 | −5.1 | 3.3 | 3.0 | 3.2 | 4.0 | 5.6 | −5.8 | 0.9 | 4.5 |
| 1989 | 1.4 | 0.6 | 3.7 | 0.2 | 3.0 | NA | NA | 2.9 | −3.7 | −0.3 | 1.3 | 0.2 | NA | 2.7 | −1.2 |
| 1990 | −3.9 | −5.0 | −1.6 | NA | −5.5 | NA | NA | −7.7 | 2.7 | −4.8 | −2.3 | NA | NA | NA | 12.9 |

## TABLE A2.1. U.S.S.R.: Derivation of CIA Type Synthetic Measures of Industrial Growth by Republic and by Branch, 1981–90.—Continued

(Annual Rates of Growth, Percent)

| Type of Output | RSFSR (1) | UkSSR (2) | BSSR (3) | UzSSR (4) | KSSR (5) | GSSR (6) | AzSSR (7) | LiSSR (8) | MSSR (9) | LaSSR (10) | KiSSR (11) | TaSSR (12) | ArSSR (13) | TuSSR (14) | ESSR (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Light industry | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 0.4 | 1.7 | 3.5 | 3.7 | 1.9 | 3.9 | 2.8 | 3.4 | 4.9 | 0.6 | 2.1 | 3.2 | 7.1 | 0.8 | 2.5 |
| 1986 | 0.4 | 0.4 | 2.4 | 4.4 | 1.4 | 2.7 | 0.3 | 3.1 | 1.4 | 1.4 | 1.4 | −1.4 | 0.8 | 8.0 | 2.9 |
| 1987 | 1.7 | 2.7 | 3.7 | −0.9 | 3.7 | 2.3 | 0.7 | 3.9 | 6.7 | 2.7 | 1.7 | 3.3 | 3.6 | −0.2 | 4.2 |
| 1988 | 2.4 | 2.4 | 3.2 | 0.9 | 3.2 | 4.0 | −2.3 | 2.3 | 4.9 | 0.5 | 7.2 | 0.2 | −0.1 | 7.4 | 1.0 |
| 1989 | 1.5 | 2.4 | 2.3 | 3.5 | 4.1 | NA | NA | 2.7 | 4.8 | 0.6 | 5.0 | 3.7 | NA | 2.9 | −0.4 |
| 1990 | 0.0 | 0.4 | 0.9 | NA | 0.9 | NA | NA | 2.4 | 3.4 | −0.9 | −0.8 | NA | NA | NA | −17.1 |
| Food industry | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 2.1 | 1.6 | 2.8 | 4.3 | 1.6 | 2.0 | 3.4 | 2.5 | 2.7 | 1.4 | 6.2 | 0.3 | 3.0 | 4.3 | 1.3 |
| 1986 | −2.0 | −4.8 | −3.9 | −1.6 | −0.1 | −5.9 | −24.9 | −3.4 | −9.5 | −4.8 | −2.9 | −5.8 | 0.3 | −8.1 | −3.3 |
| 1987 | 3.5 | 5.6 | 5.5 | 4.8 | 6.2 | 1.4 | 3.7 | 1.0 | 0.7 | 4.6 | −3.2 | −0.3 | 0.5 | 7.5 | 2.3 |
| 1988 | 4.0 | 1.2 | 4.9 | 3.8 | 2.9 | 2.0 | 13.9 | 3.1 | −0.7 | 4.0 | 0.0 | 3.1 | −1.2 | 6.9 | 1.1 |
| 1989 | 3.9 | 5.0 | 3.9 | 2.2 | 4.6 | NA | NA | −0.2 | 4.6 | 4.0 | 8.7 | 4.0 | NA | 6.3 | −1.3 |
| 1990 | 0.0 | −0.1 | 0.9 | NA | −0.7 | NA | NA | −6.9 | 2.1 | −4.2 | 2.8 | NA | NA | NA | 3.2 |

Source and Methodology: Note: These so-called "corrected" synthetic measures are derived because, in the absence of independently derived estimates of industrial output (total and by branch) for each of the republics, it is necessary to obtain substitute measures, albeit less than ideally constructed. The official *gross value of output* (GVO) indexes by republic have the same distortions as the parallel indexes at the All-Union level. This table derives measures paralleling the same concept underlying the CIA synthetically derived indexes (total and by branch) at the All-Union level. The official GVO indexes for each of the republics are adjusted by the *relative difference* between the official GVO measure at the *All-Union level* (set forth in table 1.2) and the CIA synthetically derived measure for each year (total and by branch) at the *All-Union* level (set forth in table 5).

Synthetic measure of rates of growth by republic were derived as follows:

(1) Total industry: Derived by the following formula:

$r = a^i b^i$,

where r = CIA's measure for rates of growth; $a^i$ = annual rate of growth of branch i; $b^i$ = weight of this branch in total output for each of the republics in 1988 where output by branch is measured by value added *not* by the official measure of GVO (see table 3.1).

(2) All branches and years were calculated by the following formula:

$r = I * A^i / 100 - 100$,

where I = index by branch and by republic shown in table 1.2; $A^i$ = index for republic i derived by formula: $A^i = k^i + 100$, where $k^i$ is the *relative* difference in rate of growth by branch between the *official* GVO and CIA *synthetic* measures for the USSR as a whole. See column 3 of table 5.

NA = Not available.

— = Zero or negligible.

## TABLE A3. U.S.S.R.: Official Measure of *Value Added* in Industry by Republic and by Branch, 1988 [a]

(Billions of Rubles)

| Type of Output | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total industry | 301.409 | 192.513 | 49.311 | 10.233 | 7.395 | 13.127 | 3.669 | 5.515 | 3.858 | 2.439 | 2.960 | 1.880 | 1.607 | 2.806 | 1.911 | 2.183 |
| Electric power | 24.353 | 15.186 | 3.624 | 0.615 | 0.707 | 1.461 | 0.382 | 0.399 | 0.406 | 0.234 | 0.172 | 0.282 | 0.238 | 0.233 | 0.160 | 0.252 |
| Fuels | 36.653 | 24.925 | 6.460 | 0.326 | 0.432 | 2.027 | 0.101 | 1.117 | 0.080 | — | 0.020 | 0.099 | 0.055 | — | 0.870 | 0.142 |
| Metallurgy | 27.253 | 16.819 | 6.172 | 0.318 | 0.268 | 2.534 | 0.284 | 0.253 | — | 0.061 | 0.033 | 0.115 | 0.200 | 0.168 | — | — |
| Machinery | 102.075 | 69.311 | 16.939 | 4.141 | 1.773 | 2.303 | 1.001 | 0.832 | 1.224 | 0.760 | 1.072 | 0.668 | 0.319 | 1.054 | 0.166 | 0.512 |
| Chemicals | 23.383 | 13.598 | 3.409 | 1.448 | 0.921 | 1.139 | 0.209 | 1.536 | 0.213 | 0.052 | 0.182 | 0.010 | 0.144 | 0.262 | 0.147 | 0.112 |
| Wood, pulp, and paper | 16.671 | 12.951 | 1.477 | 0.511 | 0.159 | 0.362 | 0.153 | 0.076 | 0.267 | 0.099 | 0.248 | 0.045 | 0.036 | 0.065 | 0.024 | 0.198 |
| Construction materials | 18.768 | 10.951 | 2.992 | 0.672 | 0.855 | 1.022 | 0.389 | 0.332 | 0.306 | 0.228 | 0.181 | 0.142 | 0.131 | 0.251 | 0.169 | 0.145 |
| Light industry | 18.563 | 9.511 | 2.574 | 1.047 | 1.348 | 0.704 | 0.439 | 0.397 | 0.434 | 0.341 | 0.303 | 0.256 | 0.284 | 0.457 | 0.218 | 0.251 |
| Food industry | 23.342 | 13.083 | 3.852 | 0.675 | 0.659 | 1.304 | 0.584 | 0.385 | 0.608 | 0.529 | 0.563 | 0.161 | 0.129 | 0.228 | 0.145 | 0.439 |
| Industry [b] | 10.242 | 6.179 | 1.812 | 0.479 | 0.274 | 0.164 | 0.127 | 0.188 | 0.320 | 0.135 | 0.185 | 0.102 | 0.070 | 0.088 | 0.013 | 0.132 |

**Source and Methodology:** Data are from the Input-Output table for each republic as published by *Goskomstat SSSR*: Otchetnyy mezhotraslevoy balans proizvodstva i raspredeleniya produktsii v narodnom khozyaistve za 1988 god v stoimostnom vyrazhenii v tsenakh konechnogo potrebleniya (various tables).

Value added is expressed in current prices reflecting factor incomes plus turnover (excise) taxes, miscellaneous fees, and subsidies. The largest adjustment between this coverage of industrial output and the official measure of gross value of output in table 2 is the absence of intermediate product used in the production of final product.

[a] Official measure of value added (Soviet definition) expressed in 1988 established producer's prices.

[b] Not elsewhere classified.

— = Zero or negligible.

n.e.c. = Not elsewhere classified.

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## TABLE A3.1. U.S.S.R.: Shares by Branch in Total Value Added of Industry by Republic, 1988.

(Percent)

| Type of Output | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Industry | 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 |
| Electric power | 8.1 | 7.9 | 7.3 | 6.0 | 9.6 | 11.2 | 10.4 | 7.2 | 10.5 | 9.6 | 5.8 | 15.0 | 14.8 | 8.3 | 8.4 | 11.5 |
| Fuels | 12.2 | 12.9 | 13.1 | 3.2 | 5.8 | 15.6 | 2.8 | 20.2 | 2.1 | — | 0.7 | 5.3 | 3.4 | — | 45.5 | 6.5 |
| Metallurgy | 9.0 | 8.7 | 12.5 | 3.1 | 3.6 | 19.5 | 7.7 | 4.6 | — | 2.5 | 1.1 | 6.1 | 12.4 | 6.0 | — | — |
| Machinery | 33.9 | 36.0 | 34.4 | 40.5 | 24.0 | 17.7 | 27.3 | 15.1 | 31.7 | 31.2 | 36.2 | 35.5 | 19.9 | 37.6 | 8.7 | 23.4 |
| Chemicals | 7.8 | 7.1 | 6.9 | 14.2 | 12.5 | 8.7 | 5.7 | 27.9 | 5.5 | 2.1 | 6.2 | 0.5 | 9.0 | 9.3 | 7.7 | 5.1 |
| Wood, pulp, and paper | 5.5 | 6.7 | 3.0 | 5.0 | 2.1 | 2.8 | 4.2 | 1.4 | 6.9 | 4.1 | 8.4 | 2.4 | 2.2 | 2.3 | 1.2 | 9.1 |
| Construction materials | 6.2 | 5.7 | 6.1 | 6.6 | 11.6 | 7.8 | 10.6 | 6.0 | 7.9 | 9.3 | 6.1 | 7.6 | 8.2 | 8.9 | 8.9 | 6.7 |
| Light industry | 6.2 | 4.9 | 5.2 | 10.2 | 18.2 | 5.4 | 12.0 | 7.2 | 11.2 | 14.0 | 10.2 | 13.6 | 17.7 | 16.3 | 11.4 | 11.5 |
| Food industry | 7.7 | 6.8 | 7.8 | 6.6 | 8.9 | 10.0 | 15.9 | 7.0 | 15.8 | 21.7 | 19.0 | 8.6 | 8.0 | 8.1 | 7.6 | 20.1 |
| Other Industry [a] | 3.4 | 3.2 | 3.7 | 4.7 | 3.7 | 1.3 | 3.5 | 3.4 | 8.3 | 5.5 | 6.3 | 5.4 | 4.4 | 3.1 | 0.7 | 6.0 |

Source: Derived from table 3.
[a] Not elsewhere classified.
— = Zero or negligible.

## TABLE A4. U.S.S.R.: CIA Synthetic Measures of Value of Output by Branch of Industry, 1980, 1985–90. [a]

(Billions of Rubles)

| Type of Output | 1980 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|
| Total industry | 204.5 | 224.6 | 230.1 | 237.0 | 243.3 | 241.9 | 235.0 |
| Electric power | 14.2 | 16.5 | 17.1 | 17.8 | 18.2 | 18.4 | 18.5 |
| Fuels | 19.4 | 20.2 | 20.9 | 21.3 | 21.6 | 21.2 | 20.4 |
| Metallurgy | 20.8 | 22.4 | 23.2 | 23.5 | 24.0 | 23.8 | 23.0 |
| Ferrous metallurgy | 12.6 | 13.4 | 13.9 | 14.0 | 14.2 | 13.9 | 13.4 |
| Nonferrous metallurgy | 8.2 | 9.0 | 9.3 | 9.5 | 9.8 | 9.9 | 9.6 |
| Machinery | 72.9 | 79.4 | 81.3 | 84.4 | 86.6 | 85.4 | 82.4 |
| Chemicals | 14.6 | 17.7 | 18.5 | 19.0 | 19.4 | 18.8 | 17.8 |
| Wood, pulp, and paper | 12.3 | 13.5 | 14.1 | 14.5 | 14.9 | 14.9 | 14.5 |
| Construction materials | 12.3 | 13.5 | 14.0 | 14.5 | 15.1 | 15.2 | 14.6 |
| Light industry | 14.1 | 15.2 | 15.4 | 15.7 | 16.0 | 16.3 | 16.3 |
| Food industry | 15.7 | 17.2 | 16.4 | 17.0 | 17.7 | 18.2 | 18.1 |
| Other industry [b] | 8.1 | 8.9 | 9.1 | 9.4 | 9.7 | 9.6 | 9.3 |

Source and Methodology:
Row 1: Summation of rows 2 to 4 and 7 to 13.
Row 4: Summation of rows 5 and 6.
Rows 2 to 3 and 5 to 13: CIA measures from the Office of Slavic and Eurasian Analysis, CIA.
[a] Expressed in factor cost prices of 1982.
[b] Not elsewhere classified.

## TABLE A4.1. U.S.S.R.: CIA Synthetic Measures of Annual Growth in Output by Branch of Industry, 1981–90.

(Percent)

| Type of Output | 1981–85 (Avg. Annual) | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| Total industry | 1.9 | 2.4 | 3.0 | 2.7 | −0.6 | −2.8 |
| Metallurgy | 1.5 | 3.4 | 1.4 | 2.2 | −0.9 | −3.2 |
| Ferrous metallurgy | 1.2 | 3.6 | 0.8 | 1.5 | −2.0 | −3.4 |
| Nonferrous metallurgy | 2.0 | 3.0 | 2.3 | 3.2 | 0.8 | −3.0 |
| Fuels | 0.8 | 3.3 | 1.9 | 1.4 | −1.6 | −4.0 |
| Electric power | 3.1 | 3.5 | 4.1 | 2.4 | 1.0 | 0.3 |
| Machinery | 1.7 | 2.4 | 3.7 | 2.7 | −1.4 | −3.5 |
| Chemicals | 3.8 | 4.7 | 2.7 | 2.2 | −2.9 | −5.3 |
| Wood, pulp, and paper | 1.9 | 4.5 | 2.2 | 3.2 | −0.5 | −2.2 |
| Construction materials | 1.8 | 4.0 | 3.7 | 4.2 | 0.6 | −4.0 |
| Light industry | 1.6 | 1.4 | 1.7 | 2.4 | 1.5 | 0.0 |
| Food industry | 1.8 | −4.7 | 3.6 | 4.1 | 3.1 | −0.8 |
| Other industry | 1.9 | 2.4 | 3.0 | 2.7 | −0.6 | −2.8 |

Source: CIA measures of growth are based on the ruble values given in table A4.
[a] Not elsewhere classified.

TABLE A5. U.S.S.R.: Official Soviet GVO and CIA Synthetic Measures of Annual Growth by Branch of Industry, 1981–90.

(Percent)

| Type of Output | Annual Growth Rate: Synthetic (1) | Annual Growth Rate: Official (2) | Difference: (2) minus (1) (3) |
|---|---|---|---|
| Total industry | | | |
| 1981–85 (average annual) | 1.9 | 3.6 | 1.7 |
| 1986 | 2.4 | 4.4 | 2.0 |
| 1987 | 3.0 | 3.8 | 0.8 |
| 1988 | 2.7 | 3.9 | 1.2 |
| 1989 | −0.6 | 1.7 | 2.3 |
| 1990 | −2.8 | −1.2 | 1.6 |
| Metallurgy | | | |
| 1981–85 (average annual) | 1.5 | 2.1 | 0.6 |
| 1986 | 3.4 | 4.0 | 0.6 |
| 1987 | 1.4 | 1.9 | 0.5 |
| 1988 | 2.2 | 2.8 | 0.6 |
| 1989 | −0.9 | 0.9 | 1.8 |
| 1990 | −3.2 | −2.7 | 0.5 |
| Fuels | | | |
| 1981–85 (average annual) | 0.8 | 1.2 | 0.4 |
| 1986 | 3.3 | 4.0 | 0.7 |
| 1987 | 1.9 | 1.9 | 0.0 |
| 1988 | 1.4 | 0.9 | −0.5 |
| 1989 | −1.6 | −0.9 | 0.7 |
| 1990 | −4.0 | −3.8 | 0.2 |
| Electric power | | | |
| 1981–85 (average annual) | 3.1 | 3.7 | 0.6 |
| 1986 | 3.5 | 3.0 | −0.5 |
| 1987 | 4.1 | 4.9 | 0.8 |
| 1988 | 2.4 | 1.9 | −0.5 |
| 1989 | 1.0 | 0.9 | −0.1 |
| 1990 | 0.3 | 1.8 | 1.5 |
| Machinery | | | |
| 1981–85 (average annual) | 1.7 | 6.2 | 4.5 |
| 1986 | 2.4 | 7.0 | 4.6 |
| 1987 | 3.7 | 5.6 | 1.9 |
| 1988 | 2.7 | 5.3 | 2.6 |
| 1989 | −1.4 | 2.5 | 3.9 |
| 1990 | −3.5 | 0.8 | 4.3 |
| Chemicals | | | |
| 1981–85 (average annual) | 3.8 | 4.9 | 1.1 |
| 1986 | 4.7 | 6.0 | 1.3 |
| 1987 | 2.7 | 4.7 | 2.0 |
| 1988 | 2.2 | 4.5 | 2.3 |
| 1989 | −2.9 | 0.9 | 3.8 |
| 1990 | −5.3 | −2.6 | 2.7 |
| Wood, pulp, and paper | | | |
| 1981–85 (average annual) | 1.9 | 3.5 | 1.6 |
| 1986 | 4.5 | 5.0 | 0.5 |
| 1987 | 2.2 | 2.9 | 0.7 |
| 1988 | 3.2 | 3.7 | 0.5 |
| 1989 | −0.5 | 1.8 | 2.3 |
| 1990 | −2.2 | −0.9 | 1.3 |

TABLE A5. U.S.S.R.: Official Soviet GVO and CIA Synthetic Measures of Annual Growth by Branch of Industry, 1981–90.—Continued

(Percent)

| Type of Output | Annual Growth Rate | | Difference |
|---|---|---|---|
| | Synthetic | Official | (2) minus (1) |
| | (1) | (2) | (3) |
| Construction materials | | | |
| 1981–85 (average annual) | 1.8 | 3.0 | 1.2 |
| 1986 | 4.0 | 5.0 | 1.0 |
| 1987 | 3.7 | 3.8 | 0.1 |
| 1988 | 4.2 | 4.6 | 0.4 |
| 1989 | 0.6 | 1.8 | 1.2 |
| 1990 | −4.0 | −0.9 | 3.1 |
| Light industry | | | |
| 1981–85 (average annual) | 1.6 | 1.6 | 0.0 |
| 1986 | 1.4 | 2.0 | 0.6 |
| 1987 | 1.7 | 1.0 | −0.7 |
| 1988 | 2.4 | 3.9 | 1.5 |
| 1989 | 1.5 | 1.9 | 0.4 |
| 1990 | 0.0 | 0.0 | 0.0 |
| Food industry | | | |
| 1981–85 (average annual) | 1.8 | 2.7 | 0.9 |
| 1986 | −4.7 | 2.0 | 6.7 |
| 1987 | 3.6 | 3.9 | 0.3 |
| 1988 | 4.1 | 3.8 | −0.3 |
| 1989 | 3.1 | 3.6 | 0.5 |
| 1990 | −0.8 | 0.0 | 0.8 |
| Other Industries [a] | | | |
| 1981–85 (average annual) | 1.9 | 3.6 | 1.7 |
| 1986 | 2.4 | 4.4 | 2.0 |
| 1987 | 3.0 | 3.8 | 0.8 |
| 1988 | 2.7 | 3.9 | 1.2 |
| 1989 | −0.6 | 1.7 | 2.3 |
| 1990 | −2.8 | −1.2 | 1.6 |

* Source and Methodology:
Column 1: Tabular materials from the Office of Slavic and Eurasian Analysis, CIA.
Column 2: Table 1.3.
Measures for both columns 1 and 2 are based on the average for the nine accounted for branches of industry (see total industry above).

[a] Not elsewhere classified.

## TABLE A6. U.S.S.R.: Alternative Measures of Total Industrial Output by Republic, 1981–90.

(Annual Rates of Growth, Percent)

| Measure and Year | RSFSR (1) | UkSSR (2) | BSSR (3) | UzSSR (4) | KSSR (5) | GSSR (6) | AzSSR (7) | LiSSR (8) | MSSR (9) | LaSSR (10) | KiSSR (11) | TaSSR (12) | ArSSR (13) | TuSSR (14) | ESSR (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Measure I | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 3.3 | 3.4 | 5.3 | 4.5 | 3.4 | 4.0 | 4.4 | 4.5 | 4.4 | 3.3 | 4.6 | 3.7 | 5.7 | 2.6 | 2.8 |
| 1986 | 4.5 | 4.2 | 6.7 | 5.6 | 5.1 | 2.3 | −2.0 | 4.8 | 2.6 | 3.7 | 4.3 | 1.7 | 4.5 | 4.8 | 3.8 |
| 1987 | 3.5 | 3.9 | 6.7 | 2.5 | 4.3 | 2.5 | 3.7 | 4.6 | 5.0 | 4.2 | 1.4 | 5.0 | 4.7 | 3.1 | 3.0 |
| 1988 | 3.8 | 4.1 | 6.3 | 3.3 | 3.7 | 3.2 | 3.4 | 5.7 | 3.3 | 3.5 | 6.8 | 5.5 | −1.1 | 4.3 | 3.1 |
| 1989 | 1.4 | 2.8 | 4.6 | 3.6 | 2.5 | NA | NA | 4.2 | 5.7 | 3.1 | 5.2 | 1.8 | NA | 3.3 | 0.7 |
| 1990 | −0.1 | −0.1 | 2.1 | NA | −0.8 | NA | NA | −2.8 | 3.2 | −0.2 | −0.6 | NA | NA | NA | 0.1 |
| Measure II | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 3.8 | 3.6 | 6.0 | 5.4 | 4.0 | 4.6 | 4.3 | 4.9 | 6.4 | 4.0 | 4.3 | 4.6 | 7.0 | 3.2 | 2.8 |
| 1986 | 5.3 | 4.6 | 8.0 | 6.8 | 5.7 | 3.5 | 1.7 | 5.6 | 8.2 | 4.7 | 6.2 | 3.6 | 6.6 | 3.8 | 4.2 |
| 1987 | 3.6 | 3.5 | 6.6 | 3.8 | 4.2 | 2.6 | 3.5 | 8.0 | 6.5 | 5.2 | 0.6 | 6.4 | 5.3 | 4.3 | 3.3 |
| 1988 | 3.8 | 4.3 | 7.1 | 3.9 | 3.5 | 3.0 | 0.9 | 6.0 | 3.5 | 2.7 | 12.2 | 8.1 | −1.7 | 1.3 | 2.1 |
| 1989 | 1.6 | 1.9 | 5.1 | 2.9 | 2.0 | NA | NA | 5.0 | 4.8 | 2.7 | 3.2 | −0.7 | −97.1 | 2.9 | 0.6 |
| 1990 | −0.6 | −0.6 | 2.2 | NA | −1.9 | NA | NA | −2.6 | 3.2 | 0.2 | −1.4 | NA | NA | NA | −0.9 |
| Measure III | | | | | | | | | | | | | | | |
| 1981–85 (average annual) | 1.6 | 1.5 | 3.5 | 3.6 | 2.5 | 2.7 | 2.9 | 2.8 | 4.3 | 1.7 | 2.2 | 3.1 | 4.7 | 2.3 | 1.0 |
| 1986 | 2.6 | 2.0 | 5.0 | 4.4 | 3.7 | 0.8 | −0.1 | 2.5 | 4.9 | 1.2 | 3.5 | 1.6 | 3.7 | 2.4 | 1.3 |
| 1987 | 2.6 | 2.5 | 5.4 | 3.0 | 3.4 | 1.8 | 2.6 | 7.1 | 5.6 | 4.2 | −0.2 | 5.6 | 4.3 | 4.0 | 2.6 |
| 1988 | 2.5 | 3.1 | 5.4 | 2.6 | 2.7 | 1.8 | −0.2 | 4.8 | 2.3 | 1.3 | 11.0 | 6.9 | −3.1 | 0.9 | 1.2 |
| 1989 | −0.7 | −0.4 | 2.4 | 1.0 | 0.3 | NA | NA | 2.8 | 2.8 | 0.4 | 1.3 | −2.4 | NA | 1.7 | −1.2 |
| 1990 | −2.9 | −2.8 | −0.5 | NA | −3.5 | NA | NA | −4.8 | 1.0 | −2.2 | −3.6 | NA | NA | NA | −2.9 |

Sources and Methodology:

*Measure I*: Official Soviet indexes of total gross output.

*Measure II*: Official Soviet indexes of gross output for nine industrial branches by republic expressed in 1982 established prices weighted by value added rubles by branch and by republic for 1988. Time series of indexes are from table A1.2; value added weights are from table A3.1.

*Measure III*: Official Soviet indexes of gross output for nine industrial branches by republic expressed in 1982 established prices *adjusted* upward or downward by the difference (expressed in relative terms) between the *All-Union official rates of growth* by branch and *CIA synthetic measures* of All-Union rates of growth by branch weighted by value added rubles by branch and by republic for 1988. Time series of official measures at the republic level are from table A1.3; at the All-Union level, table A5. CIA synthetic measures of growth by branch at the All-Union level are from table A5. Value added weights are from table A3.1.

NA = Not available.

## TABLE A7. U.S.S.R.: Cumulative Index of Growth of Total Industry by Republic, 1981–90 [a]

| Measure | Year | RSFSR (1) | UkSSR (2) | BSSR (3) | UzSSR (4) | KSSR (5) | GSSR (6) | AzSSR (7) | LiSSR (8) | MSSR (9) | LaSSR (10) | KiSSR (11) | TaSSR (12) | ArSSR (13) | TuSSR (14) | ESSR (15) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Measure I | 1980 | 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 |
| | 1981 | 103.3 | 103.4 | 105.3 | 104.5 | 103.4 | 104.0 | 104.4 | 104.5 | 104.4 | 103.3 | 104.6 | 103.7 | 105.7 | 102.6 | 102.8 |
| | 1982 | 106.7 | 106.9 | 110.9 | 109.2 | 106.9 | 108.2 | 109.0 | 109.2 | 109.0 | 106.7 | 109.4 | 107.5 | 111.7 | 105.3 | 105.7 |
| | 1983 | 110.2 | 110.6 | 116.8 | 114.1 | 110.6 | 112.5 | 113.8 | 114.1 | 113.8 | 110.2 | 114.4 | 111.5 | 118.1 | 108.0 | 108.6 |
| | 1984 | 113.9 | 114.3 | 122.9 | 119.3 | 114.3 | 117.0 | 118.8 | 119.3 | 118.8 | 113.9 | 119.7 | 115.6 | 124.8 | 110.8 | 111.7 |
| | 1985 | 117.6 | 118.2 | 129.5 | 124.6 | 118.2 | 121.7 | 124.0 | 124.6 | 124.0 | 117.6 | 125.2 | 119.9 | 131.9 | 113.7 | 114.8 |
| | 1986 | 122.9 | 123.2 | 138.1 | 131.6 | 124.2 | 124.5 | 121.5 | 130.6 | 127.2 | 122.0 | 130.6 | 122.0 | 137.9 | 119.2 | 119.2 |
| | 1987 | 127.2 | 128.0 | 147.4 | 134.9 | 129.6 | 127.6 | 126.0 | 136.6 | 133.6 | 127.1 | 132.4 | 128.1 | 144.4 | 122.8 | 122.7 |
| | 1988 | 132.1 | 133.2 | 156.7 | 139.3 | 134.4 | 131.7 | 130.3 | 144.4 | 138.0 | 131.5 | 141.4 | 135.1 | 142.8 | 128.1 | 126.5 |
| | 1989 | 133.9 | 136.9 | 163.9 | 144.4 | 137.7 | NA | NA | 150.5 | 145.9 | 135.6 | 148.8 | 137.5 | NA | 132.4 | 127.4 |
| | 1990 | 133.8 | 136.8 | 167.3 | NA | 136.6 | NA | NA | 146.2 | 150.6 | 135.4 | 147.9 | NA | NA | NA | 127.6 |
| Measure II | 1980 | 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 |
| | 1981 | 103.8 | 103.6 | 106.0 | 105.4 | 104.0 | 104.6 | 104.3 | 104.9 | 106.4 | 104.0 | 104.3 | 104.6 | 107.0 | 103.2 | 102.8 |
| | 1982 | 107.7 | 107.4 | 112.3 | 111.0 | 108.1 | 109.5 | 108.8 | 110.0 | 113.2 | 108.1 | 108.8 | 109.4 | 114.5 | 106.6 | 105.7 |
| | 1983 | 111.8 | 111.3 | 119.0 | 116.9 | 112.4 | 114.6 | 113.5 | 115.3 | 120.5 | 112.4 | 113.5 | 114.4 | 122.5 | 110.0 | 108.6 |
| | 1984 | 116.0 | 115.3 | 126.1 | 123.2 | 116.8 | 119.9 | 118.4 | 121.0 | 128.2 | 116.9 | 118.3 | 119.6 | 131.1 | 113.6 | 111.7 |
| | 1985 | 120.4 | 119.5 | 133.7 | 129.8 | 121.4 | 125.5 | 123.5 | 126.9 | 136.4 | 121.5 | 123.4 | 125.1 | 140.3 | 117.3 | 114.8 |
| | 1986 | 126.8 | 125.0 | 144.4 | 138.5 | 128.4 | 129.9 | 125.7 | 133.9 | 147.6 | 127.2 | 131.1 | 129.5 | 149.5 | 121.8 | 119.6 |
| | 1987 | 131.4 | 129.4 | 153.9 | 143.8 | 133.7 | 133.3 | 130.1 | 144.6 | 157.2 | 133.7 | 131.9 | 137.8 | 157.4 | 127.1 | 123.6 |
| | 1988 | 136.3 | 135.0 | 164.9 | 149.3 | 138.4 | 137.3 | 131.3 | 153.3 | 162.7 | 137.3 | 148.0 | 148.9 | 154.8 | 128.7 | 126.2 |
| | 1989 | 138.5 | 137.6 | 173.3 | 153.7 | 141.2 | NA | NA | 161.0 | 170.5 | 141.0 | 152.8 | 147.9 | NA | 132.4 | 126.9 |
| | 1990 | 137.7 | 136.8 | 177.2 | NA | 138.5 | NA | NA | 156.7 | 176.0 | 141.3 | 150.6 | NA | NA | NA | 125.8 |
| Measure III | 1980 | 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 |
| | 1981 | 101.6 | 101.5 | 103.5 | 103.6 | 102.5 | 102.7 | 102.9 | 102.8 | 104.3 | 101.7 | 102.2 | 103.1 | 104.7 | 102.3 | 101.0 |
| | 1982 | 103.1 | 103.0 | 107.1 | 107.4 | 105.1 | 105.5 | 105.9 | 105.6 | 108.8 | 103.3 | 104.4 | 106.2 | 109.6 | 104.7 | 102.1 |
| | 1983 | 104.8 | 104.6 | 110.8 | 111.3 | 107.8 | 108.4 | 108.9 | 108.5 | 113.5 | 105.0 | 106.6 | 109.5 | 114.7 | 107.1 | 103.2 |
| | 1984 | 106.4 | 106.1 | 114.7 | 115.3 | 110.5 | 111.3 | 112.1 | 111.5 | 118.4 | 106.8 | 108.9 | 112.8 | 120.0 | 109.6 | 104.2 |
| | 1985 | 108.0 | 107.7 | 118.7 | 119.5 | 113.3 | 114.4 | 115.3 | 114.6 | 123.5 | 108.6 | 111.3 | 116.3 | 125.6 | 112.1 | 105.3 |
| | 1986 | 110.9 | 109.8 | 124.6 | 124.8 | 117.4 | 115.3 | 115.2 | 117.5 | 129.6 | 109.9 | 115.2 | 118.1 | 130.3 | 114.7 | 106.6 |
| | 1987 | 113.8 | 112.6 | 131.3 | 128.6 | 121.4 | 117.4 | 118.2 | 125.8 | 136.9 | 114.4 | 115.0 | 124.8 | 135.8 | 119.3 | 109.4 |
| | 1988 | 116.6 | 116.0 | 138.4 | 131.9 | 124.7 | 119.5 | 118.0 | 131.7 | 140.1 | 115.9 | 127.6 | 133.4 | 131.6 | 120.4 | 110.7 |
| | 1989 | 115.8 | 115.6 | 141.8 | 133.2 | 125.0 | NA | NA | 135.5 | 144.0 | 116.4 | 129.2 | 130.2 | NA | 122.4 | 109.4 |
| | 1990 | 112.4 | 112.4 | 141.1 | NA | 120.6 | NA | NA | 128.9 | 145.5 | 113.9 | 124.6 | NA | NA | NA | 106.2 |

Source and Methodology: Calculated according to data in table 6. For coverage of the three measures see table A6.

[a] 1981–84 are based on a linear trend between 1980 and 1985.

NA = Not available.

TABLE A8. U.S.S.R.: Industrial Location Quotients by Republic Based on Output by Branch, 1980, 1985–90 [a]

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Electric power | 1980 | 1.00 | 1.11 | 0.92 | 0.88 | 0.95 | 1.45 | 0.68 | 0.81 | 0.92 | 1.03 | 0.39 | 0.82 | 1.58 | 1.14 | 0.79 | 2.09 |
| | 1985 | 1.00 | 1.12 | 0.90 | 0.71 | 1.04 | 1.61 | 0.51 | 0.82 | 0.78 | 0.89 | 0.37 | 0.75 | 1.44 | 0.96 | 1.11 | 1.77 |
| | 1986 | 1.00 | 1.12 | 0.87 | 0.71 | 1.08 | 1.61 | 0.50 | 0.87 | 0.76 | 0.89 | 0.36 | 0.78 | 1.19 | 0.92 | 1.20 | 1.71 |
| | 1987 | 1.00 | 1.13 | 0.87 | 0.70 | 1.08 | 1.58 | 0.48 | 0.88 | 1.07 | 0.84 | 0.39 | 0.65 | 1.29 | 0.90 | 1.23 | 1.67 |
| | 1988 | 1.00 | 1.13 | 0.91 | 0.68 | 1.02 | 1.56 | 0.49 | 0.91 | 1.15 | 0.85 | 0.35 | 0.91 | 1.50 | 0.94 | 1.19 | 1.62 |
| | 1989 | 1.00 | 1.14 | 0.88 | 0.65 | 1.10 | 1.58 | NA | NA | 1.24 | 0.80 | 0.37 | 0.93 | 1.24 | NA | 1.30 | 1.62 |
| | 1990 | 1.00 | 1.13 | 0.86 | 0.63 | NA | 1.52 | NA | NA | 1.21 | 0.71 | 0.40 | 0.82 | NA | NA | NA | 1.31 |
| Fuels | 1980 | 1.00 | 1.13 | 0.81 | 1.13 | 0.64 | 1.25 | 0.31 | 1.56 | 0.08 | — | 0.06 | 0.14 | 0.12 | — | 2.71 | 0.38 |
| | 1985 | 1.00 | 1.14 | 0.80 | 1.00 | 0.61 | 1.40 | 0.18 | 1.42 | 0.57 | — | 0.07 | 0.12 | 0.10 | — | 2.80 | 0.38 |
| | 1986 | 1.00 | 1.12 | 0.78 | 0.96 | 0.64 | 1.43 | 0.16 | 1.50 | 0.57 | — | 0.07 | 0.12 | 0.11 | — | 2.71 | 0.38 |
| | 1987 | 1.00 | 1.13 | 0.76 | 0.93 | 0.64 | 1.45 | 0.15 | 1.49 | 0.58 | — | 0.06 | 0.11 | 0.10 | — | 2.72 | 0.37 |
| | 1988 | 1.00 | 1.16 | 0.78 | 0.94 | 0.68 | 1.47 | 0.13 | 1.46 | 0.60 | — | 0.06 | 0.12 | 0.09 | — | 2.69 | 0.37 |
| | 1989 | 1.00 | 1.16 | 0.76 | 0.94 | 0.71 | 1.45 | NA | NA | 0.59 | — | 0.06 | 0.11 | 0.07 | — | 2.73 | 0.38 |
| | 1990 | 1.00 | 1.15 | 0.74 | 0.92 | NA | 1.46 | NA | NA | 0.48 | — | 0.06 | 0.11 | NA | — | NA | 0.32 |
| Metallurgy | 1980 | 1.00 | 1.20 | 1.52 | 0.06 | 0.51 | 1.80 | 0.60 | 0.34 | — | 0.01 | 0.21 | — | — | — | — | — |
| | 1985 | 1.00 | 1.22 | 1.46 | 0.08 | 0.48 | 1.74 | 0.51 | 0.40 | — | 0.04 | 0.21 | — | — | — | — | — |
| | 1986 | 1.00 | 1.21 | 1.46 | 0.10 | 0.48 | 1.72 | 0.49 | 0.41 | — | 0.09 | 0.20 | — | — | — | — | — |
| | 1987 | 1.00 | 1.22 | 1.44 | 0.10 | 0.49 | 1.70 | 0.48 | 0.42 | — | 0.12 | 0.20 | — | — | — | — | — |
| | 1988 | 1.00 | 1.23 | 1.46 | 0.12 | 0.47 | 1.75 | 0.49 | 0.43 | — | 0.12 | 0.20 | — | — | — | — | — |
| | 1989 | 1.00 | 1.23 | 1.42 | 0.13 | 0.49 | 1.74 | NA | NA | — | 0.11 | 0.20 | — | — | — | — | — |
| | 1990 | 1.00 | 1.23 | 1.39 | 0.14 | NA | 1.72 | NA | NA | — | 0.12 | 0.19 | — | — | — | — | — |
| Machinery | 1980 | 1.00 | 1.09 | 1.06 | 1.01 | 0.61 | 0.63 | 0.51 | 0.50 | 0.97 | 0.61 | 1.00 | 1.01 | 0.36 | 1.01 | 0.19 | 0.53 |
| | 1985 | 1.00 | 1.08 | 1.06 | 1.04 | 0.58 | 0.61 | 0.53 | 0.56 | 0.84 | 0.66 | 1.00 | 0.93 | 0.33 | 1.12 | 0.20 | 0.51 |
| | 1986 | 1.00 | 1.07 | 1.06 | 1.04 | 0.57 | 0.60 | 0.51 | 0.60 | 0.84 | 0.65 | 1.00 | 0.93 | 0.34 | 1.12 | 0.19 | 0.51 |
| | 1987 | 1.00 | 1.06 | 1.06 | 1.04 | 0.57 | 0.58 | 0.51 | 0.62 | 0.83 | 0.68 | 1.00 | 0.94 | 0.33 | 1.13 | 0.19 | 0.52 |
| | 1988 | 1.00 | 1.08 | 1.09 | 1.05 | 0.60 | 0.57 | 0.54 | 0.62 | 0.85 | 0.71 | 1.00 | 0.93 | 0.34 | 1.11 | 0.18 | 0.52 |
| | 1989 | 1.00 | 1.07 | 1.09 | 1.07 | 0.57 | 0.56 | NA | NA | 0.88 | 0.73 | 0.99 | 0.88 | 0.34 | NA | 0.18 | 0.52 |
| | 1990 | 1.00 | 1.06 | 1.09 | 1.06 | NA | 0.54 | NA | NA | 0.89 | 0.72 | 0.98 | 0.86 | NA | NA | NA | 0.57 |
| Chemicals | 1980 | 1.00 | 1.10 | 0.97 | 1.29 | 0.75 | 0.73 | 0.51 | 1.08 | 0.74 | 0.32 | 0.99 | 0.08 | 0.65 | 1.43 | 0.58 | 1.25 |
| | 1985 | 1.00 | 1.10 | 0.94 | 1.24 | 0.83 | 0.91 | 0.52 | 0.99 | 0.63 | 0.36 | 1.08 | 0.08 | 0.77 | 0.98 | 0.57 | 1.28 |
| | 1986 | 1.00 | 1.08 | 0.93 | 1.24 | 0.88 | 0.93 | 0.55 | 1.01 | 0.64 | 0.36 | 1.09 | 0.08 | 0.82 | 1.01 | 0.60 | 1.28 |
| | 1987 | 1.00 | 1.08 | 0.94 | 1.24 | 0.92 | 0.96 | 0.58 | 0.98 | 0.62 | 0.36 | 1.10 | 0.08 | 0.84 | 1.01 | 0.67 | 1.29 |
| | 1988 | 1.00 | 1.10 | 0.94 | 1.25 | 0.96 | 1.00 | 0.59 | 0.94 | 0.60 | 0.43 | 1.10 | 0.08 | 0.90 | 0.96 | 0.66 | 1.32 |
| | 1989 | 1.00 | 1.10 | 0.94 | 1.24 | 0.93 | 1.00 | NA | NA | 0.56 | 0.45 | 1.11 | 0.07 | 0.92 | NA | 0.63 | 1.36 |
| | 1990 | 1.00 | 1.08 | 0.95 | 1.22 | NA | 1.02 | NA | NA | 0.54 | 0.46 | 1.14 | 0.08 | NA | NA | NA | 1.16 |

## TABLE A8. U.S.S.R.: Industrial Location Quotients by Republic Based on Output by Branch, 1980, 1985–90 [a]—Continued

| Type of Output | Year | USSR (1) | RSFSR (2) | UkSSR (3) | BSSR (4) | UzSSR (5) | KSSR (6) | GSSR (7) | AzSSR (8) | LiSSR (9) | MSSR (10) | LaSSR (11) | KiSSR (12) | TaSSR (13) | ArSSR (14) | TuSSR (15) | ESSR (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wood, pulp and paper | 1980 | 1.00 | 1.20 | 0.58 | 0.95 | 0.38 | 0.50 | 0.73 | 0.31 | 1.22 | 0.71 | 1.20 | 0.42 | 0.12 | 0.46 | 0.20 | 1.77 |
| | 1985 | 1.00 | 1.17 | 0.62 | 0.91 | 0.41 | 0.54 | 0.82 | 0.35 | 1.27 | 0.72 | 1.29 | 0.43 | 0.12 | 0.48 | 0.21 | 1.89 |
| | 1986 | 1.00 | 1.16 | 0.62 | 0.88 | 0.40 | 0.55 | 0.81 | 0.37 | 1.25 | 0.70 | 1.28 | 0.40 | 0.13 | 0.48 | 0.23 | 1.90 |
| | 1987 | 1.00 | 1.18 | 0.61 | 0.88 | 0.42 | 0.56 | 0.81 | 0.37 | 1.24 | 0.71 | 1.29 | 0.41 | 0.13 | 0.49 | 0.24 | 1.94 |
| | 1988 | 1.00 | 1.17 | 0.65 | 0.89 | 0.43 | 0.56 | 0.79 | 0.36 | 1.23 | 0.75 | 1.32 | 0.42 | 0.12 | 0.49 | 0.24 | 2.04 |
| | 1989 | 1.00 | 1.19 | 0.65 | 0.88 | 0.44 | 0.56 | NA | NA | 1.19 | 0.74 | 1.27 | 0.40 | 0.12 | NA | 0.23 | 2.03 |
| | 1990 | 1.00 | 1.15 | 0.66 | 0.88 | NA | 0.57 | NA | NA | 1.16 | 0.77 | 1.24 | 0.38 | NA | NA | NA | 2.05 |
| Construction materials | 1980 | 1.00 | 0.99 | 1.03 | 1.22 | 1.51 | 1.66 | 1.26 | 0.69 | 1.24 | 1.19 | 0.99 | 1.24 | 1.35 | 1.71 | 1.34 | 0.96 |
| | 1985 | 1.00 | 0.99 | 0.98 | 1.17 | 1.57 | 1.54 | 1.31 | 0.78 | 1.41 | 1.14 | 0.93 | 1.17 | 1.35 | 1.50 | 1.65 | 0.96 |
| | 1986 | 1.00 | 0.99 | 0.97 | 1.13 | 1.47 | 1.50 | 1.34 | 0.82 | 1.37 | 1.16 | 0.93 | 1.21 | 1.37 | 1.50 | 1.63 | 0.94 |
| | 1987 | 1.00 | 1.00 | 0.95 | 1.14 | 1.49 | 1.53 | 1.36 | 0.83 | 1.34 | 1.17 | 0.94 | 1.24 | 1.39 | 1.51 | 1.67 | 0.96 |
| | 1988 | 1.00 | 1.01 | 0.97 | 1.15 | 1.49 | 1.58 | 1.38 | 0.76 | 1.32 | 1.21 | 0.95 | 1.21 | 1.41 | 1.46 | 1.62 | 0.98 |
| | 1989 | 1.00 | 1.02 | 0.96 | 1.15 | 1.46 | 1.61 | NA | NA | 1.32 | 1.12 | 0.93 | 1.18 | 1.41 | NA | 1.64 | 0.97 |
| | 1990 | 1.00 | 1.01 | 0.94 | 1.14 | NA | 1.58 | NA | NA | 1.29 | 1.15 | 0.91 | 1.20 | NA | NA | NA | 1.13 |
| Light industry | 1980 | 1.00 | 0.93 | 0.81 | 1.46 | 2.52 | 1.06 | 1.44 | 1.30 | 1.46 | 1.41 | 1.52 | 2.04 | 2.98 | 1.45 | 2.56 | 1.69 |
| | 1985 | 1.00 | 0.88 | 0.81 | 1.48 | 2.65 | 1.08 | 1.47 | 1.33 | 1.52 | 1.55 | 1.46 | 1.98 | 3.17 | 1.69 | 2.58 | 1.83 |
| | 1986 | 1.00 | 0.87 | 0.80 | 1.45 | 2.69 | 1.07 | 1.48 | 1.40 | 1.52 | 1.52 | 1.46 | 1.97 | 3.10 | 1.66 | 2.73 | 1.86 |
| | 1987 | 1.00 | 0.87 | 0.81 | 1.44 | 2.64 | 1.08 | 1.50 | 1.39 | 1.54 | 1.57 | 1.47 | 2.01 | 3.13 | 1.67 | 2.70 | 1.93 |
| | 1988 | 1.00 | 0.88 | 0.82 | 1.44 | 2.64 | 1.10 | 1.59 | 1.34 | 1.52 | 1.69 | 1.46 | 2.07 | 3.07 | 1.74 | 2.84 | 1.94 |
| | 1989 | 1.00 | 0.88 | 0.82 | 1.40 | 2.65 | 1.12 | NA | NA | 1.51 | 1.68 | 1.43 | 2.07 | 3.13 | NA | 2.84 | 1.92 |
| | 1990 | 1.00 | 0.87 | 0.81 | 1.37 | NA | 1.13 | NA | NA | 1.57 | 1.66 | 1.40 | 2.04 | NA | NA | NA | 1.57 |
| Food industry | 1980 | 1.00 | 0.98 | 1.24 | 1.42 | 0.86 | 1.02 | 2.82 | 2.38 | 2.03 | 2.84 | 1.83 | 1.36 | 1.19 | 1.40 | 0.79 | 1.66 |
| | 1985 | 1.00 | 1.00 | 1.23 | 1.38 | 0.92 | 1.01 | 2.61 | 2.46 | 2.00 | 2.78 | 1.81 | 1.59 | 1.09 | 1.32 | 0.93 | 1.67 |
| | 1986 | 1.00 | 1.02 | 1.23 | 1.35 | 0.94 | 1.05 | 2.56 | 2.06 | 2.00 | 2.58 | 1.81 | 1.61 | 1.08 | 1.38 | 0.90 | 1.69 |
| | 1987 | 1.00 | 1.02 | 1.25 | 1.34 | 0.96 | 1.07 | 2.53 | 2.07 | 1.94 | 2.48 | 1.82 | 1.54 | 1.03 | 1.32 | 0.93 | 1.69 |
| | 1988 | 1.00 | 1.04 | 1.23 | 1.33 | 0.97 | 1.06 | 2.58 | 2.29 | 1.90 | 2.48 | 1.85 | 1.46 | 1.03 | 1.34 | 0.96 | 1.68 |
| | 1989 | 1.00 | 1.05 | 1.24 | 1.30 | 0.94 | 1.07 | NA | NA | 1.79 | 2.42 | 1.84 | 1.48 | 1.03 | NA | 0.98 | 1.62 |
| | 1990 | 1.00 | 1.04 | 1.24 | 1.28 | NA | 1.07 | NA | NA | 1.71 | 2.39 | 1.76 | 1.53 | NA | NA | NA | 1.66 |

Source and Methodology: The location quotient relates the share of the official measure of gross output that a particular branch is in total industrial output in a *republic* related to the corresponding share for the USSR as a whole:

$Q^r_i = (L^r_i / L^r) / (L^u_i / L^u)$,

where $L^r_i$ = output in branch i of republic r; $L^r$ = total industrial output in republic r; $L^u_i$ = output in branch i of the USSR as a whole; $Lu^u$ = total output in industry in the U.S.S.R. Data are from table A3.1.

[a] USSR = 1.00

— = Zero or negligible.

NA = Not available.

# REGIONAL ECONOMIC DISPARITIES, GORBACHEV'S POLICIES, AND THE DISINTEGRATION OF THE SOVIET UNION

By Gertrude E. Schroeder *

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## SUMMARY

From the outset, Soviet regional policies were carried out within a framework of highly centralized economic administration and geared to serve the perceived interests of the union as a whole. The particular needs and preferences of the republics got short shrift in this process. Whereas republic planners wanted to create relatively diversified economies, Moscow planners opted for specialization enforced through its control over investment. Although political rhetoric long proclaimed the goal of evening out levels of development among the republics and various national groups, the policies actually implemented did not consistently promote that goal, although they did foster some industrialization everywhere and they put in place systems of universally available education and health care.

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The ultimate consequences of Soviet regional policies can be seen in the present large disparities in levels of development among the republics. In the late 1980s, the poorest republics (Uzbekistan and Tadzhikistan) had estimated per capita GNPs of only about a third of that of the R.S.F.S.R. Living standards in Tadzhikistan, as measured by per capita consumption, were only about half the Russian level, which in turn was 22 percent below that in Estonia. Differences had widened in recent years. All republics had economic structures that were severely distorted by Western comparison, with overblown industrial sectors and grossly underdeveloped service sectors, especially retail trade and personal services. Environmental damage was ubiquitous. The distortions and damage are physically embodied in each republic in its patterns of land use, its plants and equipment, and the skills and distribution of its work force.

Moscow's preference for regional specialization and its penchant for gigantomania combined to produce monopolistic industries and large interrepublic trade dependencies. Most republics conduct the majority of their trade with one another, and that trade supplies critical needs to sustain domestic consumption and also provides outlets for surplus production. Such are the physical legacies and economic realities that Soviet regional policies bequeathed to its fifteen successor states in varying degrees and configurations. Other legacies are republic governments without experience in real governance and ethnically fragmented population structures.

Although Gorbachev sought to revitalize the Soviet state and its constituent peoples, his often contradictory and misguided policies instead hastened its demise. Glasnost provided republican leaders with many forums in which to air long-standing grievances against policies made in Moscow and their consequences. Perestroika with its inconsistent economic reforms added to the list of grievances, but also accorded the republics and enterprises more leeway in economic decision making. The latter, coupled with Gorbachev's policy of democratization and greater autonomy for the republics in general, fueled the smoldering fires of latent separatism that were inherent in an administrative structure based on dominant nationality groups. Gorbachev was unable to control the centrifugal forces rooted in Soviet regional policies that he unintentionally unleashed.

## INTRODUCTION

For many decades, Soviet policy statements proclaimed the goal of evening out levels of economic development and equalizing living standards among the country's diverse nationalities. Moreover, as a "voluntary" federation of theoretically sovereign republics, Soviet legislation supposedly gave each of them an equal role in formulating national economic policies. The advent of glasnost under Mikhail Gorbachev demonstrated vividly, however, that the realities were quite otherwise. Disparities in levels of development and living standards among the Soviet Union's major nationality groups not only were large, but also had been widening in recent years. Moreover, economic policies made in Moscow and enforced through highly centralized planning and administration, while pro-

moting economic development everywhere, created severely distorted economies and ecological disasters in many republics. With "radical," decentralizing economic reforms once again on the agenda in Moscow, the regional consequences of past economic policies and practices provided a large added dimension to the center-periphery tensions that were unleashed by other facets of Gorbachev's perestroika. After the dissolution of the Soviet Union at the end of December, 1991, each of the successor states inherited the legacies of Moscow's regional economic policies pursued for many decades.

This paper first will review the Soviet economic development policies that were pursued as they affected regional economies. The fifteen republics are taken as units of analysis, since they were the main focus of the "national question" and now constitute the new independent states and since they are the units for which the most data are available. The results of these long-continued policies are examined as revealed in the inherited disparities in levels of development, distorted economic structures, economic interdependencies, environmental degradation, and disparities in living standards among the former republics, allowing for intra-republican nationality differences where possible. Finally, Gorbachev's economic policies and their consequences are examined as they unfolded in 1990 and 1991 and culminated in the peaceful dissolution of the Soviet Union into fifteen new nation states.

## Soviet Regional Development Policies [1]

For many decades, Soviet government policy statements proclaimed the goal of evening out levels of development and equalizing living standards among the constituent republics. Considerable progress was made in the prewar and early postwar years in reducing the enormous economic disparities that originally existed when the union was formed. This outcome applied, in particular, to the republics of Central Asia and Transcaucasia, where industrialization had proceeded swiftly from very low levels and where universal public health and education systems were put in place. [2] After Leonid Brezhnev's declaration in 1972 that the problem of regional economic disparities among national groups had been basically solved, [3] official policy statements dropped the evening-out theme, and practice continued to promote some economic development in all republics through appropriate but widely differing investment allocations. Regardless of the real intent, the practical task of reducing regional economic disparities was made more difficult by the large differences in rates of population growth among republics.

Within the framework of a general policy of fostering economic development in all republics, however, implementation of that policy was always carried out explicitly with the objective of pro-

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[1] A good survey of Soviet regional development policies and their consequences is given in Jan Ake Dellenbrant, *The Soviet Regional Dilemma*; Armonk, New York: M.E. Sharpe, 1986 and Jonathan R. Schiffer, *Soviet Regional Economic Policy*, New York, St. Martin's Press, 1989.

[2] For details see Alec Nove and J. A. Newth, *The Soviet Middle East: A Communist Model for Development*, London: Allen and Unwin, 1966.

[3] *Pravda*, December 22, 1972.

moting the interests of the Soviet Union as a whole. As a result, the particular interests of individual republics were given short shrift in the planning and resource allocation process. The long-run regional consequences of industrial location decisions and development priorities were largely ignored, along with many problems peculiar to specific republics. Republic leaders through the political process had the opportunity to lobby on behalf of local concerns, but their efforts bore fruit only on matters of minor consequence, such as small increases in budget allocations for one or another purpose. [4]

Moscow's purposes were imposed and implemented from the outset through a highly centralized structure of economic administration. Only for a brief span of seven years—the period of Nikita Khrushchev's sovnarkhoz reforms—did the republics have a substantial voice in influencing the allocation of investment and, therefore, in determining the structures of their economies. The results of their actions are apparent in increased industrial and infrastructure investment and moves toward a more balanced development pattern in that period, at least in Central Asia. [5] Moscow predictably viewed such actions as manifestations of "localism" and disregard for the interests of the country as a whole. Although this brief experiment in regional administration of industry and construction was ended in 1965, the republics were given some vague promises of being accorded more authority to chart the economic course of their territories.

Except for the sovnarkhoz period, all major decisions about the location of plants, the development strategy, and the allocation of investment in each region were formulated by the U.S.S.R. Gosplan and the economic ministries based in Moscow. Ministries were of three types—all-union, union-republic, and republic. The first two types dominated overwhelmingly. Thus, in 1989, enterprises subordinated to all-union ministries accounted for as little as 28 percent of industrial production in Moldova and as much as 69 percent in the R.S.F.S.R. [6] But those ministries' shares in the total industrial capital stock were 48 percent and 87 percent, respectively, in the two republics. For the U.S.S.R. as a whole, the share of production managed by all-union ministries had been rising rapidly: it was 47 percent in 1967 and 61 percent in 1989. These ministries, which controlled nearly all of heavy industry, were virtually impervious to regional influence. Even in the case of activities managed through union-republic ministries, development strategies were set in Moscow. Republic offices of such ministries, as well as the republican Gosplans, had little real power, although they could submit proposals and lobby for their adoption.

This diktat of the central government persisted despite a stream of decrees ostensibly giving republic and local governmental bodies greater authority and responsibility for planning and implement-

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[4] For a pioneering analysis of regional budgetary policies and politics see Donna Bahry, *Outside Moscow: Power, Politics and Budgetary Policies in the Soviet Republics*, New York: Columbia University Press, 1987.

[5] Boris A. Rumer, *Soviet Central Asia: A Tragic Experiment*, Boston: Unwin-Hyman, 1989, pp. 55–57.

[6] *Narodnoe khoziaistvo SSSR v 1989 godu*, Moscow, Finansy i statistika, 1990, p. 331. Hereafter referred to as *Narkhoz SSSR*.

ing economic development strategies in their territories. [7] The issuances in 1986 and in 1987 [8] formed part of Mikhail Gorbachev's evolving strategy for "radical" economic reform, the regional aspects of which will be treated below. Until 1990, such decentralization by decree had been ineffective, not only because major decisions were made by Moscow bureaucracies, but also because Moscow controlled the purse. In 1987, the union budget comprised 55.1 percent of the total state budget, compared with 42.5 percent in 1965. The republics did not have independent revenue-raising authority, and center-set sources of revenue were allocated to republic budgets via assorted formulas determined by Moscow. Likewise, expenditures in republic budgets were fixed in accordance with various centrally-set normatives. Having had little real power and no independent fiscal authority, republic leaders with the advent of the Gorbachev-inspired policy of glasnost felt justified in blaming Moscow for the detrimental effects of its regional policies and did so in a rising chorus.

## THE CONSEQUENCES OF SOVIET REGIONAL ECONOMIC POLICIES

The many economic legacies with which the new states necessarily begin may be surveyed under five categories: disparities in levels of economic development, distorted economic structures, disparities in standards of living, environmental degradation, and large interrepublic economic dependencies. The institutional legacies are surveyed in a separate paper. [9]

### DISPARITIES IN LEVELS OF DEVELOPMENT

Soviet regional policies by no means equalized levels of economic development among the republics. Whether regional gaps have been reduced in recent decades depends on the measure selected and the methodology used. [10] Table 1 presents some standard indicators of economic development in the republics in the 1980s. Because of distortions and definitional differences affecting official Soviet measures, this paper uses measures developed by Western research whenever possible. [11] For the most part, the data refer to 1988 or 1989, considered to be the last normal years before the U.S.S.R.'s breakup.

All four indicators reveal large disparities among the republics. The commonly used measure of GNP per capita shows that in 1989 the poorest republics—Tadzhikistan and Uzbekistan—had levels of

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[7] These decrees are summarized in Gertrude E. Schroeder, "Nationalities and the Soviet Economy", in Lubomyr Hajda and Mark Beissinger (eds.), *The Nationalities Factor in Soviet Politics and Society*, Boulder, Colorado; Westview Press, 1990, pp. 43–71.

[8] *Pravda*, July 30, 1986. *O korennoy perestroike upravleniia ekonomikoy: sbornik dokumentov.* Moscow, Gospolitizdat, 1988, pp. 208–235.

[9] See the author's paper "Post-Soviet Economic Reforms in Perspective" in this volume.

[10] The various studies are summarized in Dellenbrant, op. cit., pp. 47–61 and in Donna Bahry and Carol Nechemias, "Half Full or Half Empty: The Debate Over Soviet Regional Equality", *Slavic Review*, vol. 40, no. 3 (Fall 1981), pp. 366–383.

[11] Despite their conceptual differences, official measures of per capita national income used display fairly similar patterns among republics as are shown by the GNP measures shown in Table 1. Goskomstat SSSR. *Statisticheskie materialy ob ekonomicheskom i sotsial'nom razvitii soyuznykh i avtonomnykh respublik, avtonomnykh oblastei i okrugov*, chast' 1, Moscow, 1989, p. 8. Soviet economists have criticized these data in recent years. See, for example, *Eknomicheskaia gazeta*, no. 34 (August 1989), p. 6, *Ekonomika i organizatsiia promyshlennogo proizvodstva*, no. 9 (September 1989), pp. 29–46.

only about one-third of that in Russia, while only Estonia and Latvia exceeded that level. These disparities have increased since 1980, but the general pattern has been stable, with Russia and the Baltics ranking highest and the Central Asian republics and Azerbaijan ranking lowest. The other indicators—percentage of urban population in the total, share of agriculture in the total labor force, and infant mortality rate—display similarly large differences among republics, with four Central Asian republics and Azerbaijan consistently ranking far below the R.S.F.S.R. and with the Baltic republics above it in terms of level of economic development. The latter four republics are far more urban, have smaller shares of the labor force in agriculture, and have lower infant mortality rates than do the other five republics.

TABLE 1. Indicators of Levels of Development of Soviet Republics in the 1980s.

| Region and Republic | GNP per Capita 1989 | Urban Population as Percentage of Total 1 January 1987 | Percentage of Labor Force in Agriculture 1985 | Infant Mortality per 1,000 Births 1988 |
|---|---|---|---|---|
| European Russia | | | | |
| RSFSR | 100 | 73.5 | 17.5 | 18.9 |
| Ukraine | 71 | 66.7 | 24.8 | 14.2 |
| Belarus | 89 | 64.2 | 28.6 | 13.1 |
| Moldova | 66 | 46.5 | 34.4 | 23.0 |
| Baltics | | | | |
| Estonia | 103 | 71.8 | 20.1 | 12.4 |
| Latvia | 103 | 70.9 | 23.1 | 11.0 |
| Lithuania | 88 | 67.0 | 29.3 | 11.5 |
| Transcaucasia | | | | |
| Georgia | 63 | 54.6 | 29.1 | 21.9 |
| Armenia | 64 | 68.1 | 17.6 | 25.3 |
| Azerbaijan | 52 | 54.0 | 32.2 | 27.0 |
| Central Asia | | | | |
| Kazakhstan | 64 | 58.1 | 28.5 | 29.2 |
| Uzbekistan | 34 | 41.9 | 35.1 | 43.3 |
| Kyrgyzstan | 45 | 39.7 | 33.0 | 36.8 |
| Tadzhikistan | 32 | 33.3 | 37.7 | 48.9 |
| Turkmenistan | 50 | 47.6 | 35.7 | 53.3 |

Sources: GNP per capita: data are preliminary estimates prepared by the Center for International Research, U.S. Bureau of the Census. They are calculated in the same way as CIA estimates for GNP as a whole in the U.S.S.R. and described in *USSR: Measures of Economic Growth and Development, 1950–80*, U.S. Congress, Joint Economic Committee, 1982, pp. 137–140. Share of urban population. *Narkhoz SSSR, 2a 60 let*, pp. 389–394. Share of labor force in agriculture: These are based on my estimates of employment in purely agricultural activities as a share of total employment. The methodology is described in Ann Goodman, Margaret Hughes and Gertrude E. Schroeder, "Raising the Efficiency of Soviet Farm Labor," in *Gorbachev's Economic Plans*, U.S. Congress, Joint Economic Commitee 1987, Volume 2, p. 117. Infant mortality: *Narkhoz SSSR*, 1988, p. 29. These rates are believed to be considerably understated relative to measures used in the West.

## DISTORTED ECONOMIC STRUCTURES

Western research has demonstrated that the Soviet development strategy of extremely unbalanced growth produced a severely distorted economic structure when compared with Western countries

at similar levels of development.[12] As reflected in the distribution of the labor force, the share of industrial employment is inordinately high and the share of the service sector is very low, most notably the share engaged in retail trade and personal services. A similar conclusion holds for all of the republics. In Estonia in 1986, for example, 43 percent of the labor force was engaged in industry and construction, compared with 27 to 32 percent in the four Scandinavian countries; corresponding figures for trade and public dining show 9 percent of the Estonian workforce in these occupations, compared to 14 to 18 percent in Scandinavia.[13] For Latvia, in 1987, 40 percent worked in industry and 9 percent in trade and public dining. In Lithuania 41 percent worked in industry and 8 percent in trade and dining, in 1987.[14] Many decades of large-scale, persistent redirection of investment will be required to correct such distortions.

The present disparities in levels of development among the republics result not only from relative initial starting points and rates of population growth, but also from relative investment allocations, which were determined centrally. Over the past three decades, the share of the R.S.F.S.R. in total investment has risen steadily, while those of Ukraine and Kazakhstan have fallen markedly; these three republics account for more than four-fifths of all investment. The other republics show diverse trends, evidently related to Moscow's resource exploitation priorities in particular five-year plans. Table 2 gives data on the investment shares among the republics in the 1980s, along with allocations expressed per capita and per worker. In accord with Gorbachev's policy of pushing industrial modernization by renovating existing facilities rather than building new ones, the investment share of largely industrialized European Russia rose during 1986–90, while that of relatively underdeveloped Central Asia fell.

Gorbachev's rhetoric on regional policy also emphasized repeatedly the priority of national interests and the general intent to make resource allocations to individual republics dependent on their relative "contribution."[15] Thus, Moscow was reluctant to invest in republics where levels of labor productivity were perceived to be relatively low. According to recently published official data, "social" labor productivity exceeds the national average only in the R.S.F.S.R., (where it was the highest), the Baltics, and Belarus,[16] in 1988, labor productivity in the Central Asian republics was only 49 to 61 percent of that in the R.S.F.S.R., according to official assessments. Moreover, the R.S.F.S.R.'s relative advantage was seen to be rising.

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[12] Gur Ofer, *The Service Sector in Soviet Economic Growth: A Comparative Study*, Cambridge, Mass.; Harvard University Press, 1973. Paul Gregory, *Socialist and Non-Socialist Industrialization Patterns*, New York; Praeger Publishers, 1970. Jan Winiecki, *The Distorted World of Soviet-Type Economies*, Pittsburgh, Pa.; University of Pittsburgh Press, 1988.

[13] Andrew R. Bond and Matthew J. Sagers, "Adoption of Laws on Economic Autonomy for the Baltic Republics and the Example of Estonia: A Comment," *Soviet Geography*, vol. 1, no. 31 (January 1990), pp. 5–6.

[14] Goskomstat SSSR, *Statisticheskie materialy . . .*, Chast 1, p. 24.

[15] These points were made first in Gorbachev's speech to the 27th Party Congress, *Pravda*, February 26, 1986.

[16] Goskomostat, *Statisticheskie materialy . . .*, p. 7.

TABLE 2. Republic Shares of Total Investment and Investment Per Capita and Per Worker, 1981–1990.

| Region and Republic | Shares of Total Gross Fixed Investment (USSR = 100.0) | | Levels of Gross Fixed Investment | | | |
|---|---|---|---|---|---|---|
| | | | Per Capita | | Per Worker | |
| | 1981–85 | 1986–90 | 1981–85 | 1986–90 | 1981–85 | 1986–90 |
| European Russia | 80.6 | 81.2 | | | | |
| RSFSR | 62.2 | 62.8 | 100.0 | 100.0 | 100.0 | 100.0 |
| Ukraine | 13.9 | 13.7 | 62.5 | 62.0 | 65.2 | 64.0 |
| Belarus | 3.4 | 3.7 | 77.6 | 84.9 | 78.3 | 83.4 |
| Moldova | 1.1 | 1.1 | 62.5 | 58.8 | 66.9 | 65.1 |
| Baltics | 2.9 | 2.9 | | | | |
| Estonia | 0.6 | 0.6 | 88.9 | 87.1 | 89.1 | 89.3 |
| Latvia | 1.0 | 0.9 | 87.3 | 80.4 | 84.6 | 77.2 |
| Lithuania | 1.3 | 1.4 | 84.4 | 87.98 | 5.9 | 86.1 |
| Transcaucasia | 4.1 | 4.1 | | | | |
| Georgia | 1.5 | 1.3 | 64.6 | 57.5 | 70.1 | 59.7 |
| Armenia | 0.9 | 1.2 | 60.7 | 83.1 | 73.0 | 93.0 |
| Azerbaijan | 1.7 | 1.6 | 60.4 | 50.8 | 86.9 | 70.6 |
| Central Asia | 12.4 | 11.8 | | | | |
| Kazakhstan | 5.9 | 5.8 | 85.9 | 82.7 | 101.9 | 95.9 |
| Uzbekistan | 4.1 | 3.5 | 54.5 | 41.7 | 82.9 | 65.1 |
| Kyrgyzstan | 0.7 | 0.7 | 43.9 | 41.0 | 61.7 | 58.5 |
| Tadzhikistan | 0.7 | 0.8 | 37.8 | 36.7 | 64.1 | 62.8 |
| Turkmenistan | 1.0 | 1.0 | 74.2 | 64.3 | 104.4 | 90.6 |

Sources: Investment—*Narkhoz SSSR*, 1990, p. 553; Population—Mid-year populations in 1983 and in 1988 calculated from data in various *Narkhozy*; Employment—Number of workers and employees plus number of collective farmers employed in the socialized sector in 1983 and in 1988. Data are given in *Narkhoz SSSR*, 1983, pp. 280, 358; *Narkhoz*, 1990, p. 102; *Agropromyshlennii kompleks SSSR*, Moscow, 1990, p. 111.

As the data in Table 2 show, there were large differences among republics in investment allocations expressed per capita and per worker. In 1986–90, for example, levels of investment per capita ranged from 37 percent of the R.S.F.S.R. level in Tadzhikistan to 88 percent in Lithuania. Investment per worker relative to the R.S.F.S.R. ranged from 58 percent in Kyrgyzstan to 96 percent in Kazakhstan. On both measures, the relative positions of the Central Asian and Transcaucasian republics deteriorated markedly after 1985. Clearly, neither Gorbachev nor his predecessors were inclined to accommodate investment allocations to fast-growing populations and work forces in the southern tier. Thus, these republics faced a "Catch 22" situation. In order to increase labor productivity, they needed to raise the capital/labor ratio sharply, which would require increased investment allocations relative to the rest of the country. But Gorbachev's policies, even more than those of his predecessors, evidently steered investment allocations regionally in accord with their perceived productivity.

On another level, a frequently voiced grievance of some republics, Latvia and Estonia in particular, was that the Moscow-based ministries built huge industrial plants in the republics without regard to local labor supplies. As a consequence, large numbers of (mainly) Russians migrated into these areas to provide a work force for the new plants, thereby diluting the ethnic homogeneity of native homelands. For example, whereas in 1959, Estonians made

up 74.6 percent of the total population of Estonia, (92 percent prewar), they comprised only 61.5 percent in 1989; Latvians made up 62.0 percent of Latvia's population in 1959 and 52.0 percent in 1989. For the more radical nationalist spokesmen in these republics, this outcome of centrally dictated industrial location patterns, with its focus on labor-intensive industries, was seen as a reflection of a policy of ethnic genocide. [17] Certainly, such ethnic diversity now presents these two newly independent states with a potentially divisive situation that did not prevail in the prewar period of their national independence.

Perhaps the most celebrated case of distorted economic development wrought by Moscow's policies is to be found in the four poorest republics of Central Asia. [18] There, Moscow for decades vigorously promoted cotton growing to satisfy domestic needs and provide a source of hard currency exports. Such super-specialization in cotton created enormous demands for water for irrigation, severely depleted the soil, and crowded out ordinary food crops that could be grown in Central Asia. Moreover, Soviet policy relegated Central Asia to the role of a producer of raw materials. In 1988, virtually all cotton fiber originated there, but the region produced only 8.5 percent of the country's cotton cloth; corresponding figures for Uzbekistan are 61.7 and 5.6. [19] A similar policy was applied to Kazakhstan, which in 1988 produced 22.7 percent of all wool, but only 4.4 percent of woolen cloth. Although machinery industries were developed in Central Asia, they, too, were oriented toward cotton production and the processing of raw materials. Similarly, industrial investment was concentrated on the extraction of energy and nonferrous metals, at the expense of creating processing facilities and capacities for manufacturing. Writing in 1986, a Western scholar described Central Asia's economy as "colonial," a "plantation economy." [20]

Acrimonious arguments between Moscow and Central Asian leaders and scholars over regional development policy and its consequences were carried on for several decades. [21] With the advent of Gorbachev and his policies of glasnost and perestroika, the issue became a central focus for Central Asian grievances against Moscow. At the Central Committee Plenum on nationality policy held in September 1989, for instance, the Party first secretary in Uzbekistan referred to "the arbitrary and distorted approach that was taken toward so-called, "cotton affairs," as well as in evaluating historical and cultural values and the people's customs and traditions" and declared that they provide "the soil in which social tensions and tensions between nationalities are springing up in the

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[17] A typical example of this point of view is given in a speech by the Estonian Communist Party first Secretary V. J. Valas at the CPSU plenum on nationalities policies, *Pravda*, September 21, 1989.

[18] For a recent description and assessment see Boris Z. Rumur, op. cit.

[19] *Narkhoz SSSR*, 1988, pp. 342–343.

[20] Leslie Dienes, *Soviet Asia: Economic Development and National Policy Choices*, Boulder, Colorado; Westview Press, 1987, p. 125.

[21] For descriptions see: Boris Z. Rumer, op. cit., pp. 43–122. Gregory Gleason, "Ministries Versus Territories: Evidence From Agricultural Administration in Soviet Central Asia", *Studies in Comparative Communisms*, Vol. XIX, No. 314 (Autumn/Winter 1986), pp. 227–245. Grey Hodnett, "Technology and Social Change in Soviet Central Asia: the Politics of Cotton Growing", in Henry W. Morton and Randolph L. Taukraaes (eds.), *Soviet Politics and Society in the 1970's*, New York; The Free Press, 1974, pp. 60–117.

republic today." [22] The Party Secretary in Tadzhikistan made a similar point with regard to the failure of repeated attempts by local leaders to persuade the center to site cotton textile factories and other labor-intensive facilities in the republic. The reluctance of the center to pay attention to the need of Central Asian republics and Azerbaijan to provide jobs for their fast-growing populations of working age also elicited bitter complaints from republic leaders. High rates of unemployment there were cited as a principal reason for rising ethnic tensions in these republics.

Other republics voiced similar grievances. Ukrainians complained that central diktat had assigned their republic the role of producer of mainly extractive and intermediate goods, thus creating a lop-sided economic structure and unnecessary dependence on other republics for final goods. Many Ukrainians were also bitter about what they perceived as their having been forced to transfer income to support other, less productive republics. Western research has estimated such transfers to have amounted to an average of some 10 percent of national income annually over many years. [23] In general, it seems that, whereas local sentiment sought to promote a diversified pattern of economic development, the union ministries chose specialization with its consequent high levels of interrepublic trade.

### DISPARITIES IN LIVING STANDARDS

In forum after forum during the Gorbachev era, leaders lamented the poor living conditions in their republics and cited long bills of particulars. The Baltics compared their lot with that of nearby affluent Scandinavia; the southern republics compared their well-being with that of the northern tier. In contrast, Russian and Ukrainian spokesmen argued that living standards in their republics had been held down because of the transfer of budgetary funds to the poorer southern regions, which had not "earned" them. People in the Baltic republics believed that they would have been far better off, had they been able to retain their independence lost in 1940. In contrast, people in the Central Asian republics maintained that the federal government had the "socialist" duty to eliminate the lags in their development, for which the center was to blame.

Disparities in living standards among the republics are quite large, if not by international standards, at least by "socialist" standards. Moreover, the gaps had been slowly widening since at least 1970 and continued to do so under Gorbachev. As an alternative to the Soviet official measure of living standards (labeled "real per capita incomes"), the author devised a Western-type measure—real per capita consumption, defined to embrace both personal consumption and government expenditures on health and education. This measure also attempts to remove the substantial upward bias in the official measures of improvement in living standards. [24]

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[22] *Pravda*, September 22, 1989.

[23] I. S. Koropeckyj, "A Century of Moscow-Ukraine Economic Relations: An Interpretation," *Harvard Ukrainian Studies*, vol. 3, no. 4 (December 1981), pp. 467–496.

[24] The basic methodology for deriving this measure is described in Gertrude E. Schroeder, "Regional Living Standards," in I. S. Korpeckyj and Gertrude E. Schroeder (eds.), *Economics of Soviet Regions*, New York: Praeger Publishers, 1981, pp. 149–153.

Table 3 gives such estimates of the relative levels and growth rates of real per capita consumption during 1981–1988 for the fifteen republics, with levels expressed relative to that in the R.S.F.S.R. While the differentials in living standards revealed by this measure are similar to newly published official data,[25] the rates of improvement shown by the alternative measure are much lower. The results regarding relative levels are consistent with a wide variety of related data for each republic, except for Moldova, where the alternative estimate is probably too high, and Latvia, for which it may be too low. They do not take into account the activities of the illegal "underground" economy, since there are no reliable data with which to do so; its impact could differ appreciably among regions. By and large, it appears that relative standings of the republics were about the same in 1990 as in 1988.

TABLE 3. Levels and Growth of Per Capita Consumption in Soviet Republics, 1980–88.

| Region and Republic | Levels (RSFSR = 100) | | | Average Annual Rates of Growth | |
|---|---|---|---|---|---|
| | 1980 | 1985 | 1988 | 1981–85 | 1986–88 |
| European Russia | | | | | |
| RSFSR | 100 | 100 | 100 | 0.8 | 0.6 |
| Ukraine | 84 | 88 | 88 | 1.5 | 0.6 |
| Belarus | 91 | 93 | 94 | 1.3 | 1.0 |
| Moldova | 89 | 90 | 91 | 0.9 | 1.0 |
| Baltics | | | | | |
| Estonia | 120 | 118 | 122 | 0.4 | 2.0 |
| Latvia | 106 | 103 | 106 | 0.4 | 1.3 |
| Lithuania | 106 | 103 | 105 | 0.2 | 1.2 |
| Transcaucasia | | | | | |
| Georgia | 85 | 94 | 98 | 2.4 | 2.3 |
| Armenia | 78 | 76 | 74 | 0.4 | −0.6 |
| Azerbaijan | 62 | 64 | 63 | 1.2 | 0.4 |
| Central Asia | | | | | |
| Kazakhstan | 82 | 80 | 81 | 0.3 | 0.7 |
| Uzbekistan | 71 | 68 | 63 | −0.1 | −1.8 |
| Kyrgyzstan | 67 | 67 | 66 | 0.7 | 0.4 |
| Tadzhikistan | 57 | 55 | 52 | 0.1 | −1.0 |
| Turkmenistan | 71 | 68 | 67 | −0.1 | 0.3 |

Sources: Levels of per capita consumption in current priceswere calculated in accordance with the methodology described in Gertrude E. Schroeder, "Regional Living Standards," in I.S. Koropeckyj and Gertrude E. Schroeder (eds.), *Economics of Soviet Regions*, New York, Praeger, 1981, pp. 149–153. The methodology described there was revised by inflating the calculated ruble values by the official index of retail prices given in *Torgovlia SSSR*, Moscow, 1989, p. 75. Also, revised official indexes of real per capita incomes were used (*Narkhoz SSSR*, 1988, p. 95).

Average annual rates of real growth were obtained by deflating all ruble values in current prices calculated as described above by an implicit price index for the USSR obtained by deflating the values in current prices with a price index that can be derived from estimates of consumption in current and constant prices for the USSR as a whole.

[25] Goskomstat SSSR, *Sotsial'noe razvitiie i uroven' zhizni naseleniia SSSR: statisticheskii sbornik*, Moscow, 1989, p. 97. The author's alternative estimates or relative levels accord fairly well with estimates using an entirely different methodology recently developed by the Center for International Research, U.S. Bureau of the Census.

As indicated in Table 3, per capita consumption in 1988 ranged from 52 percent of the R.S.F.S.R. level in Tadzhikistan to 22 percent above that level in Estonia. With the exception of Georgia, all of the southern tier republics fare quite poorly relative to the Russian republic. For all of Central Asia and also for Armenia, the disparities have increased since 1980. Except in the Baltics, the growth of per capita consumption slowed under Gorbachev, and levels actually declined in three republics. Conceptually, the alternative measure relates to quantities of goods and services provided per capita, but the gaps probably are even greater when qualitative factors are taken into account. For example, much anecdotal evidence suggests that the quality of goods and services, including health care and education, is much poorer in the southern republics than elsewhere, while quality seems to be somewhat better in the Baltics.

To supplement the overall measure of relative living standards, Table 4 presents data for the republics on availability of housing, home telephones, passenger automobiles, and food. While the patterns are quite diverse, the general picture provided by these data is similar to that given by the overall measures. The Baltic republics retain their superior position, while four Central Asian republics and Azerbaijan lag far behind. With regard to housing, a source of grievance almost everywhere, per capita living space available in cities in 1988 in all of Central Asia, Azerbaijan, Armenia, and Moldova was still well below the minimum standard for health and decency (9 square meters per capita) set by the Soviet government in 1928. Provision of housing amenities also differs among republics in a similar pattern.

A mass of evidence indicates that living standards are much lower in rural areas than in cities. Thus, the 1987 average monthly wages of the state labor force in rural areas were below those in urban areas in all republics except the Baltics (where they were higher) by 2 percent (Kazakhstan) to 20 percent (Azerbaijan).[26] A similar relationship prevailed with regard to average monthly earnings of collective farmers, which in over half of the republics were even lower than the wages of rural state workers. On the other hand, rural incomes were boosted by earnings from private plots, whose shares in total agricultural output differ widely among republics; in 1987 the shares ranged from 16 percent in Turkmenistan to 42 percent in Georgia.[27] Although rural housing, most of which is owned privately, had substantially more space per dwelling (except in Tadzhikistan) than urban housing,[28] most of it had few amenities. Thus in 1988, only 2 percent of collective farm housing had running water in Turkmenistan and Azerbaijan, whereas the shares were 60 to 74 percent in the Baltics.[29] Fewer home telephones were available in rural areas than in cities—levels of less than one-third in most republics. Large rural-urban gaps also prevail in the provision of day care facilities for preschool children,

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[26] Goskomstat SSSR, *Trud v SSSR: statisticheskii sbornik*; Moscow, 1988, pp. 156–157. *Narkhoz SSSR*, 1988, p. 83.
[27] Goskomstat SSSR, *Press-vypusk*, no. 170, 24 April 1989.
[28] Goskomstat SSSR, *Press-vypusk*, No. 288, 3 July 1989.
[29] Goskomstat SSSR, *Press-vypusk*, No. 436, 29 November 1989.

with the gaps differing widely among republics.[30] Finally, retail sales per capita in rural areas were less than half those in cities in most republics,[31] and the gaps in provision of everyday services were also large.[32] Rural residents were forced to travel to cities to obtain many goods and services.

TABLE 4. Indicators of Relative Living Standards in Soviet Republics, 1980, 1985, and 1988.

| Region and Republic | Urban Housing Space ($M^2$ per capita) | | | Home Telephones (per 1000 Urban People) | | | Passenger Cars (per 100 families) | | | Food Consumption (RSFSR = 100) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1985 | 1988 | 1980 | 1985 | 1988 | 1980 | 1985 | 1988 | 1980 | 1985 | 1988 |
| European Russia | | | | | | | | | | | | |
| RSFSR | 8.6 | 9.3 | 9.6 | 59 | 78 | 102 | 10 | 14 | 16 | 100 | 100 | 100 |
| Ukraine | 8.9 | 9.5 | 9.8 | 64 | 85 | 111 | 10 | 14 | 17 | 106 | 108 | 105 |
| Belarus | 8.4 | 9.0 | 9.4 | 66 | 92 | 125 | 8 | 12 | 16 | 105 | 102 | 107 |
| Moldova | 7.8 | 8.2 | 8.6 | 67 | 84 | 107 | 8 | 11 | 13 | 103 | 109 | 106 |
| Baltics | | | | | | | | | | | | |
| Estonia | 10.0 | 11.5 | 12.0 | 97 | 118 | 144 | 21 | 29 | 33 | 100 | 105 | 96 |
| Latvia | 10.2 | 10.8 | 11.2 | 141 | 163 | 185 | 18 | 22 | 25 | 99 | 106 | 102 |
| Lithuania | 9.3 | 10.3 | 10.6 | 96 | 130 | 162 | 22 | 28 | 33 | 100 | 104 | 104 |
| Transcaucasia | | | | | | | | | | | | |
| Georgia | 9.5 | 10.2 | 11.1 | 72 | 89 | 106 | 19 | 27 | 31 | 99 | 104 | 101 |
| Armenia | 7.8 | 8.2 | 8.0 | 109 | 136 | 140 | 19 | 27 | 31 | 89 | 90 | 89 |
| Azerbaijan | 7.7 | 7.5 | 7.9 | 53 | 78 | 97 | 12 | 14 | 17 | 83 | 86 | 83 |
| Central Asia | | | | | | | | | | | | |
| Kazakhstan | 7.8 | 8.1 | 8.4 | 53 | 65 | 92 | 12 | 15 | 18 | 93 | 96 | 96 |
| Uzbekistan | 6.3 | 7.3 | 7.3 | 44 | 60 | 84 | 13 | 19 | 21 | 84 | 86 | 81 |
| Kyrgyzstan | 7.5 | 7.6 | 7.6 | 48 | 62 | 89 | 12 | 16 | 18 | 79 | 83 | 85 |
| Tadzhikistan | 6.9 | 7.2 | 7.4 | 42 | 64 | 76 | 12 | 20 | 22 | 83 | 86 | 82 |
| Turkmenistan | 6.9 | 7.0 | 7.0 | 38 | 59 | 78 | 16 | 24 | 27 | 82 | 85 | 83 |

Sources: *Urban housing.*—Measured in square meters of living space. Data for 1980 given in square meters of total floor space were converted to living space using coefficients for 1985. *Sotsial'noe razvitie i uroven' zhizni naseleniia SSSR*, Moscow, 1988, pp. 189–190. Goskomstat SSSR. *Press-ypusk* No. 288, 3 July 1989.

*Urban telephones.*—*Sotsial'noe razvitiie i uroven' zhizni naseleniia SSSR*, p. 298. *Statisticheskie materialy obrazvitiia Soyuznykh i avtonomnykh respublik, aytonomnykh oblastei i okrugov*, chast 1, 1989, p. 331.

*Passenger cars.*—*Torgovlia SSSR*, Moscow, 1989, p. 41.

*Food consumption.*—*Torgovlia SSSR*, Moscow, 1989, pp. 24–25. Source gives total quantities of food consumed per capita measured in kilograms or units per year. These quantities have been converted to calories with standard conversion coefficients for the products.

Data first published by the Soviet government in 1989 permit an assessment of regional differences in the extent of poverty.[33] In 1989, 11.1 percent of the total population in the U.S.S.R. had aggregate incomes (including incomes in kind) below 75 rubles per month. The official poverty line was 78 rubles per month. The shares were about 2 percent in the Baltics and 5 percent in the R.S.F.S.R. But the share was 51 percent in Tadzhikistan, 44 percent in Uzbekistan, and 33 to 35 percent in Kyrgyzstan, Turkmenistan, and Azerbaijan. Central Asian leaders often cited these data, along with estimates of the number of unemployed workers in their republics, as evidence of the poor living conditions there.

Other data for the republics reflect the situation of their titular nationalities. According to 1989 census data, the titular nationalities made up over half of the total populations in all republics

[30] Goskomstat SSSR, *Narodnoe obrazovanie i kul'tura v SSSR: statisticheskii sbornik*, Moscow, 1989, pp. 38–39.

[31] *Narkhoz SSSR*, 1988, p. 108.

[32] Goskomstat SSSR, *Statisticheskie materialy . . .*, Chast 1, p. 60.

[33] *Narkhoz SSSR*, 1989, p. 91.

except Kazakhstan.[34] They comprised 70 percent or more in 9 republics. Data from this and earlier censuses allow the following generalizations to be made: titular nationalities tend to live in their own republics by overwhelming margins; there is a strong tendency for them to live in rural areas (except for Russians and Armenians) and to be less well educated than the rest of their republic's population (except for Russians, Armenians and Georgians). In republics, such as Central Asia and Ukraine, where the titular nationalities are both more rural and less educated, one would expect them to be concentrated in lower-paying jobs. On balance, one may conclude that the data given for republics in Tables 4 and 5 reflect reasonably well the situation of their titular nationalities in the R.S.F.S.R., Transcaucasia, and the Baltics, but overstate perhaps by sizeable margins the position of titular nationalities in the other republics. Clearly, the substantial economic disparities among the union republics, and within them as well, were a major source of the escalation of ethnic tensions with the advent of glasnost.

ENVIRONMENTAL DEGRADATION

Another contentious issue between the periphery and the center that surfaced with the advent of glasnost concerned the state of the environment. Certainly not for the first time, republican leaders used the environmental issue as a vehicle for lambasting the central economic ministries, which were cast as the principal villains responsible for the environmental degradation. A notable case in point was the protracted controversy that raged over the erstwhile project to divert Siberian rivers to ease the pressure on water supplies in Central Asia and halt the desiccation of the Aral Sea.[35] Although this grandiose project was halted by the central government, largely on grounds of its huge cost, the debate continued. The project was seen by many people as one that would benefit the Central Asians at the expense of Russians. Uzbek leaders called for the project's revival as the only way to avert an economic but, even more, a political crisis in their republic.[36]

While the river diversion case may be the most notorious, the heady mix of environmentalism and nationalism became evident everywhere. In Kazakhstan and in Central Asia, environmental and development issues became closely intertwined.[37] Latvians protested dam construction and the military activities in the republic as environmentally disastrous; Armenians protested en mass against air pollution there; Estonians cited severe pollution of air and water. The common culprit was seen to be "departmental tyranny."[38] Kazakh leaders demanded the closure of a nuclear weap-

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[34] Goskomstat SSSR, *Statisticheskie materialy* . . ., Chast II.

[35] A good summary of this controversy is given in Robert G. Darst, Jr., "Environmentalism in the USSR: The Opposition to the River Diversion Projects", *Soviet Economy*, vol. 4, no. 3 (July-September 1988), pp. 223-252; and Philip P. Micklin and Andrew R. Bond, "Reflections on Environmentalism and the River Diversion Projects," ibid., pp. 253-274.

[36] *Literaturnaia gazeta*, no. 46, 15 November 1989, p. 2.

[37] *Kommunist*, No. 14, September 1989, pp. 23-43; and *Noviy Mir*, No. 1, 1990, pp. 201-206.

[38] Examples are cited in Darst, loc. cit., *Sovetskaia Estoniia*, October 30, 1989. *Sovetskaia Latviia*, January 14, 1990.

ons testing range on grounds of damage to the population's health, and stated "millions of hectares of land have been kept out of economic use by military departments alone." [39]

Ukrainians expressed bitterness about plans for developing electric power in the republic; at the 19th Party Conference in June 1988, a speaker said, "The arrogance and disdain that some union bodies, especially the Ministry of Electric Power, have toward Ukraines's fate not only border on some sort of merciless cruelty, but are an insult to national dignity"; he continued, "I have been given a mandate from Communists to demand ... that the outside planners who are running loose all over Ukraine and other republics in the style of plantation owners, with no regard for the interests or even the very lives of the native peoples, be stopped." [40] The Lithuanian Party First Secretary stated at the same Conference, "There are still no pollution control devices in Kaunas, the republic's second largest industrial center. This is largely the result of the fact that a number of union ministries have viewed and continue to view environmental protection as a matter of secondary importance." [41] In addition, republican spokesmen frequently attacked the central ministries for the general failure of socialist central planning to accord priority to pollution control and to pay attention to local requirements for municipal services and social infrastructure when new facilities were built. Finally, some local governments even shut down polluting enterprises, despite the outcries of the buyers of their products, and some nuclear power plants were mothballed following the Chernobyl disaster.

INTER-REPUBLICAN ECONOMIC DEPENDENCIES

Soviet regional development strategy created large and in many cases growing economic dependencies among the republics. [42] Their extent can best be examined by means of republican input/output tables and trade flows, but the U.S.S.R. never published complete tables and released only fragmentary ones for four years—1959, 1966, 1972, and 1988 and did not make them available for all republics. From Western work on these data, however, we can obtain an idea of the overall size of these dependencies in 1966. [43] The U.S.S.R. State Committee for Statistics (Goskomstat) finally published data on inter-republican trade flows in 1988 and 1989. [44] In 1988, such trade made up 85–90 percent of total trade turnover in all republics except Ukraine (79 percent) and Russia (57 percent). Table 5 presents data on the relative dependencies of the republics

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[39] *Kommunist*, No. 14, September 1989, pp. 23–43, *Pravda*, September 30, 1989.

[40] *Pravda*, July 2, 1988.

[41] Ibid.

[42] For a more extended discussion of inter-republican economic relations see the paper by Stuart Brown and Misha Belkindas in this volume and this author's paper "Economic Relations Among the Soviet Republics", in Michael P. Claudon and Tamar L. Gutner, *Investing in Reform: Doing Business in a Changing Soviet Union*, New York, New York University Press, 1991, pp. 19–38.

[43] James W. Gillula, "The Interdependence of Soviet Republics", in *Soviet Economy in a Time of Change*, Washington; U.S. Congress Joint Economic Committee, 1979, Vol. 1, p. 640. Interdependencies had become somewhat greater by 1972. James W. Gillula, *The Reconstructed 1972 Input-Output Tables for Eight Soviet Republics*, U.S. Bureau of the Census, Foreign Economic Report, No. 19, December 1982, pp. 95–99.

[44] *Vestnik statistiki*, No. 3, 1990, pp. 37–53 and No. 4, 1990, pp. 51-60. *Narkhoz SSSR*, 1990, p. 639.

on one another for imports and exports in 1988 and 1989, expressed as shares of total consumption and the total value of production in each republic, respectively. In those years, the shares of imports in republican consumption ranged from 16 percent in Russia to 31 percent in Armenia; the shares or exports in republican production ranged from 11 percent in Russia to 27 percent in Azerbaijan.

TABLE 5. Relative Importance of Foreign Trade by Republic in 1988 and 1989.

| Region and Republic | Total Imports as Shares of Republican Consumption, 1989 | Total Exports as Shares of Republican Production, 1989 | Shares of Interrepublican Trade in Total Trade, 1988 | |
|---|---|---|---|---|
| | | | Imports | Exports |
| European Russia | | | | |
| RSFSR | 15.7 | 10.7 | 51 | 68 |
| Ukraine | 17.6 | 14.9 | 73 | 85 |
| Belarus | 25.1 | 26.0 | 79 | 91 |
| Moldova | 28.0 | 24.3 | 82 | 95 |
| Baltics | | | | |
| Estonia | 28.1 | 24.2 | 81 | 90 |
| Latvia | 26.9 | 24.9 | 82 | 92 |
| Lithuania | 27.0 | 22.0 | 83 | 91 |
| Transcaucasia | | | | |
| Georgia | 26.2 | 25.1 | 80 | 93 |
| Armenia | 31.0 | 26.0 | 82 | 98 |
| Azerbaijan | 21.3 | 27.1 | 75 | 94 |
| Central Asia | | | | |
| Kazakhstan | 19.2 | 11.0 | 84 | 91 |
| Uzbekistan | 23.6 | 18.2 | 86 | 85 |
| Kyrgyzstan | 26.5 | 17.9 | 80 | 98 |
| Tadzhikistan | 29.5 | 21.2 | 87 | 86 |
| Turkmenistan | 25.7 | 21.6 | 86 | 92 |

Sources: *Vestnik Statistiki*, no. 3, 1990, p. 36. *Narkhoz SSSR*, 1990, p. 639.

The Soviet government recently released other data that permit an assessment of inter-republican dependencies in selected key areas. From published energy balances we can see that in 1985 only the R.S.F.S.R., Kazakhstan, Azerbaijan, and Turkmenistan were self-sufficient in energy, on balance. The others had to import shares of their domestic consumption ranging from 99 percent in Moldova to 22 percent in Uzbekistan:[45] in 1988, the latter's imported share had risen to 28.[46] Uzbekistan, along with Ukraine, had shifted from a position of self-sufficiency in 1970 to a net importer in 1985. Imported shares rose in all the remaining republics except Tadzhikistan during that period. For consumer goods, the data show that the R.S.F.S.R., Ukraine, and all Central Asian republics were net importers.[47] With respect to food products, the same republics (except Ukraine and Kyrgyzstan) were net importers, along with Azerbaijan and Armenia. All Central Asian republics were substantial net importers of products of light industry. With respect to other consumer goods (mainly durables), all repub-

[45] Goskomstat SSSR, *Material'no-tekhnicheskoe obespechenie narodnogo khoziaistva SSSR: statisticheskii sbornik*, Moscow: 1988, pp. 66–75.
[46] Goskomstat SSSR, *Press-vypusk*, no. 394, 5 September 1989.
[47] Gosknomstat SSSR, *Torgovlia SSSR: statisticheskii sbornik*, Moscow, 1989, pp. 217–236.

lics except the R.S.F.S.R., Belarus, and Latvia were net importers, usually by large margins.

As one would expect, the R.S.F.S.R. was by far the largest source of imports for the small republics and also the largest customer for their exports. In 1982, for example, the R.S.F.S.R. accounted for 53.8 percent of Estonia's imports and 58.2 percent of its exports. [48] The other two Baltic republics accounted for 9 and 11 percent, respectively. The situation was similar for Lithuania. [49] In 1990, Russia was the largest trading partner for all republics, with Ukraine ranking second in most cases. Trade among the Baltics was modest, but that among the Central Asian republics was fairly substantial, associated mainly with mutual exchanges of energy.

The national leadership clearly regarded these large and growing economic interdependencies among the republics as evidence of the success of Soviet regional development policies. Thus, in his speech to the Party plenum on nationalities policies in September 1989, Gorbachev noted such an achievement: "As a result of many years of development on the basis of plans, the Soviet economy has become highly integrated and is now a single national economic complex." [50] At the same time, however, the balance of such inter-republic trade became a focus for acrimonious accusations and disputes among republic leaders and economists, often aired under the rubric "Who is feeding whom?" The argument was often made that a republic's balance-of-trade deficit or surplus calculated in ruble prices did not reveal the "true" situation because of the many distortions in Soviet prices, which did not reflect the real costs and values of products. This argument prompted the U.S.S.R. State Committee on Statistics to publish republican balance-of-payments data calculated in both internal prices and in world market prices. [51] Because fuels and raw materials are under priced in the U.S.S.R. relative to world market prices, the calculation shows that the balance of trade for the R.S.F.S.R., the Ukraine, and Turkmenistan looks considerably better when tabulated in world market prices instead of in domestic prices; on the other hand, the remaining republics have even larger deficits when their trade flows are figured in world market prices. Such calculations satisfied few critics, and arguments continued to rage during 1989 and 1990. [52]

## The Regional Impact of Gorbachev's Economic Policies, 1985–1989

The evolution of Gorbachev's policies bearing on the economic aspects of overall nationalities policy is considered under three rubrics: reduction of regional disparities; the role of all-union interests; and the scope of economic autonomy to be accorded to the republics.

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[48] K. Kukk, *Economic Relations of the Estonian SSSR*, Tallinn, 1988 (In Estonian).
[49] *Sovetskaia Litva*, October 25, 1989.
[50] *Pravda*, September 20, 1989.
[51] *Argumenty i fakty*, no. 50 (16–22 December 1989), pp. 6–7. *Narkhoz SSSR*, 1990, p. 642.
[52] For example: *Ekonomika i zhizn'*, No. 10 (March 1990), pp. 7–8. *Pravitel'stvennii vestnik*, no. 5, January 1990, pp. 6–7. *Ekonomika i matematicheskie metady*, no. 1, 1990, pp. 93–104.

### REDUCTION OF REGIONAL DISPARITIES

With regard to reducing economic disparities, on which Communist Party pronouncements had been largely silent for at least a decade, Gorbachev initially took a rather hard-line position. As already noted, he suggested in early 1986 that budget allocations for social needs ought to be related to the efficiency of a region's economy, i.e., to its "contribution" to the national economy as a whole. Neither his opening speech nor the resolutions adopted by the 19th Party Conference in June 1988 mentioned reduction of regional economic disparities as a desirable objective. With the outbreaks of national violence and the outpouring of national economic grievances in many forums, however, Gorbachev evidently concluded that depressed economic conditions could be fueling ethnic tensions, especially in the southern republics. At the much-postponed Party plenum on nationalities issues held in September 1989, Gorbachev said, "Despite the impressive progress made in 'evening out the differences,' serious problems still remain in this field". [53] He broached the idea of setting up some kind of a mechanism for using state budget funds "to consistently resolve the pressing problems of the regions that lag behind." The resolution adopted at the plenum was more specific:

> The country must have a system of economic levers and incentives which enables the USSR government on the basis of the efficient use of state budget resources to pursue in conjunction with the republics a purposeful line aimed at eliminating the lag in the economic development of individual regions due to objective factors and also to create an all-union fund to provide aid to regions affected by natural disasters or ecological catastrophes, and in the development of new territories. [54]

Although no mention was made of such a fund, the 1990 state budget provided for a total grant of 7.4 billion rubles to the five Central Asian republics and Armenia, thus continuing past practices. [55] The new central Stabilization Funds created in 1991 also were supposed to be used to aid the poorer republics.

### THE ROLE OF ALL-UNION INTERESTS

In many pronouncements, Gorbachev insisted on the primacy of all-union (state) interests in the formation of economic policy. He repeatedly railed against "national egoism," "chauvinism," "selfishness," and "separatism." With the rise of independence movements in the Baltics and elsewhere in 1988 and 1989, his speeches often cited figures showing the large economic interdependencies that had developed among the republics. In his speech to the Party plenum on nationalities policy in September 1989, he stated, "A major advantage of all of our republics and regions is without doubt the existence of a practically unlimited all-union market." [56]

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[53] *Pravda*, September 20, 1989.
[54] *Pravda*, September 24, 1989.
[55] *Izvestiia*, September 27, 1989.
[56] *Pravda*, September 20, 1989.

But he also referred to "negative processes" that had led to "social tensions and the flare-up of conflict situations including in the sphere of inter-ethnic relations." While citing as causes "the baneful effects of excessive centralization, diktat, and arbitrariness of departments in the development of various economic branches," he also pointed out that the republic governments themselves often had pressured the center to locate new plants and industries on their territories. "Much for which the center is now being blamed emerged as a result of persistent, repeated requests from republican and local bodies," he said.

As for remedial action to alleviate the most pressing problems in the southern tier, it appears that Moscow solicited detailed proposals from those republics. In an interview in August 1989, a Gosplan Deputy Chairman cited a number of steps that were being taken; projections for their accelerated economic development in the long range plans; a specific Council of Ministers Resolution pertaining to Uzbekistan; the Council of Ministers Resolution on the Aral Sea; the "special attention" given to proposals from Kazakhstan and Tadzhikistan in connection with formulation of the 13th Five-year Plan and the Plan to 2010; a "special resolution" of the central government on development of fruit-growing in Tadzhikistan; and the more general resolutions delegating more authority to the republics, thus enabling them to help solve such problems.[57]

THE SCOPE OF AUTONOMY FOR REPUBLICS

An important facet of Gorbachev's evolving "radical" economic reforms pertained to moves to grant the republics and local governments substantially greater authority and responsibility for managing their economies within the framework of an all-union "national economic complex." Initial decrees adopted in July 1986 moved somewhat toward such decentralization, mainly in the social sphere and in construction.[58] As part of an overall reform package, a decree of July 1987 went much farther, ostensibly according the republics virtually complete control over consumer-related sectors and infrastructure in their economies and broadened budgetary authority, although heavy industry and nation-wide infrastructure would remain in the hands of union organs.[59] To that end, seven formerly union-republic ministries were given all-union status in 1987 and 1988, and most union-republic industrial ministries were abolished. As a result, the share of centrally controlled industrial production increased in some republics: in 1989, it was half or more in the R.S.F.S.R., Ukraine, Belarus, Kazakhstan and Armenia. Although the provisions of the 1987 decree were incorporated into planning and budgetary procedures, their attempted implementation created much confusion and uncertainty.

In the meantime, something potentially far more radical appeared—the movement toward full economic autonomy for the republics. The general idea was initially endorsed in mid-1988 in the Resolution adopted at the 19th Party Conference, but "with a clear definition of what they are expected to contribute to union-wide

[57] *Trud*, August 24, 1989.
[58] *Pravda*, July 30 and September 13, 1986.
[59] Source cited in 8 above.

programs." [60] In September 1988, the Party Central Committee authorized an experiment along those lines in the Baltics, Belarus, the Tatar ASSR, Sverdlovsk Oblast, and Moscow, starting in 1990. Independence-minded reformers in the Baltic republics seized upon this idea and proceeded to develop quite radical models to be used to pave the way for full political sovereignty. [61] The national government responded by publishing a draft law in March 1989 entitled "General Principles for Restructuring the Leadership of the Economy and the Social Sphere in the Union Republics on the Basis of Broadening Their Sovereign Rights, Self-Management and Self-Finance." [62] Although replete with rhetoric about republic economic sovereignty, this document, in fact, went little beyond the 1987 decree, mostly elaborating details and spelling out streamlined budgetary arrangements between the republics and the center. Following a lively public discussion of this draft, the Supreme Soviet returned it twice (in October and in November) for reworking because it was not "radical" enough. [63] Meanwhile, the Council of Ministers adopted a decree providing for the transfer of Belarus to economic sovereignty in 1990 along the lines spelled out in the March draft. [64]

Following publication of ever more radical proposals by the Baltic republics, notably Estonia, and contentious debates at the September 1989 Party plenum on nationalities policies, the U.S.S.R. Supreme Soviet on November 27th adopted a "Law on the Economic Autonomy of the Lithuanian S.S.R., the Latvian S.S.R., and the Estonian S.S.R.," which, while not meeting all of the demands of Baltic leaders (republican ownership of all property and land and full control over all enterprises, banking, financial matters and foreign trade), did accord them considerable leeway. [65] This law provided the basis for acrimonious negotiations with Moscow agencies to spell out the details of the economic relationships of those republican governments with Moscow. Issues of the transfer of union enterprises to republic jurisdiction and the size of the tax to be paid to the union budget were the most contentious. Even before the adoption of this law, the Baltic republics had been taking actions that were at variance with Moscow policies, leading to accusations of "sabotage" and counter-accusations of "blockade." Finally, while awaiting a new national law on the subject, other republics were preparing their own draft programs for economic autonomy. The Kazakh government, moreover, was considering a draft U.S.S.R. government decree authorizing an experiment there with some version of republic-wide economic sovereignty in 1990 and sovereignty at the oblast level in 1991. [66]

In his speech to another CPSU plenum in late December 1989, Gorbachev spoke fervently about what he regarded as the folly of attempts at economic (and political) independence for Lithuania,

[60] *Pravda*, July 2, 1988.
[61] A detailed review of the evolution and content of the Baltic models for economic sovereignty is given in Misha V. Belkindas, *Soviet Regional Economic Autonomy: Baltics versus Moscow*, Falls Church, Virginia; Delphic Associates, 1989.
[62] *Pravda*, March 14, 1989.
[63] TASS, Moscow, November 20, 1989.
[64] *Izvestiia*, September 16, 1989.
[65] *Izvestiia*, December 2, 1989.
[66] *Izvestiia*, January 4, 1990.

where the Communist Party had just recently broken with Moscow. "Those who concern themselves with policy and not with emotions understand that the economic separation of Lithuania cannot and will not lead to any material prosperity either now or in the foreseeable future." [67] At the next CPSU plenum held in early February 1990 to prepare the platform for the 28th Party Congress, Gorbachev called for the continued "principled" fight against "nationalism, chauvinism and separatism," but he also spoke of development of a "treaty-based principle" for the Soviet federation and the possibility for "the existence of various forms of federal ties." [68] The Party platform adopted at the plenum endorsed the resolution on nationalities policy that had been adopted in September 1989 as the framework for action. On economic policy, the platform stated further, "The present-day economy cannot manage without the center operating at the macro-level. The center has no interests of its own distinct from the fundamental interests of the republics and peoples of the federation. But the jurisdiction of the union and the republics must be clearly defined in such areas as planning, budget formation, taxes and credit, and pricing. Direct contract links between enterprises in all republics and regions, and a developing union-wide market, must form the economic foundation for integration processes and the renewal and strengthening of the federation." [69]

## Developments in 1990 and 1991

The pace of events accelerated rapidly in 1990. [70] On April 10, 1990, the Supreme Soviet adopted a new law entitled "On the Fundamentals of Economic Relations Between the USSR and the Union and Autonomous Republics." [71] The law was to take effect on January 1, 1991, and the U.S.S.R. Council of Ministers was directed to prepare a series of implementing documents. The law laid out in fairly broad terms the areas of responsibility in economic matters that were to be reserved for the national government, prescribed general procedures for forming the all-union budget, and stressed the primacy of federal laws and regulations over those adopted at lower levels. A major section of the law dealt with the "all-union market." Republics were forbidden to discriminate against one another in economic matters and to erect barriers to interrepublic commerce. Republics could enter into treaties with the federal government and with one another on economic matters, and general procedures were set forth for resolving disputes. Cast in much broader and more legalistic language than the government's original draft, the new law provided ample room for disputes between the federal and republican governments over its intent in individual cases.

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[67] *Pravda*, December 17, 1989.
[68] *Pravda*, February 6, 1990.
[69] *Pravda*, February 13, 1990.
[70] The following discussion rests in part on the author's paper "Perestroyka in the Aftermath of 1990", *Soviet Economy*, Vol. 7, No. 1, 1991, pp. 3-13. See also Donna Bahry "The Union Republics and Contradictions in Gorbachev's Economic Reform", *Soviet Economy*, Vol. 7, No. 3, 1991, pp. 215-255.
[71] *Izvestiia*, April 17, 1990.

But events did not wait for the orderly implementation of this law. One by one, the republics declared their sovereignty and signed treaties and economic cooperation agreements with one another, a movement that gathered speed in the second half of 1990 as the overall economic situation deteriorated markedly. All republics declared their sovereignty during the year. By the end of May 1991, the R.S.F.S.R. and Ukraine had bilateral agreements with all other republics, and all the rest (but one) had such agreements with at least half of the republics. These assorted agreements varied widely in content and specificity, but most of them contained a pledge to maintain existing economic ties at least at the 1990 level during 1991. Most republics also acted quickly to establish direct trade ties with foreign countries. Finally, moves were made to conclude treaties of cooperation among groups of republics: specifically, such accords were signed by the three Baltic republics in April 1990 and by the five Central Asian republics in June 1990.

While adoption of economic reform legislation and consideration of ever more radical reform programs proceeded at the national level during 1990, republican legislatures acted to draft and/or enact their own laws on economic matters that also were the subject of federal legislation, for example, on land reform, property ownership, enterprises, and taxes. The Baltic republics were the most active in this regard. Some of these laws conflicted with federal legislation, creating massive confusion in their implementation. Some republics also drafted their own blueprints for economic reform, and the R.S.F.S.R. legislature voted to endorse "in principle" the rather radical Shatalin Plan for economic reform and republic economic sovereignty that was rejected at the national level. This chaotic process came to be described as the "war of laws."

Connected with this "war" and the declarations of republic sovereignty were the conflicts that erupted between the center and the republics over the control of individual enterprises. The Baltics, in particular, fought battles with Moscow over this issue, as did the R.S.F.S.R. and the Ukraine in regard to the coal industry. This process came to be described as the "war of jurisdictions." Toward the end of the year and in early 1991, battles also were fought over the formation of budgets for 1991, in particular over the size of republic "contributions" to funding the federal budget. Gorbachev finally managed to forge some kind of an accord with the republics in regard to budgetary and related matters and coordination of price, wage, and social policies. Although it was endorsed "in principle" by the Federation Council, the failure of some republics (including the R.S.F.S.R.) to observe this agreement contributed to an accelerating decline in production and a budgetary crisis, as some republics failed to remit the agreed-upon sums to the Union budget, and a "battle of the budgets" ensued. This situation led Gorbachev to unveil an "anti-crisis program" in April.[72] Center/republic disputes over this program culminated in the historic accord signed by Gorbachev and nine republics on April 23, 1991.[73] The accord was supplemented by a new "anti-crisis" plan and was

[72] *Pravda*, April 10, 1991.
[73] *Pravda*, April 24, 1991.

to be implemented through negotiation of a new union treaty and constitution.

As the year proceeded, events on the nationalities front played out at a fast pace in a general context of accelerating political upheaval and a deteriorating economic environment. Gorbachev's ill-conceived economic policies and badly flawed economic reforms implemented over the preceding five years had moved the economy from a "pre-crisis" state to one of full-blooded "crisis," to use Gorbachev's own words. There were no significant improvements in economic growth, efficiency, product quality, or standards of living, and the situation of the poorer republics deteriorated markedly. Even worse, perestroika also brought near disintegration of the consumer market throughout the country, chaos in the investment process, massive fiscal disarray, rapid inflation and a pervasive deterioration of government administrative services.[74] Regional conflicts both contributed to this situation and were exacerbated by it, as regional autarky spread when republics and local bodies acted to protect their own populations and economies at the expense of other localities and the country as a whole. Regions adopted localized rationing schemes, imposed embargoes on shipments of scarce goods to other regions, refused to adhere to contracts for delivery of products outside their areas, and took local actions to nullify Moscow's attempts to stabilize the economy.

The "9 plus 1" accord (nine republics plus the center) proved ephemeral. In a climate of growing separatism during the spring and early summer, negotiations over drafts of a union treaty needed to implement it stalled over the fundamental issue of federation versus confederation. The failure in late August of the coup that was launched to halt the perceived disintegration of the Soviet state only hastened its demise. The independence of the three Baltic republics was recognized by an enfeebled central government in early September. Other republics quickly issued their own declarations of independence. While talks on the union treaty continued, its futility was made clear when Ukraine declared its independence on December 1. A week later, Russia, Ukraine, and Belarus agreed to form a Commonwealth of Independent States (CIS) and were later joined by all the rest except Georgia. On Christmas day, Mikhail Gorbachev, the initiator of the fateful policies of glasnost, perestroika and democratization, resigned, and the venerable Soviet state formally ceased to exist at the end of the year.

Meanwhile, negotiations to establish an economic union of some kind had been proceeding and had produced a Draft Treaty on the Economic Community signed by eight republics in early October; most of the rest subsequently signalled their intent to participate. Although this document provided for coordination of economic policies among members, Russia soon announced its intention to launch its own radical economic reform, beginning with price liberalization in mid-December. This action, coupled with formation of the CIS, ended the treaty process, and the new structure became the mechanism for coordination of economic policies among the 11 member states. In its first nine months of existence, the CIS struc-

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[74] For a review of the performance of the Soviet economy and the republics during 1986–91 see the paper by James H. Noren and Laurie Kurtzweg in this volume.

ture has provided the vehicle for many meetings and policy issuances.[75] Overall, however, the member states have made little progress toward setting up the coordinated trade and currency arrangements that their inherited economic interdependencies would seem to require in the short to medium term.

## CONCLUSIONS

The much-touted Leninist nationalities policies of the Soviet state failed spectacularly. Intended to create a melting pot in a multinational Sovietized state, they instead facilitated its destruction. These policies called both for the "flourishing" of each of the many nationalities and for their gradual "convergence." Ultimately, these two processes carried out under socialism would lead to the merging of all peoples, that is, to the creation of a "new Soviet people." In practice, these general policies were executed through a regional administrative structure—the union republics—each of which could be regarded as the historical homeland of its dominant population group. Soviet policies permitted the retention of native languages in the titular republics and encouraged their distinctive culture. Both policies unintentionally nurtured the seeds of nationhood. Their swift ripening in 1991 not only destroyed the Soviet state, but established fifteen new nation-states on the basis of the former republics. The Soviet state in effect had created its own gravediggers.

In the economic realm, policy was made centrally, but executed administratively through the republic structure. In terms of "flourishing," these policies did indeed promote economic development and industrialization in each republic, along with systems of universal health care and education. Extreme disparities were reduced, but by no means were levels of development and living standards equalized among the republics. Despite the obvious economic progress made everywhere, Moscow's failure to tailor its policies more carefully to the needs of the regions became a source of many pent-up grievances. When Gorbachev sought to revitalize the Soviet state through his policies of glasnost, perestroika, and democratization, these long-standing grievances provided the basis for an explosion of rage against the center voiced through republic spokesman, who now demanded control over their own economic affairs and, finally, their political independence. Like the sorcerer's apprentice, Gorbachev was unable to control the centrifugal forces he had unleashed, inadvertently hastening the Union's demise.

The regional policies pursued by the Soviet Union have left terrible legacies for its successor states. Their nature and severity differ considerably among them. Most fundamentally, these legacies are to be found in the patterns of land use, the physical capital stocks in place, the skills of the work force, and the state of the environment. Large interrepublic economic dependencies stem from these physical and human assets that Moscow-centered regional policies had put in place. More generally Soviet nationalities policies, as they were carried out in the republics, bequeathed to their succes-

[75] For a detailed description of this tortuous process see James H. Noren and Robin Watson, "Interrepublican Economic Relations After the Disintegration of the USSR", *Soviet Economy*, vol. 8, no. 2, pp. 89–129.

sors governments without experience in real governance and potentially divisive ethnic compositions of the population. But they have also bequeathed to each of them relatively educated populations and skilled work forces and a territorial-administrative framework based on the potentially cohesive force of perceived nationhood. While the task of creating economically viable nation-states from the fragments of the empire is awesome, one need not conclude that it is impossible, given time, patience, and appropriate international support carefully tailored to time and place.

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# THE NEW EAST AND ITS PREFERRED TRADE REGIME—THE IMPACT OF SOVIET DISINTEGRATION

by Jozef M. van Brabant *

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## Summary

In designing technical facilities, perhaps with international assistance, to ease the transition to a market economy in the former Soviet Union, it is useful to separate the politics of union formation from the analysis of why countries pool some of their resources. This can best be done by looking at the destruction of the ruble zone within a broader setting. The paper recalls the key features of the economic and monetary union that existed until the U.S.S.R.'s dissolution and the aspirations of moving toward market-based economic systems harbored by some of the policymakers of the successor republics and the new generation of policy advisers. How to get from the planning systems to basic market orientation is bound to be complex. To maintain some sociopolitical—and economic—order in the transition, maintaining buoyant interrepublic trade, possibly with foreign assistance, is a must. This could usefully be arranged through a payment facility, regardless of whether the successor republics adopt their own currency, and it might be useful to let other former Council for Mutual Economic Assistance (CMEA) countries as well as Albania and the Yugoslav successor republics choose to join it too.

## Introduction

With the foundering of Communism over the past three years or so, we have witnessed many dramatic, and on the whole unanticipated, transformations throughout the eastern part of Europe. I

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collectively refer to these planned economies in transition (PETs)—no pun intended—as "East." One of the more surprising aspects of this tumultuous remaking of the East has been the collapse of the former Soviet Union. The previous constituent republics, at least in their political posturing, have become unrecognizable, despite strenuous efforts to erect a Commonwealth of Independent States (CIS). However, their emerging economic problems are jointly shared, if only because of the recent experiences of the countries [1] formerly allied in the CMEA and the destruction of their regional price, trade, and payment regimes. [2]

The CIS proposes to formulate a common policy regarding the ruble, foreign affairs, and defense, among others, and to foster some coordination of economic reforms of the type spearheaded by the Russian Federation (hereafter referred to as Russia) since January 1992. To some degree, this smacks of the former transferable ruble (TR) regimes that were the mainstay of economic relations within the CMEA until they spectacularly unraveled in 1990. But the frustrated aspiration of these countries to quickly realize trade and payment conditions comparable to those of "the world market" has left a bitter taste and many dashed hopes. The situation for the other former CMEA members as well as Albania and the successor Yugoslav republics is nothing short of catastrophic. Expectations of this being emulated in the former U.S.S.R. are widespread and probably self-fulfilling.

## THE POLITICS OF ECONOMIC DISINTEGRATION

Politics is, of course, important in setting the framework within which states coexist and indeed for determining how best any one state can reach its set goals. The slide in the Soviet polity had started much earlier than the palace revolt of August 1991. Whatever salutary effects perestroyka and its associated "New Thinking" may have had on world and regional politics, and indeed on the demise of Communism more generally, the economic components of perestroyka had withered to calamitous failure well before—no later than 1988—the final disintegration of the union. Shortages were pervasive; output was declining at an alarming rate; productivity was down; unemployment and poverty were coming into the open; the prospect for a decent harvest in 1991 was dim; the budget deficit was well out of control; external imbalances were rising (at least in the ex ante sense), inflation was rampant;

[1] Membership was identical to what is here denoted as East, except Albania, which ceased participation in 1961; Yugoslavia, which became an associate member in 1964, but never assumed full membership; three full non-European members (Cuba, Mongolia, and Vietnam); nine cooperants (Afghanistan, Angola, Ethiopia, Finland, Iraq, Mexico, Nicaragua, Syria, and (Democratic) Yemen); and other developing countries that maintained some relationship, usually as observer, with the CMEA. Here I focus on the European members of the ex-CMEA (Bulgaria, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Poland, Romania, and the Soviet Union). This group is also identified as Eastern Europe, although I shall occasionally use the notion to refer either to the six smaller European CMEA countries prior to the GDR's absorption into Germany or the East other than the CIS and Georgia. But the context makes it then clear that I have this smaller group in mind.

[2] Certainly the CMEA was not formally abolished until 28 June 1991 at the 46th Council Session in Budapest and the transferable ruble mechanisms remained in place until the end of 1990. But by then these mutations were only a belated recognition of the decay that had already pervasively tunneled through the real spheres of trade, payments, and economic cooperation in the East.

and the value of the ruble was being eroded at an alarming pace. Ruble printing was running into its own bottleneck set by the availability of paper, ink, and functioning presses.

Even when measured by the official gauges of Soviet policymakers, the ruble had slipped in less than one year from about R6 per dollar in the tourist market to R45 by late 1991. The auction rate had even gone beyond that measure, reaching into the R60–100 range, depending on nervousness permitted in the narrow trading. And, of course, the black market rate was well beyond that, by some accounts perhaps twice the auction rate. In early 1992, with the launching of Russia's dash toward what may yet turn out to be economic disaster, the exchange rate plummeted further; at one point it reached about R230. The visible improvement in late February and early March 1992 stemmed probably more from the shortage of physical ruble amounts; the need to pay inflated wages in state-owned enterprises, if necessary by mobilizing convertible currency holdings; and the tug-of-war between the government and the central bank of Russia, in which the latter was pressed to demonstrably reverse its dismal dash to the printing press in preceding months, than from a genuine resurgence of confidence in the wholly discredited ruble.

Any reversal of this drift into sheer economic anarchy would have involved stringent demand-management measures aimed at economic stabilization, in the first instance by eliminating stock disequilibria, or the imbalances built up over the past years because of egregious policy errors. But it would soon also involve the rudiments of coming to grips in monetary and fiscal domains with the basic requirements of stabilization in the flow sense, or managing the economy in such a way that the government either does not run a budgetary deficit or can finance it out of voluntary savings through financial intermediation in 'commercial markets.' Only in this way could confidence in the ruble be restored, at least at home, possibly only in Russia.

Because the commitment to economic stabilization was absent until early 1992 and has been lukewarm at best since then, since about mid-1991 the question increasingly has been asked whether with such a loose union it would still make sense to maintain a single currency. In addition, with the growing displacement of the ruble, either with straightforward barter or convertible currency, it became proper to inquire into the raison d'être of the ruble in any credible reform package. Without the latter, the ruble would probably disappear into oblivion as several other currencies did, following the ravages of war, revolution, or sheer regime mismanagement.

Managing a union with up to 15 sovereign republics in a single currency zone necessarily raises issues that are familiar from the literature about optimal currency areas, although the ruble zone could hardly be termed an optimal area, if only because the condition for reaping the advantages of a common currency with internal and external balance at high levels of capacity utilization were rarely fulfilled, especially since the start of perestroyka got under way. Nonetheless, the practical issues emanating from the destruction of the ruble regime are known from the demise of the TR price, payment, and trading regimes since late 1989 and the dinar

regimes more recently. But the issues at stake are more acute for the ruble zone for at least two reasons. For one thing, the dependence of the republics on intragroup trade is at least as pronounced—and in some republics far more so—as was the case in the CMEA until about 1990. More important, the ruble zone, though it never reigned over a market properly defined, provided the institutional wherewithal for the acquisition and disposal of goods, without the republics having to worry too much about interrepublic imbalances. That arrangement, including the rampant cross-subsidization largely through nonscarcity pricing, may well have been irrational, and it might in the end be preferable to let some republics orient themselves to other areas in which they can better capitalize on their static and dynamic comparative advantages. Until that platform can be reached, however, the question of how best to orderly transit from the present disarray to market-based decision making remains to be addressed. The disruption of the ruble regimes elicits at least three questions: How best to conduct orderly trade and payment arrangements now that the Gosbank infrastructure has been obliterated; How best to finance ruble imbalances, or the imbalances previously incurred in rubles, and offset them through the ruble credit mechanisms; and how best to come to grips with the new imbalances arising from the transition to "world market" pricing.

For many observers of the collapsing TR, ruble, and dinar regimes, the advice to the transition's managers has been to move away as rapidly as sociopolitical circumstances permit from the antiquated forms of economic interaction. If necessary in the short run, the advice has been to opt for bilateral solutions, even pure barter (Drábek 1992; Rosati 1991). That, however, cannot generally be salutary and it is certainly not the best solution. For one thing, barter and bilateralism pose the danger of a sharp compression in the volume of sustainable trade as they require the "double coincidences of wants," as characterized by Stanley Fischer (1992, p. 34) twice over, given that the economic interaction among the republics is not solely determined by economic considerations.

The position taken on the most rapid destruction of inherited economic interdependencies is wrong as a matter of both theory and political economy. As a matter of trade theory, in a number of second-best situations, including those prevailing in the former Soviet Union, it may be desirable for now to maintain approximately the turnover that has ultimately to be displaced by shifting the commodity composition or the geographical orientation of trade. And there is, of course, no reason to believe that the optimal restructuring of trade would wipe out all commercial ties forged over more than half a century. As a matter of political economy, a very rapid and forced compression of trade, hence output, of what may in the end have to disappear may stop a reform process cold in its tracks. The recent experience of the former CMEA members provides some evidence that trade-related shocks to an economy in comprehensive transition, even if due to trade that eventually would have lacked a solid economic foundation, can produce too rapid a decline in output, thereby undermining the credibility of the transformation policies as such.

## THE RATIONALE OF COMMON TRADING AND MONETARY AREAS

In view of the rapidly collapsing ruble regime, it may be useful to briefly recollect the rationale for countries banding together. To do so, the basic points justifying 'optimum' currency or economic regimes need to be recalled. In this context, I can only do so in a very rudimentary way (but see Brabant 1992c) by contrasting the essence of the ideal regime with the emerging disarray in the former, more or less, coherent zones. I shall do so specifically with reference to what appears to be required to shift from a common to a disrupted union, now that reform ambitions in the successor states are unlikely to coincide. Some common trade framework is required even if the successor republics adopt different domestic reforms; the latter need at least implicitly to be managed. This question becomes especially important when there is a need for coordination in an environment (such as the former CMEA, U.S.S.R., or Yugoslavia) that is otherwise utterly in shambles.

There is little point in looking for a neat economic rationale to explain the formation of the Soviet Federation as it never explicitly aspired to reaping the economic gains available within an optimum currency area or regional association (Grubel 1973, Mundell 1973). The common formula is that gains can be reaped from having a currency area in which there is only one currency or in which there are multiple currencies that are rigidly and (in the expectational sense) permanently linked through credible exchange rates, but that may periodically adjust in tandem to other currencies. The commitment to immutable exchange rates requires that aggregative monetary and fiscal policies be harmonized so as to maintain long-run equilibrium in the current account and to arrange lending facilities to make it possible for members to keep the exchange rate stable in spite of short-run external disequilibria. With a single currency, there is, of course, no need to harmonize policies with a view to maintaining the overall current account, but regional imbalances, including those in employment patterns, must be corrected when labor mobility is imperfect. For that, harmonized fiscal policy must be attuned to take over the function that otherwise an exchange rate might play in the adjustment process (Grubel 1973, p. 101). However, even that might not suffice, and it will then be necessary to integrate labor markets (Balassa 1973).

The above can realistically be pursued only when there is some potent coordination mechanism. This is normally provided through flexible, fully integrated markets. But that could not prop up the case for the ruble zone or its preferred transformation in the foreseeable future. Yet, there would be little point in fostering a return to intensive interrepublic trade without invoking an economic logic. Not that economics by itself can persuade sovereign states—or those aspiring to that status—to engage in constructive joint undertakings. But by pointing out the economic gains of participating in some union, cogent arguments setting a tangible tradeoff between economic gains and political drawbacks could be formulated for policymakers.

An economic union with one common currency, provided there is an agreed fiscal, monetary, and indeed labor policy stance, may yield significant economic gains. But these do not necessarily

accrue equitably to all entities of the union. A case can, therefore, be made for agreeing on redistributing some of these gains, for example, through regional policies. This rationale is very different from any advocacy of recreating the CMEA mechanisms for managing the interrepublic relations as László Csaba (1991) has argued. This cannot be a desirable option and it certainly should not be invoked to deride proposals for temporary payment mechanisms (see Brabant 1991a, b, c; Havrylyshyn 1992, and Havrylyshyn and Williamson 1991).

## The Unraveling of Economic Ties

Prior to the collapse of the Soviet Union, interrepublic relations devolved more from administrative convenience and political imperatives than economics. In other words, trade and payment relations between, say, Ukraine and then Byelorussia were no different from those between, say, Leningrad and Moscow. All transactions in principle devolved from planning decisions or administratively negotiated contracts with rather inflexible prices, but the clearing of transactions ensured through the technical apparatus of the monobanking system, was backed up by agreed-upon plan priorities. This system had been crumbling for some time prior to the formal collapse of the union as sovereignty claims were being staked out. But just as the TR regimes outlived the interruption of CMEA contract discipline, the ruble zone and the unionwide technical clearing of settlements were preserved until the dissolution of the Gosbank system. [3]

As a result, trade flows did not emanate from genuine comparative advantages. Just as in the TR regimes, goods were traded at prices that reflected neither domestic ruble costs nor real scarcities in world markets, and these prices were as a rule not directly passed on to domestic agents. Eastern markets were 'captive,' especially for goods built within the context of intergovernmental specialization agreements and jointly financed investment projects. The former were mainly in support of machine building and manufacturing more generally. The latter were principally designed to shore up the buoyant exchange of Soviet fuels and raw materials for Eastern European manufactured products.

The resulting patterns of trade on the whole supported economies that were by design sheltered against external competition and without competition from within; economies that engaged in widespread redistribution of incomes throughout their own economy, but were reluctant to do likewise on a regional level, even among likeminded partners; and economies that had their economic priorities set by the political and bureaucratic powers in place, rather than through a framework from within which economic decision makers could formulate their own strategies in pursuit of their own profit motives. Except for the reluctance to redistribute

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[3] Note that CMEA and Yugoslav interdependences differed slightly from this state of affairs. For one thing, regardless of aspirations of some key players in the CMEA tug-of-war and the agreed policy framework, there never was a unified CMEA economic space and the CMEA members in fact never aimed at elaborating it. On the other hand, though at some point there was centralism in Yugoslavia, this was eroded rapidly as a result of the inchoate economic and political decentralization of "market socialism" à la Tito and his epigones.

incomes and the degree of integrated planning, this CMEA system on the whole characterized the ruble regimes as well.

Whatever the considerable defects of these regimes—and they were very substantial indeed!—they did support buoyant trade and clearing for many decades. The system began to totter—and, in the end, it faltered completely—when imbalances could no longer be accommodated, and the erstwhile transfer of incomes through peculiar price setting proved unacceptable to those countries or republics that had been shoring up their regional or domestic partners. But aiming at more scarcity-related pricing and economic decision making is quite different from being able to apply 'world market' conditions overnight or redirecting trade to alternative markets. This can best be understood by looking at the likely implications of such regime switching. These are bound to be more ominous for the ruble than TR regimes, owing to the fact that the former economic space functioned in a much more integrated, if bureaucratically planned, way than this applied to the TR economic space.

"World conditions" in Eastern parlance means essentially four things: goods and services are negotiated by microeconomic agents on their own account; market-clearing prices of a sort, given that there are really not yet genuine markets in the East, will be the terms at which exchanges take place; imbalances are settled in convertible currency on a current basis or periodically (in the case of clearing); and the usances of world trading, notably on payment conditions, need to be observed. Other financing modalities can be worked out by going through financial markets, but that opens up an altogether different arena.

The switch to this new environment exerts repercussions that can usefully be analyzed in three categories. First, the adoption of market-clearing prices of a sort significantly modifies the terms-of-trade. In the case of the Soviet successor republics, it would improve the terms of trade of the exporters of fuels and most raw materials (largely Azerbaijan, Russia, and Turkmenistan), but sharply deteriorate those for the other republics. [4] In fact, some of the southern republics may yet lose in terms-of-trade because transfers through the pricing mechanism, notably for foodstuffs and fuels, are due to be completely eliminated, and this might more than offset the gains alluded to earlier. The western republics are probably bound to lose most, in relative terms, while the livelihood of many of the southern republics may be reduced beyond the level at which sociopolitical consensus on transition can be maintained.

Second, demand and supply schedules are bound to change because the new microeconomic agents are highly unlikely to replicate the earlier behavior of ministerial bureaucrats, which at least for now (albeit at the republican rather than central levels) contin-

[4] That would probably be exacerbated by the erosion of manufactures prices, as could have been anticipated for CMEA trade. However, the latter slide will probably be somewhat slower, provided some semblance of trade order at moderately high levels of aggregate economic activity can be maintained. The major impact on manufactures will probably occur through volume compressions of products no longer wanted rather than through the erosion of prices of manufactures that, at least for now, will be required to maintain, for example, the existing machine park. The price slide will gather speed in the medium term as the existing capital stock is being replaced with "better" products. With a sharp compression in levels of activity, it may start earlier than it would otherwise, of course.

ue to set trading and payment patterns. This will change the demand of importers of manufactured goods more radically than the demand for most raw materials and fuels. Structural change over time, including energy and raw material conservation measures embraced as prices start to "bite" and new capital investments can be undertaken, would eventually impact also on the demand for such goods.

Finally, arguably the most important repercussion is bound to emanate from the inability to increase the supply of convertible currency in line with demand for both transaction and precautionary reasons. With new trading agents, larger ex ante imbalances are likely to surface. To finance them, adequate reserves are required. Also the transaction demand for convertible currency rises, basically for three reasons. One is the rule of thumb that it is prudent for a country to hold foreign-exchange reserves equivalent to about three months' worth of imports. Another is the need to finance private trading and related foreign transactions previously all conducted at special clearing conditions. Finally, because of the asymmetry in export structures, the net exporters of machinery would on balance have to grant supplier credit of 90 to 120 days but pay cash for their net imports of fuels and raw materials.

Required reserves can be built up by running a net current-account surplus now or in the future (if borrowing were feasible). Doing this in the short run would be very costly, if not impossible, given the excess demand for imports and the inability quickly to switch export markets without incurring sizable terms-of-trade or export-revenue losses. Borrowing might help, but only if the intervening years are utilized for structural change and thus laying the foundations for a future current-account surplus. Even if alternative, private as well as official, reserve financing could be explored, the successor republics will have to depend to a considerable extent on interrepublic credit, which in the short run is analogous to the erstwhile transfer of implicit subsidies. While it would be easier to arrange this technically in a uniform ruble zone, the essence even with multiple currencies is a (temporary) transfer of real resources from one republic (mainly Russia) to others.

Even if the politics remain clement, without having available some mechanism through which trade and payments can be settled, and in the short- to medium-run financed in some sense under some form of surveillance, one must reckon with a serious contraction in sustainable levels of interrepublic trade. This is highly undesirable, not because previously conducted trade has been rational (although it must still be financed at this stage), but some part of that trade will have to be maintained to sustain orderly adjustment without eroding the support for the envisaged transformation. A collapse of ruble trade in turn cannot but exert downward pressure on supportable levels of domestic economic activity, and, through the multiplier, a downward spiral for most republics, especially the trade-dependent ones unable to reorient their trade quickly to Western markets, is bound to follow. The impact for the Soviet successor republics seems likely to be even more pronounced than has been the case of switching to "world market" conditions in the economic relations among the ex-CMEA countries. There is, therefore, some interest in seeking ways to avert an abrupt com-

pression of interrepublic trade. The support for doing so in the case of the ruble zone would seem even more compelling than was the case for the TR, when it gave way in 1990–1991.

Would it logically make sense, and be politically prudent, to rescue part of the traditional trade—including some flows that cannot be justified in the medium to long run—and, at the same time, provide a platform for rebuilding economic cooperation on strictly economic grounds? I maintain that there are such opportunities. But none can be immediately placed in the context of "world market" conditions. My preferred strategy includes the creation of a payments union with outside support and supervision. Certainly, many difficulties are likely to arise in managing trade and payments under conditions of comprehensive economic transformation. Barring massive foreign assistance on the order of what has been arranged in Germany, only by instituting some payment facility can utter economic collapse be staved off, the base to pursue pervasive structural adjustment be shored up, the market orientation of these countries be robustly anchored, and the fuller integration of these countries into the world economy on a sustainable basis be prepared.

### The Need for a Payments Union and the Question of Chronic Imbalances

Many alternatives for resetting policies in the successor republics have been proposed. I shall not examine all of them, if only because some fancy schemes are simply quite implausible (Brabant 1992a, b). And the survivability of the ruble zone does not depend on, and certainly does not derive its rationale from, the long run. Rather, it depends on whether policymakers can make a credible and orderly transition from the currently convoluted situation to one with the potential to buttress and foster along the transition to market-based economic systems.

To forestall the easy critique of advocating derogations from "world market" conditions, let me first outline the three circumstances under which there can be no need for any special facility, such as a payments union. First, it is superfluous when countries at near-full employment adopt some form of currency convertibility approximating the stipulation of Article VIII of the Articles of Agreement of the International Monetary Fund (IMF). [5] That should at least encompass automatic and anonymous access to foreign exchange for all duly authorized transactions by legitimate traders.

A second instance occurs when the potential participants in the envisaged mechanisms can redirect their trade to other markets without incurring sizable terms-of-trade losses. In the case of the successor republics a further requirement is that there be no sizable export-revenue losses, since a good share of former ruble trade consists of special-order goods that would be all but impossible to merchandise elsewhere. The Soviet successor republics are unlikely

[5] Article VIII, section 2 states that "no member shall, without the approval of the Fund, impose restrictions on the making of payments and transfers for current international transactions" (IMF 1978, p. 29). For a useful interpretation, see Gianviti 1989, 1990, and a comment in Brabant 1992d.

to be in a position to repeat the feat of some Central European countries in Western European markets, even though the losses in the East have not yet been offset. The reasons are multiple, but involve marketing, security arrangements, and available infrastructure as well as the fact that the republics are not likely to obtain the same privileged access to Western markets, even if their recent pace of economic activity had provided room for export expansion.

Finally, if potential participants were willing and able to finance their intragroup trade in convertible currency, even though their own currency is for now inconvertible, no payment facility is required. This case would amount to de facto convertibility through liberal foreign-exchange allocation mechanisms that for now fall short of emulating relatively free markets for commercial exchange transactions.

Although under these conditions no payment facility should be innovated, countries may still wish to explore avenues through which they could economize on scarce foreign exchange or expedite the settlement of reciprocal transactions. There is nothing onerous or particularly unusual about establishing some clearing scheme, such as the one utilized in Western Europe. Finding plausible ways in which their transactions can be expeditiously settled is an urgent necessity in the case of the successor republics, given the breakdown of the former Gosbank settlements system. Certainly, Russia claims to have instituted a settlements facility for interrepublic trade, including swing credits (Yasiliev 1992). But other republics contend that the scheme is either highly inadequate or nonoperational (Havrylyshyn 1992, Imanov 1992, Iztelenov 1992, Karapetjan 1992, Narzikulov 1992, Onoprishwili 1992, Steinbuka 1992).

From the above it follows that I favor a payments union only to assist with the establishment of market systems in PETs as a purely temporary device that should help guide these countries toward current-transaction convertibility in the shortest time possible and at the smallest transition cost (Brabant 1991a). Note that a payments union can come to grips only with temporary imbalances. Structural deficits have to be dealt with through structural-adjustment lending, although the two facilities could be coordinated, as pointed out later. Also, my advocacy of a payments union for all or subgroups of PETs makes sense only if it is thoroughly integrated in the entire design to restructure the participating economies through national, regional, as well as international efforts. Such a facility would minimize the inhibitions to economic integration, formal or not, among the countries thoroughly committed to reform. Without a transferable currency this cannot function. Short of reaching de facto convertibility for the national currency, a transferable currency managed within the context of a payments union may be useful.

Ensuring some harmony between current-account management and forging ahead with market-oriented transitions as rapidly as circumstances permit requires that there be some instance to supervise the entire operation. To expect that the Russian authorities can do so only on the basis of a technical clearing facility with swing credits, as in the proposal for an Interrepublic Payments Mechanism of Stanley Fischer (1992, p. 36), is naïve at best. To the extent it credits the presence of the Washington financial institu-

tions with the ability to infuse such a mechanism with credibility for the other republics, the position taken may be a pragmatic one. But I have expressed my doubts on the intermittent involvement notably of the Fund in current-account management with a view to fostering the reform, largely on the grounds that the tail cannot wag the dog (see Brabant 1991a, 1992d).

Without the ability to pursue any of the three courses under which a payments union would be superfluous, the successor republics can at best choose from among three genuine alternatives. One is borrowing in commercial markets on their own account (perhaps with government guarantees and assistance from the Washington financial institutions) to finance their structural change over the medium run. But commercial lenders are highly reluctant to repeat their errors of the preceding two decades and, in view of their inexperience with most of the successor republics, are unlikely to be inclined to lend in adequate volumes for current-account purposes. Furthermore, such massive borrowing might simply worsen the external-debt situation of these countries and eventually usher in another debt crisis, as it did in the early 1980s for most of the East. It is especially difficult for commercial banks to enact effective surveillance so that the funds are indeed mobilized to credibly restructure output profiles. To counteract this reluctance of commercial markets, would it be advisable to set up a special borrowing facility at the IMF, similar to the oil facility inaugurated in the 1970s, provided it could be financed and managed specifically for the successor republics or perhaps all PETs.

The last option is to sustain a massive loss of trade, either in terms of an erosion of the country's terms-of-trade or because of the collapse of export markets. The consequences of such a policy option would be a sharp downward pressure on sustainable levels of economic activity that may in due course lead to a protracted economic depression, a sort of low-level equilibrium trap from which policymakers may find it very difficult to extricate their economy.

One major problem that has often been invoked against setting up a payments union is the existence or emergence of chronic creditors. If settlements arrangements permit, at given levels of economic activity, Russia will predictably maintain a net export surplus if the successor republics were to switch to world prices in their intragroup trade, provided buoyant activity levels can be ensured. Because it is no longer interested in subsidizing the other republics, it will have to be paid for its surplus, if not immediately at least over the medium run. It might prefer to be paid immediately but the republics simply do not have adequate reserves. Russia might, then, seek to divert exports to convertible-currency markets, but there are limits to this flexibility in the short to medium run (such as security interests in the West, limited infrastructure in Russia, and retooling costs to adjust to heavy Russian oils). Either for physical or profitability reasons, Russia might yet be interested in extending interrepublic loans that will eventually be repaid. This provides a useful nexus on which a payment facility with outside assistance too may be grafted.

If the international community were interested in ensuring an orderly restructuring of the successor republics, presumably funds

would need to be appropriated to finance the republics' deficit vis-à-vis Russia. This can be reconciled by constituting the payment facility in a somewhat peculiar fashion. So the linchpin of the discussion is not for or against a payments union, but rather whether the international community is interested in an orderly transition in the former U.S.S.R., how and at what cost such a winding down of old ties may be attempted, and whether the capital required to finance the scheme can be mobilized and, if not, whether there are other ways of economizing on scarce assistance funds.

In any case, if magnitudes of imbalances can be agreed upon as worthy of being financed in the interest of orderly transition, this can be incorporated in a payments union by adopting asymmetric rules on drawings against common funds for creditors and debtors and their changes according to a prearranged schedule worked out in line with the desired 'adjustment' of the net import countries. This can be embedded, both for one member country willing to lend or in the case of outside capital, though different asymmetries in debtor-creditor positions and their periodic modification according to an agreed-upon adjustment schedule.

In other words, it is wrong to assume that a payments union cannot cope with chronic creditors. This is only so when managers of the agreement do not succeed in holding participants to agreed-upon rules or cannot persuade policymakers of the participating economies to adjust their macroeconomic stances to wind down excess credits and debits. Excess in this context must clearly be determined by the desirability of lending within the union on capital account as well as the reciprocal drawing facilities to be "hardened" over time. That would mean that the Surveillance Board, in my scheme of things, is either incompetent or unable to hold decision makers to policy advice.

Note that even if one member were to agree to temporarily transfer capital, the critical variable often ignored in the easy criticism of a payments union is the competence and persuasiveness of the Surveillance Board. A stamp of approval on the part of the international community, including those called upon to line up capital to finance current-account deficits, is highly desirable and, in the end, unavoidable. Any scheme agreed to by a potential creditor may seem not credible to the potential debtor. A mix of internal and external support might, therefore, be the more desirable option. For reasons advocated elsewhere (Brabant 1991a), I would not entrust this task to the existing multilateral financial organizations, if only because of their built-in bias toward management of demand at the expense of taking direct action on the supply side, and the inherent difficulties of global organizations to cater to the needs of one specific group of countries in any case. Supply-side management is urgently required to foster structural change in economies where markets are at best incipient and far from sufficiently flexible to give credence to the assumption of automatic adjustment mechanisms.

## How Best To Ride Out the Transition

Opinions about the desirable path of disengaging from the erstwhile unions that were either not politically desired or not truly

based on economic factors have ranged disturbingly from an advocacy of maintaining the union to its most rapid destruction. The latter view derives essentially from presumptions that in the long run—essentially the equilibrium position in a comparative statics perspective—most of the component economies would do better by seceding from the union than from committing themselves to not very credible gradualism. The former position essentially argues that the costs of disengagement are so large (either because of true benefits or because of gradual disengagement) that it would be sheer folly to seek rapid dissolution of the existing unions. Naturally, both positions are suspect. But I would ally myself more readily to those advocating gradual dissolution of the union than to those propounding shock therapy. The latter evidently tacitly relies on the assumption that "market-based" adaptations will emerge quickly, hence, the short-term cost of complete destruction will be inferior to the discounted cost of any gradual solution.

Even if such a quick, moderately costly transition were feasible, I am suspicious of arguments that propound to be able to forecast the desirable trading and integration patterns of the economies in transition. For one thing, I find it almost ludicrous to entertain seriously any eventuality of the PETs returning to their trading patterns of the 1920s, either before the Great Depression for Eastern Europe (Bofinger and Gros 1992, Collins and Rodrik 1991), including the Baltics and, of course, Albania and Yugoslavia; or before the institutionalization of administrative planning in the Soviet Union (Bofinger and Gros 1992, Vavilov and Vyugin 1992). Even the presumption that the trade orientation registered at that time was in any sense an equilibrium position is suspect, if only because of the enormous adjustment difficulties experienced after World War I and the very substantial trade barriers (not necessarily of the tariff kind) erected by the successor republics to the Empires swept away by that war. There simply is no reason to presume that the industrialization and related structural changes that have taken place in the meantime have been all for naught, hence that these countries would be well advised to return to their spuriously imputed prewar equilibrium.

Similarly suspect are forecasts based on gravity equations constructed for presumptively comparable market economies (Bofinger and Gros 1992, Rosati 1991, Vavilov and Vyugin 1992). I find it hard to believe that, say, the Soviet successor republics could all be interpolated into the parameter values obtained on the basis of the same gravity equation estimated for some group of "similar" market economies (Bofinger and Gros 1992). I also have doubts about the assumption that the behavior of Western European economies provides a solid guide to how the Eastern countries will eventually trade (Rosati 1991). Arguments that parameter values for gravity equations are stable and almost invariant to sampling are not very persuasive for anyone who has experimented with alternative specifications. And if such invariance were to prevail, the model itself would be highly suspect, if only because there are so many countries that cannot be considered "normal" trading participants. It should also be recalled that the gravity model is a specification of general equilibrium, hence, only applicable if there is a fair conjecture that the sample is drawn from a global equilib-

rium. Point estimates based on one-year samples are rather suspect of being derived from magnitudes generated under such a demanding model.

Measurement problems regarding proper GDP levels in dollars (or any uniform Western currency) loom large in all of the gravity runs, and little attention appears to be have been paid to how best to correct for the huge differences between purchasing power and commercial exchange rates, especially those set after the transition, on the one hand, and the measurement of GDP for countries that traditionally adhered to net material product (NMP) computations in any case. Perhaps the most difficult problem is the integration of TR and convertible currency trade into one composite measure to be used in evaluating whether current trade is or is not "normal" in any meaningful sense.

Even if some invariance were to be observed and justified, it would still be true that the relationship between estimated and observed trade values for many countries tends to be rather different from unity, even once all kinds of dummy variables are introduced. It is for that reason that point forecasts for, say, trade between Denmark and Sweden tend to be rather "biased." Once this uncertainty is projected into the future (and parameter values are in any case not very stable over time, hence the presumed base year values are suspect as "norms" for the countries undergoing rapid structural change), the confidence interval becomes so wide that any point estimate will be pure empiricism with little informative value for policymaking. [6]

But most suspect is the proposition that any presumed equilibrium value based on aggregate income (and related) indicators observed shortly before or during the transition can be taken as a "normal" magnitude in any proper sense of that term and thus used as indicator of trade once equilibrium is restored. The latter long-term goal is, as a rule, surreptiously added. But this implicit assumption hides a great fallacy: What matters during the transition is not some target for long-term equilibrium, but rather how to disengage (if such should be done) from the intricate trading web knit over so many decades in an orderly way and thus gain a situation that economic magnitudes can fully support.

And, finally, the argument occasionally invoked to the effect that integration among developing countries is not very likely to emerge on economic grounds because the static and even more the dynamic comparative advantages of these countries are largely with developed markets rather than their fellow developing countries (Gros 1991) is not persuasive. To the extent that one believes in path dependency, a good deal of the trade orientation of developing countries emanates from ties built up with colonial powers and subsequently waxed through various forms of "development assistance." Now, especially in the case of the Soviet successor republics, very intimate ties were built over more than half a century. If these countries had been able to choose an independent develop-

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[6] Several observers have admitted the latter (Bofinger and Gros 1992), but then contend that what matters is not the biased absolute level of trade but rather the projected geographical distribution of trade. Well, one cannot project reliable geographical shares from the summation of absolute binary forecasts that are admittedly unreliable. Certainly, shares must lie between zero and 100 percent. But these are trivial boundaries at best!

ment strategy they might now look very different from what in fact could emerge under Soviet rule. But that does not necessarily mean that one could overnight embark on such a preferred development path, as it were, in mid-stream. For one thing, I do not even believe that with "freedom" completely centrifugal forces will be warranted and emerge on solid economic grounds. It may well be the case that, say, Uzbekistan in the year 2000 may trade 70 percent of its trade with other countries than the republics that once were in the Soviet Union. But I suspect that a good deal of that will be "new" trade, that is, trade creation over and above levels sustained under Soviet rule, once trading patterns have been restored to economically sensible levels.

## Conclusions

I have argued that holding a currency area, such as that for the ruble, together without a common monetary platform supported through adequate fiscal and labor-market policies may not improve matters beyond the purely cosmetic. The outcome under the circumstances would depend on two events. One requires that those in "control" of monetary policy be able and willing to share seigniorage and provide for adequate settlement and credit mechanisms, so that orthodox trade patterns can be gradually eroded. The other is that the remaining republics desist from embracing all kinds of de facto trade barriers, such as those installed by the Soviet republics in 1990–1991.

Given the extreme disarray in the post-Soviet Union, it would be a forlorn hope to expect such a coordination and voluntary submission to Russian decision making to emerge spontaneously. Rather, a further compression of trade among the republics can be averted only through credible gradualism. And that requires international financial assistance and active surveillance. If donors wish to come to the rescue of the PETs, the resource-transfer mechanisms should be designed so as to maximize the bang for each dollar—or ecu—ultimately in terms of fostering the radical restructuring of these societies, maximizing as much self-help as these PETs can muster (including avoiding the imposition of all kinds of artificial trade barriers), and minimizing any adverse implications for the global economy, including transfers to developing countries.

Although there may be several ways to achieve these objectives, in my view, a flexible payment mechanism with outside financing and surveillance offers the best way to cope with the very difficult situation at hand. It could be more effective and less expensive than the current course pursued through IMF-led ruble stabilization and current-account financing.

## Bibliography

Balassa, Béla, "Comment," in *The economics of common currencies*, edited by Harry G. Johnson and Alexander K. Swoboda (Cambridge, MA: Harvard University Press, 1973), pp. 173–7.

Bofinger, Peter and Daniel Gros, "A Soviet payments union: why and how?" (paper prepared for the conference "Eastern European Trade Policy Issues," organized by the European

Bank for Reconstruction and Development, London, 25–27 March 1992, mimeographed).

Brabant, Jozef M. van, *Integrating Eastern Europe into the global economy—convertibility through a payments union* (Dordrecht-Boston-London: Kluwer Academic Publishers, 1991a).

———, "Key problems of creating a Central European Payments Union," *Banca Nazionale del Lavoro Quarterly Review*, 1991b:2, 119–49.

———, *A Central European Payments Union: technical aspects* (New York: Institute for East-West Security Studies, 1991c).

———, "The new East and old trade and payments problems," in *Constructing a capitalist economy in Poland*, edited by Kazimierz Poznański (Dordrecht-Boston-London: Kluwer Academic Publishers, 1992a), forthcoming.

———, "The new East and old problems—about neighborly trade and payment relations," *Economies et Sociétés—Série G: Economie Planifiée*, 1992b, special issue, forthcoming.

———, *The new Commonwealth and the ruble* (London: Institute of Economic Affairs, 1992c, forthcoming).

———, *Ruble convertibility, external and internal equilibrium, and perestroyka* (Cologne, Berichte des Bundesinstitut für ostwissenschaftliche und internationale Studien, 1992d:6).

Collins, Susan and Dani Rodrik, *Eastern Europe and the Soviet Union in the world economy* (Washington, DC: Institute for International Economics, 1991).

Csaba, László, "Post-comecon trade in convertible currencies," *Est-Ovest*, 1991:5, 39–56.

Drábek, Zdeněk, "Convertibility or a payments union?—convertibility!" (paper prepared for the conference "Eastern European Trade Policy Issues," organized by the European Bank for Reconstruction and Development, London, 25–27 March 1992, mimeographed).

Fischer, Stanley, "Stabilization and economic reform in Russia" (paper prepared for the conference 'Eastern European Trade Policy Issues,' organized by the European Bank for Reconstruction and Development, London, 25–27 March 1992, mimeographed).

Gianviti, François, "The International Monetary Fund and external debt," *Recueil des Cours*, 1989:3, 213–86.

———, "Convertibility" (Washington, DC: The International Monetary Fund, office memorandum of 23 October 1990).

Gros, Daniel, "Regional disintegration in the Soviet Union: economic costs and benefits," *Intereconomics*, 1991:5, 207–13.

Grubel, Herbert G., "The theory of optimum regional associations," in *The economics of common currencies*, edited by Harry G. Johnson and Alexander K. Swoboda (Cambridge, MA: Harvard University Press, 1973), pp. 99–113.

Havrylyshyn, Oleh, "Trade and payments options for Central and East Europe" (paper prepared for the conference 'Eastern European Trade Policy Issues,' organized by the European

Bank for Reconstruction and Development, London, 25-27 March 1992, mimeographed).

——— and John Williamson, *From Soviet disUnion to Eastern economic community?* (Washington, DC: Institute for International Economics, 1991).

Imamov, Korkhmaz, "Azerbaijan" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

IMF, *Articles of agreement* (Washington, DC: International Monetary Fund, 1978).

Iztelenov, Beizenbay, "Kazakhstan" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

Karapetjan, Suren, "Armenia" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

Mundell, Robert A., "A plan for a European currency," in *The economics of common currencies*, edited by Harry G. Johnson and Alexander K. Swoboda (Cambridge, MA: Harvard University Press, 1973), pp. 143–72.

Narzikulov, Rustam, "Kyrgyzstan, Tadzhikistan, Turkemenia, Uzbekistan" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

Onoprishwili, David, "Georgia" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

Rosati, Dariusz, "The CMEA demise, trade restructuring and trade distruction (*sic*!) in Eastern Europe—initial assessment" (Warsaw: Instytut Koniunktur i Cen, 1991, mimeographed).

Steinbuka, Inna, "The Baltic states: Estonia, Latvia, Lithuania" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

Vavilov, Andrey and Oleg Vyugin, "Trade patterns of former Soviet republics after integration into the world economic system" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

Yasilyev, S., "Russia" (paper prepared for the conference 'Economic Consequences of Soviet Disintegration,' organized by Österreichische Nationalbank and the Institute for International Economics, Vienna, 20–22 April 1992).

# WHO'S FEEDING WHOM? AN ANALYSIS OF SOVIET INTERREPUBLIC TRADE

By Stuart S. Brown and Misha V. Belkindas *

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## SUMMARY

In May 1990 speaker after speaker at the Russian Federation's Congress of People's Deputies conference rose to condemn Russia's disproportionate resource burden and "nonequivalent exchange" with the rest of the Soviet Union (see, e.g., Vlasov, 1990). In what amounted to a national catharsis, Russia's reply to the popular question "who's feeding whom?" was unambiguous.

This paper explores the validity of this question and Russia's answer. With the breakup of the Soviet Union a reasoned reply to "who's feeding whom?" remains important: The perception that certain republics assumed a disproportionate burden in realizing central resource allocative priorities arguably played a role in the union's demise. Thus, a reexamination of "who's feeding whom?" is compelling for historical reasons alone. Furthermore, what can

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Soviet data on republic trade, the principal evidence marshalled to evaluate "who's feeding whom?", reveal about variations in the immediate costs of independence in the various former Soviet republics?

The rest of the paper is organized as follows: The first part analyzes data on republic trade balances, key physical interrepublic commodity flows and republic generation and consumption of foreign exchange. The second part interprets the findings and assesses their implications for interrepublic resource transfers in the former Soviet Union.

## Republican Merchandise Trade Balances

"Who's feeding whom?" is a dramatic way of asking which former Soviet republics have been chronic net creditors versus debtors. To determine this in principle, entails the estimation of a time series of current accounts by republic. The latter, in turn, requires two basic subcomponents: republic merchandise and services trade balances for successive years.

Such estimates were never made in the Soviet Union; at least they were never made public. Two obstacles preclude Western estimates of republic current accounts: The first is the limited duration for which officials of the former Soviet Union have so far provided republic trade balances; only 1987–89 republic trade data are available. The other reason is that such data are largely confined to merchandise trade and thus neglect most categories of services.

One can best start by drawing tentative conclusions based on a cautious interpretation of recorded republic trade flows in 1987–1989. These include commodities exported and imported among Soviet republics and with the rest of the world in established domestic prices, domestic prices adjusted for the interrepublic reallocation of financial resources plus so-called money migration, and world market prices. Merchandise trade balances by republic in each set of prices are summarized in table 1.

As many observers have legitimately objected, the trade balances in domestic prices severely bias real interregional commodity flows due to well-known distortions underlying Soviet domestic prices. However, others reject officially estimated adjusted domestic price balances because net flows of turnover taxes among the republics represent merely the financial counterpart of underlying real flows better captured in unadjusted prices (Dolle and van Selm, 1991). We believe that the latter argument reflects a fundamental misunderstanding of the purpose for and effect of central reallocation of financial resources among the republics. While it remains broadly true that one can characterize the Soviet economy as a passive monetary regime, net financial flows among the republics did serve to augment or reduce republic absorption (consumption plus accumulation). Because adjusted domestic price balances better capture the contribution of real interrepublic trade flows to republic absorption and thus, to the republic's national income balance, than do unadjusted domestic prices, no compelling reason exists to con-

TABLE 1. Interrepublic and Foreign Trade Balances, by Republic

(Millions of Rubles)

| Republic | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|
| | Domestic Price | World Price | Domestic Price | Adjusted Domestic Price | World Price | Domestic Price |
| Russia | −28,760 | 41,284 | −33,327 | −41,727 | 30,800 | −34,660 |
| Ukraine | −6,181 | −5,418 | −2,927 | −2,927 | −2,900 | −6,480 |
| Belarus | 1,157 | −2,492 | 2,073 | 3,273 | −2,100 | 950 |
| Uzbekistan | −4,000 | −4,362 | −1,840 | −740 | −2,500 | −3,990 |
| Kazakhstan | −7,541 | −7,653 | −7,255 | −6,555 | −6,600 | −8,480 |
| Georgia | −325 | −1,771 | −592 | −992 | −1,900 | −380 |
| Azerbaijan | 1,209 | −48 | 1,110 | 2,110 | −500 | 1,930 |
| Lithuania | −1,098 | −3,535 | −1,530 | −630 | −3,700 | −1,020 |
| Moldova | −288 | −1,870 | −1,023 | 777 | −2,600 | −1,150 |
| Latvia | −900 | −1,721 | −695 | 5 | −1,300 | −620 |
| Kyrgyzstan | −1,166 | −1,405 | −1,149 | −719 | −1,100 | −1,690 |
| Tajikistan | −1,187 | −1,309 | −1,134 | −634 | −1,100 | −1,400 |
| Armenia | −134 | −539 | −1,109 | −1,409 | −1,400 | −1,210 |
| Turkmenistan | −478 | −105 | −284 | 116 | 0 | −670 |
| Estonia | −689 | −1,352 | −748 | −348 | −1,300 | −700 |
| *Total* | −50,381 | 7,704 | −50,431 | −50,431 | 1,800 | −59,570 |

Sources: *Argumenty*, 1989; *Mikhaylov*, 1990; *Vestnik statistiki*, No. 4, 1990; *SSSR v tsyfrakh*, 1991.

sider the unadjusted trade balances further. [1] (For the interested reader, unadjusted domestic price ruble imports and exports by republic are provided in Appendix A).

### REPUBLIC TRADE BALANCES IN ADJUSTED DOMESTIC PRICES

To bring republic trade data closer to an adjusted factor-cost, thus arguably more realistic basis, domestic prices must be adjusted for interrepublic flows of turnover taxes and subsidies. [2] In addition, further adjustments are necessary to account for interrepublic migration, which can also distort republic trade balances. A large inflow of money due to vacations, business trips, or the search for more consumer items understates a republic's trade balance since migrant purchases of local goods are not recorded as exports. Like-

[1] National income balance is net material product produced less net material product used. At the national level this balance equals so-called special earnings from foreign trade plus losses. At the republic level the net material product balance equals the percentage of national special earnings central authorities impute to each republic, republic losses, plus the interrepublic merchandise trade balance. For an analysis see Brown and Belkindas, 1992.

[2] The degree to which domestic prices unadjusted for financial flows distort real interrepublic commodity flows varies by republic and reflect disparate industrial structures, hence varying shares of wages, profits and taxes in value added. For example, the overwhelming majority of net output produced in sectors of heavy industry and agriculture is realized in the prices of products of other sectors, primarily in the consumer textile, apparel, and food industries. Because turnover tax is highest for final consumer manufactures, it disproportionately augments exports in republics specializing in such manufacture. Thus, for example, large alcoholic beverage exporters (importers) bias trade balances upward (downward) due to the roughly 90 percent of value added attributable to turnover tax on alcohol.

In contrast, due to the Soviet practice of levying subsidies at the location of production rather than consumption, the presence of subsidies reduces the value of exportables. Thus export volume for large net agricultural exporters is downwardly biased thanks to the high percentage of subsidies contained in the retail price.

wise, a large outflow of money for these purposes would overstate a republic's trade balance since purchases of goods outside the republic are not recorded as imports.

Goskomstat's adjusted trade balances for 1988 are presented in table 2. The most significant change relative to established domestic prices is for Russia; its total (domestic and foreign) trade balance drops 8.4 billion rubles to -41.7 billion. Moldova's total trade balance shifts from negative 1 billion rubles to a positive 0.8 billion and Latvia's and Turkmenistan's trade deficits are eliminated. While netting out turnover taxes, subsidies, and money migration that affect the other republics as well, their status as trade surplus (or deficit) republics does not change. In particular, positive trade balances in Belarus and Azerbaijan increase roughly by 57 and 91 percent, respectively. Meanwhile, negative trade balances in much of Central Asia are reduced. Trade balances in Georgia and Armenia deteriorate by 67 and 27 percent, respectively.

TABLE 2. Trade Balance Adjustments, 1988

(Billions of Rubles)

| Republic | Trade Balance | Adjustment for: | | Purchases by Migrants | Total | Adjusted Trade Balance |
|---|---|---|---|---|---|---|
| | | Turnover Taxes | Subsidies | | | |
| Russia | −33.3 | −3.4 | −5.1 | .1 | −8.4 | −41.7 |
| Ukraine | −2.9 | −1.2 | 1.6 | −.4 | .0 | −2.9 |
| Belarus | 2.1 | −1.1 | 1.7 | .6 | 1.2 | 3.3 |
| Uzbekistan | −1.8 | 1.5 | .0 | −.4 | 1.1 | −.7 |
| Kazakhstan | −7.3 | .2 | 1.0 | −.5 | .7 | −6.6 |
| Georgia | −.6 | .6 | −.3 | −.7 | −.4 | −1.0 |
| Azerbaijan | 1.1 | 1.8 | −.4 | −.4 | 1.0 | 2.1 |
| Lithuania | −1.5 | −.4 | .8 | .5 | .9 | −.6 |
| Moldova | −1.0 | .9 | .3 | .6 | 1.8 | .8 |
| Latvia | −.7 | −.2 | .4 | .5 | .7 | .0 |
| Kyrgyzstan | −1.1 | .3 | .1 | .0 | .4 | −.7 |
| Tajikistan | −1.1 | .4 | −.1 | .2 | .5 | −.6 |
| Armenia | −1.1 | .2 | −.3 | −.2 | −.3 | −1.4 |
| Turkmenistan | −.3 | .5 | .1 | −.2 | .4 | .1 |
| Estonia | −.7 | −.1 | .2 | .3 | .4 | −.3 |
| *Total* | −50.4 | .0 | .0 | .0 | .0 | −50.4 |

Source: *Vestnik statistiki*, No. 3, 1990, Table 1.

Some evidence exists that for certain republics the prices underlying the republic trade balances deviate from those at which such goods were actually transacted. [3] In other cases the prices assigned to specific goods in interrepublic trade may be either less than their costs of production or less than the prices at which they are sold within the producing republic. [4] The degree to which financial

[3] Economists at the Estonian Institute of Economics told us in private discussion that actual transaction prices for certain Estonian exports (imports) were greater (less) than the prices used in Goskomstat's merchandise trade estimates.

[4] For example, Kalev Kukk writes that Estonia subsidizes the exports of much of its meat and milk products (i.e. sells them below cost). For example, he asserts that in 1982 such exports of

Continued

reallocation offsets such biases in measured trade flows is difficult to assess.

Partly in response to such issues the Soviets provide republic trade balances in world market prices. Such valuations hold the disadvantage that the country's (and republics') factor endowments and thus, relative scarcities, may be poorly captured. [5] However, given their myriad biases domestic price trade balances arguably reflect Soviet scarcities less accurately than do world market prices. Besides, valuation in world market prices best captures the opportunity costs of interrepublic trade.

## REPUBLIC TRADE BALANCES IN WORLD MARKET PRICES

According to Goskomstat figures (see table 3), all Soviet republics except Russia run commodity trade deficits on overall trade in world market prices for 1988. (No breakdown is given for interrepublic versus foreign trade in 1988). These adjusted prices have the most dramatic effect on Russia's trade balances, which rise from a negative 33.3 billion (in domestic prices) to a positive 30.8 billion. Of this change, 33.9 billion is attributable to imports with the remaining 30.2 billion due to exports. This suggests that the revaluation of energy and metal exports is only part of the story, albeit a crucial one. In addition, however, the Russian Federation accounts for over 50 percent of all machinery and light industry (republic plus foreign) imports. Since the average prices of the interrepublic component (of a republic's total trade) exceeds world market levels at the official exchange rate, a meaningful price reform arguably would tend to lower significantly the value of interrepublic imports.

Table 4 provides ratios of world to (unadjusted) domestic prices for combined interrepublic and foreign trade by republic. Were foreign and domestic trade flows separable, world-domestic price ratios for interrepublic merchandise trade alone would capture the order of magnitude of the opportunity cost of interrepublic commodity trade. With domestic and foreign trade combined, it is impossible to know to what extent (interrepublic plus foreign) domestic price imports (exports) are biased upward by the convention of applying high prices to foreign consumer goods (by the average higher quality of Soviet exports relative to domestic equivalents).

In columns 3 and 6 of table 4 an estimate is given of the opportunity cost of the pattern of interrepublic plus foreign trade during the late 1980s for each republic. Given the paucity of data, these can be regarded as the best possible guesstimates of the immediate

Estonian subsidies equaled in value Estonia's alleged import surplus for that year. In 1985, such subsidies amounted to 270 million rubles or 40 percent of the budgetary subsidies received by Estonia's industry that year. He adds, however, that Estonia receives similar subsidies through its imports from other republics. Kukk also cites Estonian electrical energy exports as a prime example of price distortions in the interrepublican commodity flows. When the average price for a kilowatt hour inside Estonia was 1.9 kopecks, Estonia was exporting this at 1.1 kopecks.

[5] For example, world prices arguably understate the value of agricultural imports from other republics given the high-cost and excessive material intensity of Soviet agriculture and therefore light industrial products embodying agricultural raw materials (Mikhaylov, 1990). The reestimation of agricultural exports upward primarily would improve the balances of Kazakhstan, Ukraine, Belarus, and the Baltics.

TABLE 3. Interrepublic and Foreign Trade In World Market Prices

(Millions of Rubles)

| Republic | 1987 | | 1988 | |
|---|---|---|---|---|
| | Imports | Exports | Imports | Exports |
| Russia | 99,259 | 140,543 | 101,900 | 132,700 |
| Ukraine | 49,374 | 43,956 | 47,400 | 44,500 |
| Belarus | 18,961 | 16,469 | 18,500 | 16,400 |
| Uzbekistan | 11,321 | 6,959 | 10,500 | 8,000 |
| Kazakhstan | 16,147 | 8,494 | 15,600 | 9,000 |
| Georgia | 5,286 | 3,515 | 5,300 | 3,400 |
| Azerbaijan | 5,161 | 5,113 | 5,100 | 4,600 |
| Lithuania | 7,861 | 4,326 | 7,800 | 4,100 |
| Moldova | 5,055 | 3,185 | 5,100 | 2,500 |
| Latvia | 5,271 | 3,550 | 5,000 | 3,700 |
| Kyrgyzstan | 2,924 | 1,519 | 3,200 | 2,100 |
| Tajikistan | 2,867 | 1,558 | 2,800 | 1,700 |
| Armenia | 3,025 | 2,486 | 3,600 | 2,200 |
| Turkmenistan | 2,605 | 2,500 | 2,400 | 2,400 |
| Estonia | 3,316 | 1,964 | 3,200 | 1,900 |
| Total | 238,433 | 246,137 | 237,400 | 239,200 |

Sources: *Vestnik statistiki*, No. 4, 1990; *Mikhaylov*, 1990.

TABLE 4. Change in Terms of Trade of a Shift from Domestic to World Market Prices

| Republics | 1987 World/Domestic Price Ratio | | Terms of Trade Effect (%) [a] | 1988 World/Domestic Price Ratio | | Terms of Trade Effect (%) [a] |
|---|---|---|---|---|---|---|
| | Imports | Exports | | Imports | Exports | |
| Russia | .755 | 1.368 | 81.2 | .750 | 1.294 | 72.6 |
| Ukraine | .984 | .999 | 1.5 | .951 | .948 | −.3 |
| Belarus | 1.071 | .873 | −18.5 | 1.037 | .823 | −20.6 |
| Uzbekistan | .873 | .775 | −11.1 | .852 | .763 | −10.4 |
| Kazakhstan | .987 | .964 | −2.4 | .950 | .982 | 3.4 |
| Georgia | .871 | .612 | −29.7 | .816 | .576 | −29.4 |
| Azerbaijan | .929 | .756 | −18.6 | .899 | .678 | −24.6 |
| Lithuania | 1.128 | .737 | −34.7 | 1.042 | .688 | −33.9 |
| Moldova | .855 | .566 | −33.8 | .839 | .494 | −41.1 |
| Latvia | .942 | .756 | −19.7 | .894 | .756 | −15.5 |
| Kyrgyzstan | .838 | .654 | −22.0 | .855 | .809 | −5.3 |
| Tajikistan | .831 | .688 | −17.2 | .802 | .721 | −10.1 |
| Armenia | .743 | .631 | −15.0 | .738 | .584 | −20.9 |
| Turkmenistan | .891 | 1.022 | 14.7 | .822 | .911 | 10.8 |
| Estonia | .913 | .667 | −26.9 | .863 | .642 | −25.6 |
| *Total* | .863 | 1.089 | 26.2 | .841 | 1.031 | 22.7 |

Sources: *Mikhaylov*, 1990, Tables 3 and 8.
[a] Authors' estimations.

terms of trade change in going to "world market prices". [6] The use of unadjusted domestic prices biases the change in the terms of trade downward for republics whose trade balances worsen as adjusted domestic prices are substituted for unadjusted domestic prices and whose trade balances improve in world market prices. For example, Russia's terms of trade would actually improve by a greater amount than suggested in the table. In contrast, the estimates for the Baltic states may somewhat understate the actual terms of trade deterioration to be expected.

Data in table 4 suggest that the only significant gainers in the move from domestic to world prices are Russia and Turkmenistan (the biggest relative exporter of gas). Russia's terms of trade effect is estimated to be 81 and 73 percent, and Turkmenistan's 15 and 11 percent in 1987 and 1988, respectively. The effect for Ukraine is a small positive change in 1987 and an even smaller negative change in 1988; the reverse is true for Kazakhstan. The biggest "losers" are Moldova, Lithuania, and Georgia, followed by smaller albeit significant losses in Belarus, Azerbaijan, Latvia, Armenia, and Estonia. Losses in Uzbekistan, Tajikistan, and Kyrgyzstan (1988) are smaller still.

Before proceeding further, biases in the official Soviet procedure for revaluing trade flows in world market prices should be highlighted. First, the base "world market prices" employed are in fact Soviet foreign currency prices. Thus, the domestic ruble equivalents (in which the world market price balances are expressed) reflect prices the Soviet Union pays to and receives from all its trading partners, including the less-developed-countries, the former members of the Council of Mutual Economic Assistance, and the industrialized countries. The differential prices at which the Soviet Union traded with each of these groups reflect a variety of considerations including non-economic factors. Consequently, the U.S.S.R. may have sold or purchased a given good at several alternative prices, none of which correspond closely to this good's (or its closest equivalent's) contemporaneous price in world markets. [7]

Since locating a world market price for each good traded among the republics would require a herculean effort, Soviet statisticians apply a shortcut method in which only a limited number of conversion coefficients (ratios of domestic to foreign prices) for highly aggregated commodity groups are used. Thus, for example, Lithuanian calculator exports might be converted to valuta prices at the coefficient for machine building as a whole or perhaps for all electronic equipment. Such coefficients would then be used to express Lithuanian exports *to Russia* (say) in world market prices. Apparently little or no effort is used to adjust for the typical quality differential between Lithuanian calculator exports to Russia com-

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[6] In principle, a better terms of trade estimate could be derived using *adjusted* domestic prices. However, because the Soviets tell us only how these data affect the balance of trade and not exports and imports separately they cannot be used to estimate the terms of trade change in going to "world market prices."

[7] Soviet foreign currency prices probably bias upward the trade balances of predominantly manufactures (interrepublic) exporters among Soviet republics given the average lower quality of Soviet manufactures sold domestically. With its high share of raw material exports, Russia's domestic exports should not be appreciably affected; however, depending on the strength of any such quality bias in the data, Russia's large manufactures imports from other republics could bias imports upward where quality differentials exist between domestic and foreign sales.

pared with calculator exports to Europe. Moreover, it is unclear how often coefficients are revised to account for changes in world market prices. The resulting biases presumably are largest in smaller republics that specialize in a small subgroup of a given industrial sector. [8]

It should be stressed that these trade flows, and hence the estimates of terms of trade movements upon which they rest, are highly sensitive to the choice of coefficients. To see this, in table 5 alternative trade figures are presented in hypothetical foreign trade prices based on minor changes in the domestic/world price coefficients. For example, Columns 7–9 depict a trade scenario in which import coefficients are augmented by 10 percent, with export coefficients unchanged. In addition, we show how trade flows would change if the export coefficients varied by 10 percent, and finally what happens when both export and import coefficients vary in opposite directions.

The results are revealing. Even when the country's overall trade balance moves from a positive 1.8 billion rubles to a negative 46 billion rubles owing to less favorable coefficients for both imports and exports, Russia's overall trade balance remains positive while that of all remaining republics are negative. This includes a sizable negative of 12 billion for Ukraine and a negative 9 billion for Kazakhstan.

Given the different size of the republic economies, it is instructive to examine the trade flows and their balances on a per capita basis (our estimates in world prices are presented in table 6). Here, the plausibility of Russia's claim to sole net creditor status appears clearest. Aside from Turkmenistan, Ukraine, and Azerbaijan, which have either balanced trade or modest negative balances, the remaining republics appear as significant resource importers in per capita terms. In this regard the Baltic states stand out (Lithuania, in particular) along with Moldova, Armenia (1988), and Kazakhstan.

### SUPPLEMENTARY INDICATORS FOR "WHO'S FEEDING WHOM?"

Given the ambiguity involved in measuring and interpreting republic trade balances using the above methodology, it is natural to seek other indicators that capture individual republics' contributions. Two alternatives are the republic's import/export structure of key physical commodities and the republics' net generation of valuta (foreign currency receipts earned net of receipts used).

Table 7 contains trade flows for 6 critical commodity groups in physical quantities; these include three industrial inputs (coal, metals, and natural gas), one agricultural input (mineral fertilizers), and two groups of food products (meat and dairy products). Of noteworthy absence is petroleum of whose production Russia reportedly accounts for over 90 percent.

Russia is a significant net importer of all product groups presented except gas and fertilizers. [9] Eight republics are completely de-

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[8] For example, Estonia produces shale-oil and conversion to world market prices by the oil/gas sector coefficient conceivably could measurably bias the overall Estonian export figure in one direction or another.

[9] Although official Soviet statistics exclude comparable data for oil, it is well known that the R.S.F.S.R. is the leading net exporter of these critical products.

TABLE 5. Trade Balances in World Market Prices, 1988.

(Alternative Scenarios)

| Republic | Domestic Prices: Imports | Domestic Prices: Exports | Domestic Prices: Balance | Ratio of Domestic to World Prices: M | Ratio of Domestic to World Prices: X | M+10% | Imports | Exports | Balance |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Russia | 135,860 | 102,540 | −33,320 | 1.333 | .773 | 1.467 | 92,636 | 132,700 | 40,064 |
| Ukraine | 49,860 | 46,940 | −2,920 | 1.052 | 1.055 | 1.157 | 43,091 | 44,500 | 1,409 |
| Belarus | 17,840 | 19,920 | 2,080 | .964 | 1.215 | 1.061 | 16,818 | 16,400 | −418 |
| Uzbekistan | 12,320 | 10,490 | −1,830 | 1.173 | 1.311 | 1.291 | 9,545 | 8,000 | −1,545 |
| Kazakhstan | 16,400 | 9,100 | −7,300 | 1.051 | 1.011 | 1.156 | 14,182 | 9,000 | −5,182 |
| Georgia | 6,490 | 5,900 | −590 | 1.225 | 1.735 | 1.347 | 4,818 | 3,400 | −1,418 |
| Azerbaijan | 5,700 | 6,800 | 1,100 | 1.118 | 1.478 | 1.229 | 4,636 | 4,600 | −36 |
| Lithuania | 7,490 | 5,960 | −1,530 | .960 | 1.454 | 1.056 | 7,091 | 4,100 | −2,991 |
| Moldova | 6,100 | 5,060 | −1,040 | 1.196 | 2.024 | 1.316 | 4,636 | 2,500 | −2,136 |
| Latvia | 5,600 | 4,900 | −700 | 1.120 | 1.324 | 1.232 | 4,545 | 3,700 | −845 |
| Kyrgyzstan | 3,770 | 2,560 | −1,210 | 1.178 | 1.219 | 1.296 | 2,909 | 2,100 | −809 |
| Tajikistan | 3,490 | 2,330 | −1,160 | 1.246 | 1.371 | 1.371 | 2,545 | 1,700 | −845 |
| Armenia | 4,880 | 3,760 | −1,120 | 1.356 | 1.709 | 1.491 | 3,273 | 2,200 | −1,073 |
| Turkmenistan | 2,900 | 2,600 | −300 | 1.208 | 1.083 | 1.329 | 2,182 | 2,400 | 218 |
| Estonia | 3,700 | 3,000 | −700 | 1.156 | 1.579 | 1.272 | 2,909 | 1,900 | −1,009 |
| Total | 282,400 | 231,860 | −50,540 | 1.190 | .969 | 1.309 | 215,818 | 239,200 | 23,382 |

| Republic | M | X+10% | Imports | Exports | Balance | M−10% | X+10% | Imports | Exports | Balance |
|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| Russia | 1.333 | .850 | 101,900 | 120,636 | 18,736 | 1.200 | .850 | 113,222 | 120,636 | 7,414 |
| Ukraine | 1.052 | 1.160 | 47,400 | 40,455 | −6,945 | .947 | 1.160 | 52,667 | 40,455 | −12,212 |
| Belarus | .964 | 1.336 | 18,500 | 14,909 | −3,591 | .868 | 1.336 | 20,556 | 14,909 | −5,646 |
| Uzbekistan | 1.173 | 1.442 | 10,500 | 7,273 | −3,227 | 1.056 | 1.442 | 11,667 | 7,273 | −4,394 |
| Kazakhstan | 1.051 | 1.112 | 15,600 | 8,182 | −7418 | .946 | 1.112 | 17,333 | 8,182 | −9,152 |
| Georgia | 1.225 | 1.909 | 5,300 | 3,091 | −2,209 | 1.102 | 1.909 | 5,889 | 3,091 | −2,798 |
| Azerbaijan | 1.118 | 1.626 | 5,100 | 4,182 | −918 | 1.006 | 1.626 | 5,667 | 4,182 | −1,485 |
| Lithuania | .960 | 1.599 | 7,800 | 3,727 | −4,073 | .864 | 1.599 | 8,667 | 3,727 | −4,939 |
| Moldova | 1.196 | 2.226 | 5,100 | 2,273 | −2,827 | 1.076 | 2.226 | 5,667 | 2,273 | −3,394 |
| Latvia | 1.120 | 1.457 | 5,000 | 3,364 | −1,636 | 1.008 | 1.457 | 5,556 | 3,364 | −2,192 |
| Kyrgyzstan | 1.178 | 1.341 | 3,200 | 1,909 | −1,291 | 1.060 | 1.341 | 3,556 | 1,909 | −1,646 |
| Tajikistan | 1.246 | 1.508 | 2,800 | 1,545 | −1,255 | 1.122 | 1.508 | 3,111 | 1,545 | −1,566 |
| Armenia | 1.356 | 1.880 | 3,600 | 2,000 | −1,600 | 1.220 | 1.880 | 4,000 | 2,000 | −2,000 |
| Turkmenistan | 1.208 | 1.192 | 2,400 | 2,182 | −218 | 1.088 | 1.192 | 2,667 | 2,182 | −485 |
| Estonia | 1.156 | 1.737 | 3,200 | 1,727 | −1,473 | 1.041 | 1.737 | 3,556 | 1,727 | −1,828 |
| Total | 1.190 | 1.066 | 237,400 | 217,455 | −19,945 | 1.071 | 1.066 | 263,778 | 217,455 | −46,323 |

Source: Table 3; authors' estimations.

pendent on coal imports, largely from the Ukraine and Kazakhstan; the latter are also dominant net metal exporters. Indeed, Kazakhstan is a significant exporter of all but dairy products. Turkmenistan is the biggest net natural gas exporter. Leading agricultural exporters include Ukraine, Belarus, and the Baltic republics. Particularly dependent on imports of critical goods are Transcaucasia and Central Asia.

How do the republics fare with respect to the generation of highly valued valuta? Without exception all Soviet republics recorded negative foreign balances in domestic prices for 1988. The key reason can be gleaned from columns 10 and 11 in table 8. In all

TABLE 6. Per Capita Trade, by Republic.

(Rubles, World Market Prices)

| Republic | 1987 | | | 1988 | | |
|---|---|---|---|---|---|---|
| | Imports | Exports | Balance | Imports | Exports | Balance |
| Russia | 681 | 964 | 283 | 694 | 903 | 210 |
| Ukraine | 962 | 857 | −106 | 919 | 862 | −56 |
| Belarus | 1,877 | 1,631 | −247 | 1,814 | 1,608 | −206 |
| Uzbekistan | 590 | 362 | −227 | 533 | 406 | −127 |
| Kazakhstan | 991 | 521 | −470 | 945 | 545 | −400 |
| Georgia | 997 | 663 | −334 | 981 | 630 | −352 |
| Azerbaijan | 748 | 741 | −7 | 729 | 657 | −71 |
| Lithuania | 2,125 | 1,169 | −955 | 2,108 | 1,108 | −1,000 |
| Moldova | 1,204 | 758 | −445 | 1,186 | 581 | −605 |
| Latvia | 1,952 | 1,315 | −637 | 1,852 | 1,370 | −481 |
| Kyrgyzstan | 696 | 362 | −335 | 744 | 488 | −256 |
| Tajikistan | 585 | 318 | −267 | 560 | 340 | −220 |
| Armenia | 890 | 731 | −159 | 1,091 | 667 | −424 |
| Turkmenistan | 766 | 735 | −31 | 686 | 686 | 0 |
| Estonia | 2,073 | 1,228 | −845 | 2,000 | 1,188 | −813 |
| *Total* | 843 | 870 | 27 | 832 | 838 | 6 |

Sources: Tables 1 and 3; *Naselenye 87*, p. 8; *Naselenye 88*, p. 8; Authors' estimations.

but two republics foreign imports as a share of total imports exceed foreign exports as a share of total exports. This follows directly from the Soviet convention of applying high coefficients to valuta prices for imports. Although the purpose is to enhance budgetary revenues by exploiting the scarcity of higher quality importables, the procedure worsens the trade balance in domestic prices.

## TABLE 7. Exports and Imports, by Republic, Selected Products, 1988.

(Thousands Tons)

| Republic | Coal | | | Metals | | | Mineral Fertilizers | | |
|---|---|---|---|---|---|---|---|---|---|
| | Imports | Exports | Balance | Imports | Exports | Balance | Imports | Exports | Balance |
| USSR | 117,017 | 137,392 | 20,375 | 38,756 | 45,819 | 7,063 | 7,848 | 15,301 | 7,453 |
| Russia | 59,454 | 49,182 | −10,272 | 19,296 | 17,323 | −1,973 | 1,557 | 5,922 | 4,365 |
| Ukraine | 21,186 | 25,745 | 4,559 | 6,519 | 21,776 | 15,257 | 2,324 | 1,109 | −1,215 |
| Belarus | 3,333 | 0 | −3,333 | 2,892 | 432 | −2,460 | 710 | 5,058 | 4,348 |
| Uzbekistan | 3,742 | 967 | −2,775 | 1,608 | 707 | −901 | 367 | 793 | 426 |
| Kazakhstan | 14,063 | 58,842 | 44,779 | 2,751 | 3,646 | 895 | 556 | 1,495 | 939 |
| Georgia | 881 | 419 | −462 | 763 | 620 | −143 | 151 | 81 | −70 |
| Azerbaijan | 262 | 0 | −262 | 991 | 86 | −905 | 154 | 244 | 90 |
| Lithuania | 1,720 | 0 | −1,720 | 780 | 0 | −780 | 496 | 281 | −215 |
| Moldova | 5,691 | 0 | −5,691 | 356 | 530 | 174 | 238 | 0 | −238 |
| Latvia | 1,270 | 0 | −1,270 | 902 | 699 | −203 | 398 | 83 | −315 |
| Kyrgyzstan | 2,833 | 1,888 | −945 | 452 | 0 | −452 | 195 | 0 | −195 |
| Tajikistan | 765 | 349 | −416 | 315 | 0 | −315 | 256 | 41 | −215 |
| Armenia | 645 | 0 | −645 | 492 | 0 | −492 | 100 | 7 | −93 |
| Turkmenistan | 727 | 0 | −727 | 224 | 0 | −224 | 185 | 46 | −139 |
| Estonia | 445 | 0 | −445 | 415 | 0 | −415 | 161 | 141 | −20 |

| Republic | Meat Products | | | Dairy Products | | | Natural Gas, 1985 (Millions q. m.) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Imports | Exports | Balance | Imports | Exports | Balance | Imports | Exports | Balance |
| USSR | 2,520 | 1,453 | −1,067 | 16,130 | 7,184 | −8,946 | 345,508 | 345,508 | 0 |
| Russia | 1,907 | 63 | −1,844 | 9,604 | 424 | −9,180 | 80,531 | 151,448 | 70,917 |
| Ukraine | 32 | 455 | 423 | 212 | 2,005 | 1,793 | 123,193 | 9,538 | −113,655 |
| Belarus | 14 | 337 | 323 | 2 | 2,184 | 2,182 | 33,665 | 24,411 | −9,254 |
| Uzbekistan | 191 | 0 | −191 | 1,423 | 1 | −1,422 | 74,761 | 77,369 | 2,608 |
| Kazakhstan | 12 | 178 | 166 | 390 | 29 | −361 | 6,033 | 2,242 | −3,791 |
| Georgia | 88 | 0 | −88 | 1,248 | 4 | −1,244 | 4,769 | 0 | −4,769 |
| Azerbaijan | 78 | 0 | −78 | 1,277 | 0 | −1,277 | 5,266 | 5,117 | −149 |
| Lithuania | 2 | 181 | 179 | 2 | 1,328 | 1,326 | 4,495 | 5 | −4,490 |
| Moldova | 4 | 78 | 74 | 18 | 111 | 93 | 1,231 | 0 | −1,231 |
| Latvia | 2 | 81 | 79 | 3 | 603 | 600 | 3,027 | 515 | −2,512 |
| Kyrgyzstan | 10 | 18 | 8 | 88 | 1 | −87 | 1,422 | 71 | −1,351 |
| Tajikistan | 43 | 1 | −42 | 320 | 0 | −320 | 1,389 | 214 | −1,175 |
| Armenia | 74 | 0 | −74 | 1,176 | 17 | −1,159 | 4,397 | 102 | −4,295 |
| Turkmenistan | 59 | 0 | −59 | 360 | 0 | −360 | 8 | 74,476 | 74,468 |
| Estonia | 4 | 61 | 57 | 7 | 477 | 470 | 1,321 | 0 | −1,321 |

Sources: *Vestnik statistiki*, No. 4, 1990; For natural gas the source is *Materialno*, 1988, pp. 146, 147.

## TABLE 8. Interrepublic and Foreign Trade Balances by Republic, 1988.

(Millions of Rubles)

| | Total | | | Domestic | | | Foreign | | | Shares of Foreign Component in Total Shares | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Imports | Exports | Balance | Imports | Exports | Balance | Imports | Exports | Balance | Imports | Exports | Ratios |
| Republic | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Russia | 135,865.1 | 102,537.7 | −33,3274 | 68,963.9 | 69,224.2 | 260.3 | 6,6901.2 | 33,313.5 | −33,587.7 | 49.2 | 32.5 | 1.52 |
| Ukraine | 49,862.3 | 46,935.3 | −2,927.0 | 36,431.6 | 40,055.2 | 3,623.6 | 13,430.7 | 6,880.1 | −6,550.6 | 26.9 | 14.7 | 1.84 |
| Belarus | 17,843.8 | 19,917.2 | 2,073.4 | 14,171.4 | 18,221.7 | 4,050.3 | 3,672.4 | 1,695.5 | −1,976.9 | 20.6 | 8.5 | 2.42 |
| Uzbekistan | 12,327.1 | 10,486.9 | −1,840.2 | 10,623.7 | 8,957.2 | −1,666.5 | 1,703.4 | 1,529.7 | −173.7 | 13.8 | 14.6 | 0.95 |
| Kazakhstan | 16,420.1 | 9,164.8 | −7,255.3 | 13,686.4 | 8,337.1 | −5,349.3 | 2,733.7 | 827.7 | −1,906.0 | 16.7 | 9.0 | 1.84 |
| Georgia | 6,492.9 | 5,900.8 | −592.1 | 5,218.4 | 5,508.1 | 289.7 | 1,274.5 | 392.7 | −881.8 | 19.6 | 6.7 | 2.95 |
| Azerbaijan | 5,672.2 | 6,782.0 | 1,109.8 | 4,258.2 | 6,357.5 | 2,099.3 | 1,414.0 | 424.5 | −989.5 | 24.9 | 6.3 | 3.98 |
| Lithuania | 7,487.6 | 5,957.8 | −1,529.8 | 6,238.5 | 5,430.7 | −807.8 | 1,249.1 | 527.1 | −722.0 | 16.7 | 8.8 | 1.89 |
| Moldova | 6,080.4 | 5,057.5 | −1,022.9 | 4,986.5 | 4,800.3 | −186.2 | 1,093.9 | 257.2 | −836.7 | 18.0 | 5.1 | 3.54 |
| Latvia | 5,591.2 | 4,896.1 | −695.1 | 4,632.8 | 4,515.2 | −117.6 | 958.4 | 380.9 | −577.5 | 17.1 | 7.8 | 2.20 |
| Kyrgyzstan | 3,744.8 | 2,595.4 | −1,149.4 | 2,971.8 | 2,536.8 | −435.0 | 773.0 | 58.6 | −714.4 | 20.6 | 2.3 | 9.14 |
| Tajikistan | 3,492.4 | 2,358.7 | −1,133.7 | 3,022.6 | 2,025.2 | −997.4 | 469.8 | 333.5 | −136.3 | 13.5 | 14.1 | 0.95 |
| Armenia | 4,876.4 | 3,767.0 | −1,109.4 | 4,017.6 | 3,683.1 | −334.5 | 858.8 | 83.9 | −774.9 | 17.6 | 2.2 | 7.91 |
| Turkmenistan | 2,918.2 | 2,634.2 | −284.0 | 2,486.0 | 2,389.2 | −96.8 | 432.2 | 245.0 | −187.2 | 14.8 | 9.3 | 1.59 |
| Estonia | 3,708.6 | 2,961.0 | −747.6 | 3,047.2 | 2,715.1 | −332.1 | 661.4 | 245.9 | −415.5 | 17.8 | 8.3 | 2.15 |
| Total for all republics | 282,383.1 | 231,952.4 | −50,4307 | 184,756.6 | 184,756.6 | 0.0 | 97,626.5 | 47,195.8 | −50,430.7 | 34.6 | 20.3 | 1.70 |

Source: *Vestnik statistiki*, No. 3, 1990. Authors' estimations.

The last column of table 8 shows the share of the foreign component in total imports divided by the share of the foreign component in total exports or $M_{ik}/M_{iz}$ / $X_{ik}/X_{iz}$, where z = foreign plus interrepublic exports or imports; k = foreign imports or exports, and i = the ith republic. This statistic provides a measure of the republic's share of the country's valuta-generating burden; such valuta on average requires greater effort and production costs to raise product quality to world market levels. In addition, valuta is the means by which higher quality importables are acquired.

Like all data valued in distorted Soviet prices this statistic should be approached with the customary caution. In particular, the use of (unadjusted) domestic prices implies that the above ratio understates the contribution of those republics like Russia whose terms of trade are expected to improve in the movement to world market prices. Likewise the ratio overstates the contribution of republics whose terms of trade are expected to deteriorate in the move to world prices. Despite such caveats the figures remain instructive. The value of the ratio for all republics is 1.7. Particularly low ratios are found for Uzbekistan (0.95) and Tajikistan (0.95) while the highest ratios are recorded in Armenia (7.91) and Kyrgyzstan (9.14). Moderately high ratios appear in Belarus (2.42), Georgia (2.95), Azerbaijan (3.98), Moldova (3.54), Latvia (2.20), and Estonia (2.15). Roughly average or moderately below average ratios appear in Russia, Ukraine, Kazakhstan, Lithuania, and Turkmenistan. [10]

As deputies to the Russian Federations's first annual congress in May 1990 repeatedly stated, Russia generates a disproportionate share of the country's hard currency revenue (Vlasov, 1990; Granberg, 1990). These data suggest that the R.S.F.S.R. is also slightly above average for Soviet republics in terms of the overall valuta generated relative to valuta spent on own consumption. However, what is most striking is the degree to which Central Asia (excluding Kyrgyzstan) generates a disproportionate quantity of valuta relative to the imports enjoyed from valuta expenditure. These figures may even understate Central Asia's "altruistic" foreign trade patterns given the high percentage of foreign imports in the (high priced) consumer goods category. For example, Uzbekistan, Tajikistan, Turkmenistan, and Kyrgyzstan all import a disproportionately high share of consumer goods from abroad; this would tend to exaggerate their valuta imports. In contrast, the Caucasuses plus Kyrgyzstan portray the opposite tendency with relatively high foreign import/export ratios. [11]

## INTERPRETATION AND CONCLUSIONS

The question, "who's feeding whom?" has long lurked below the surface of nationalist hostilities in the Soviet Union. If the lack of republic services trade balances and time series data, plus distor-

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[10] In principle, summing across all republics' net interrepublican trade flows should yield zero, which in fact occurs as one can see from the column domestic balance in table 8. However, the sum of republic foreign trade balances cannot sum to the country's overall trade balance since official sources on foreign trade statistics record the latter in valuta rubles only.

[11] Furthermore, in situations where one republic's foreign imports are "reexported" to another republic (e.g. Russian imports of Swiss boots resold in Moldavia), the receiving republic's interrepublic import values are inflated by more or less depending on the size of the implicit exchange rate for such goods determined in Moscow.

tions in Soviet pricing methodology are discounted, an answer can readily be supplied: The Russian Federation dominates as the principal net generator of resource outflows to all remaining 14 republics.[12] This conclusion appears inevitable if one takes real trade flows as given and values these flows in (arguably more realistic) Soviet foreign currency prices. In such prices Russia achieved a total export surplus of 41 billion rubles in 1987 and 31 billion rubles in 1988.[13]

From this vantage point, the only remaining issue is the specific pattern of transfers extended to the various non-Russian republics. These are best studied in per capita perspective. In Central Asia, while Uzbekistan, Tajikistan, Kyrgyzstan, and Kazakhstan were moderate net resource importers during 1988, Turkmenistan had balanced trade. Aside from Azerbaijan, which exhibits a relatively small net resource dependence on Russia, the rest of Transcaucasia (Armenia and Georgia) is a moderately heavy net resource importer. The clearest pattern of resource dependence is in the Baltics where regional per capita net imports are highest. Finally, thanks to Russia, the European Slavic region is relatively balanced but this disguises small and moderate per capita deficits in Ukraine and Belarus, respectively.

In contrast, if one views relative (adjusted) domestic prices as more appropriate weights, the pattern of resource transfers appears less lop-sided and Russia abandons its position of sole net resource provider. Indeed, from this perspective Russia emerges as a major net importer of resources. Despite current claims about its relative economic potential, Ukraine represents a net resource importer overall, regardless of price weights. More generally, most non-Russian republics fare better in domestic as opposed to world market prices. And if one confines attention to interrepublic trade alone, roughly half of the republics appear as net resource exporters with Ukraine, Belarus, and Azerbaijan appearing particularly strong.

Alternative measures of economic dependence, including key physical commodity export and import balances and net generation of valuta, provide additional information. Here the surprising success story is Central Asia (including Kazakhstan). Ukraine per-

[12] It is interesting to note that figures of 70 billion rubles for 1987 and 64 billion for 1988 have been repeatedly used as estimates of Russia's subsidies to the remaining republics. However, given the limits of the data upon which this conclusion is reached - in particular, its confinement to merchandise trade - a more legitimate estimate of the resource transfer would be Russia's interrepublican trade surplus in world market prices in 1988, 41 billion rubles, rather than the difference between the trade balances in domestic and world prices. In addition, there is reason to suspect that this lower figure is itself inflated, even without invoking services trade. For example, agricultural and light industry imports to Russia from neighboring republics should be priced higher than world market levels owing to their unusually high-cost nature. (In response, however, it could be claimed that the opportunity costs of Russia's trade patterns include purchasing high cost agriculture rather than utilizing the world market). In addition, much of the machinery exports for which Russia claims it is not fairly reimbursed include military hardware. It is not clear that such purchases are in all cases desired by their recipients. (Mikhaylov, 1990) Finally, in arriving at the domestic ruble equivalent of the balance in world market (dollar) prices, an internal exchange rate of unity is assumed. This is tantamount to assuming that the official exchange rate is a realistic converter of foreign to domestic prices.

[13] Of course the Russian Federation now faces complaints that particular oblasts and raions generate the bulk of Russia net exports, including valuta earnings. For instance, arguments from the Tyumen region that the latter generates a disproportionate quantity of oil and natural gas relative to other oblasts while ranking toward the bottom in provision of social services is a potent example (Dobbs, 1990).

forms relatively well on the commodity availability measure but depends critically on imports of natural gas and fertilizers. While its record in securing valuta relative to consuming it measures up well against a majority of the other republics, Ukraine's performance pales next to that of Central Asia (excluding the disastrous performance in Kyrgyzstan). In particular, Turkmenistan and Uzbekistan are leading net gas exporters. And Kazakhstan stands out as a net exporter of five of the six products examined.

In contrast, Transcaucasia brings in the worst regional performance on the combination of these two measures. While the Baltics perform about average on the valuta standard and are net exporters of food, they remain more dependent than most republics on certain key commodities. Finally, out of the six commodities examined (excluding oil), Russia is a leading producer and exporter of four but a net exporter of only 2. Its net valuta production record is formidable but does not quite measure up to that of Central Asia.

Although the above data provide some flavor of interdependencies among the former Soviet republics in key commodities and overall merchandise trade, the tendency of certain observers to treat these data as operational measures of the republics' contribution to the national economy is misleading:

First, there is no theoretical basis for considering merchandise trade to be more critical than that of services; hence, commodity flows provide at best a partial perspective on interrepublic trade. Given their relatively small share of Soviet gross national product and the probable lower degree with which services enter interrepublic trade, the inclusion of services is unlikely to affect the trade balances measurably. However, it cannot be ruled out that services may appreciably affect trade balances in a few republics. [14]

A different set of biases can affect these balances through volume rather than price. Some observers argue that central authorities occasionally tamper with the commodity trade quantities so that the latter no longer perfectly mirror the republic's input-output data. [15] Still others claim that republics frequently have the capacity to export additional products given the proper incentives. [16] Finally, spokespeople for certain former republics, particu-

[14] Inclusion of services will vary by republics. Some rough estimations and observations suggest that they can be quite substantial for the Baltic states and Ukraine. The Baltic states have a few major seaports, and transit fees will definitely increase hard currency earnings. The same is true regarding a payment for the Soviet (now Commonwealth's) military bases stationed in the Baltic States. Ukraine has a long mileage of gas and oil pipelines located on its territory. These pipelines are the means of transportation for Russian gas deliveries to Western and Eastern Europe. A transit fee would probably add over a billion dollars to the Ukrainian service account.

[15] In discussions with researchers in the Estonian Institute of Economics we discovered that data on a republic's foreign trade is collected from enterprises directly and do not always correspond well with input-output data. For example, at least three big enterprises directly subordinated to the all-union ministries provide no information to the Estonian statistical authorities. As a result the input-output data fails to capture all of the republic's relevant regional activity. Moscow statistical authorities actually supplement the Estonian input-output data with data corresponding to these all-union enterprises.

[16] For example, Jan Laas of the Estonian Institute of Economics asserts that Estonia could improve its trade balance by selling more milk, meat, fish, textiles, and wood products. It bears mention, however, that republics never had an incentive to increase exports in order to achieve a positive trade balance. What mattered was the availability of goods inside the republic. Thus, to the extent that the republics had such influence, each tried to increase imports while reducing exports.

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larly the Baltics, argue that their territories serve as major conduits for the processing and export of refined energy products for which they are not properly credited either in terms of the value added by transport and refining services or for the valuta garnered.[17]

A related and fundamental issue concerns central control over investment flows, which largely predetermine what gets traded. Since investment shapes a region's production specialization, the investment pattern influences with a lag republican industrial structure and production capacity. Since increases in capacity, in turn, permit greater export production, and since imports of machinery and equipment are associated with currently allotted investment funds, the trade balance in any given year is largely determined by investment decisions that are beyond the republic's control.

One is tempted to regress investment on trade flows by republic but this strategy encounters at least two serious obstacles: First, investment data are reported in constant prices and hence are incompatible with current price trade data for which adequate deflators are unavailable. Second, although times series for investment by republic are available, the Soviets have provided republican trade flows for 1987-89 only. This is too short a duration with which to expect meaningful coefficients relating many successive years of targeted investment and republic trade balances. Finally, depending on the specific use pattern of these investments, adequate data for which is unavailable—in particular do they tend to be export capacity-enlarging or largely confined to nontradeables like housing?—regression analysis is unlikely to be revealing.

Nevertheless, a cursory examination of republican investment flows remains instructive. Investment data (tables 9 and 10) show that the more developed or resource-rich union republics, with the notable exception of Ukraine, tend to receive the highest per capita investment funds. At least during the last 15 years investment has disproportionately flowed to the Russian republic, followed by above average (but more modest) flows to the Baltics. In fact, the relatively industrialized Ukraine, which contributes 16 percent of Soviet net material product, receives a below average share of investment resources per capita.

In contrast, with the exception of Kazakhstan and Turkmenistan, Central Asia has received a strikingly lower per capita share of investment funds. The latter is probably explained by some combination of high fertility rates in Central Asia, lower capital replacement needs (due to scant past investment), and centrally determined upward limits on the reallocation of investment flows to

[17] For example, G. Balltin'sh asserts that Latvia's official merchandise trade deficit in 1987 should decline by 260 million rubles thanks to its unnoted contribution to the country's oil exports (Baltin'sh, 1989). Mikhaylov refers to the idea of certain economists to redistribute export and import volumes among the republics to account for the help that poorly endowed republics provide in developing the resource and export potential of richly-endowed republics. Mikhaylov regards this notion as "erroneous" as such assistance in the form of transportation services and/or material inputs are already present in the interrepublic export/import volumes. However, while the Latvian Maritime Steamship Company and the republic's railroad transport were credited with transportation exports to republics producing energy and raw materials, Mikhaylov maintains that Latvia should have also earned a share in the ultimate earnings of foreign exchange from the export of such products (Mikhaylov, 1990, pp 7-8).

TABLE 9. Investment, by Republic, 1980–88.

(Rubles per Capita)

| Republic | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|---|---|---|---|
| Russia | 601 | 623 | 642 | 665 | 752 | 773 | 837 | 880 | 941 |
| Ukraine | 378 | 377 | 388 | 424 | 482 | 493 | 541 | 552 | 571 |
| Belarus | 446 | 469 | 470 | 496 | 650 | 611 | 643 | 764 | 758 |
| Uzbekistan | 343 | 361 | 360 | 378 | 403 | 374 | 372 | 373 | 384 |
| Kazakhstan | 535 | 546 | 548 | 570 | 638 | 659 | 682 | 744 | 790 |
| Georgia | 367 | 364 | 409 | 414 | 510 | 541 | 528 | 561 | 557 |
| Azerbaijan | 325 | 357 | 370 | 415 | 457 | 500 | 523 | 505 | 497 |
| Lithuania | 459 | 504 | 527 | 569 | 645 | 683 | 773 | 812 | 868 |
| Moldova | 376 | 372 | 399 | 428 | 504 | 486 | 496 | 535 | 546 |
| Latvia | 507 | 542 | 559 | 559 | 661 | 725 | 787 | 736 | 730 |
| Kyrgyzstan | 278 | 265 | 275 | 302 | 335 | 345 | 356 | 358 | 371 |
| Tajikistan | 245 | 240 | 231 | 245 | 288 | 298 | 311 | 327 | 313 |
| Armenia | 368 | 390 | 384 | 389 | 461 | 480 | 504 | 524 | 473 |
| Turkmenistan | 430 | 449 | 470 | 512 | 574 | 565 | 597 | 574 | 586 |
| Estonia | 560 | 546 | 545 | 582 | 696 | 723 | 768 | 758 | 817 |
| USSR | 503 | 518 | 533 | 558 | 634 | 647 | 694 | 726 | 764 |

Sources: National and republican statistical yearbooks, various years.

equalize development levels among the republics. Finally, investment rates in Transcaucasia and Moldova are somewhat higher than Central Asia but still considerably below the average. [18]

TABLE 10. Per Capita Investment by Republic.

(As a Percentage of the USSR Average)

| Republic | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|---|---|---|---|
| Russia | 119.48 | 120.27 | 120.45 | 119.18 | 118.61 | 119.47 | 120.61 | 121.21 | 123.17 |
| Ukraine | 75.15 | 72.78 | 72.80 | 75.99 | 76.03 | 76.20 | 77.95 | 76.03 | 74.74 |
| Belarus | 88.67 | 90.54 | 88.18 | 88.89 | 102.52 | 94.44 | 92.65 | 105.23 | 99.21 |
| Uzbekistan | 68.19 | 69.69 | 67.54 | 67.74 | 63.56 | 57.81 | 53.60 | 51.38 | 50.26 |
| Kazakhstan | 106.36 | 105.41 | 102.81 | 102.15 | 100.63 | 101.85 | 98.27 | 102.48 | 103.40 |
| Georgia | 72.96 | 70.27 | 76.74 | 74.19 | 80.44 | 83.62 | 76.08 | 77.27 | 72.91 |
| Azerbaijan | 64.61 | 68.92 | 69.42 | 74.37 | 72.08 | 77.28 | 75.36 | 69.56 | 65.05 |
| Lithuania | 91.25 | 97.30 | 98.87 | 101.97 | 101.74 | 105.56 | 111.38 | 111.85 | 113.61 |
| Moldova | 74.75 | 71.81 | 74.86 | 76.70 | 79.50 | 75.12 | 71.47 | 73.69 | 71.47 |
| Latvia | 100.80 | 104.63 | 104.88 | 100.18 | 104.26 | 112.06 | 113.40 | 101.38 | 95.55 |
| Kyrgyzstan | 55.27 | 51.16 | 51.59 | 54.12 | 52.84 | 53.32 | 51.30 | 49.31 | 48.56 |
| Tajikistan | 48.71 | 46.33 | 43.34 | 43.91 | 45.43 | 46.06 | 44.81 | 45.04 | 40.97 |
| Armenia | 73.16 | 75.29 | 72.05 | 69.71 | 72.71 | 74.19 | 72.62 | 72.18 | 61.91 |
| Turkmenistan | 85.49 | 86.68 | 88.18 | 91.76 | 90.54 | 87.33 | 86.02 | 79.06 | 76.70 |
| Estonia | 111.33 | 105.41 | 102.25 | 104.30 | 109.78 | 111.75 | 110.66 | 104.41 | 106.94 |
| USSR | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Table 9.

[18] In a recent paper John Burkett tests econometrically which factors appear to be driving the distribution of investment among Soviet republics. He concludes as follows: "Considerations of efficiency as well as equality and defense seem to have had diminished influence on the allocation of investment among republics in the late 1980s. Increasingly, investment is concentrated in the already capital-abundant republics." (Burkett, 10–11)

Investment allocation aside, central directives on the destination and source of trade flows often conflict with local wishes and priorities. Were republican authorities to attempt to alter such balances (on the basis of perceived comparative advantages, say), strict plan directives governing production, pricing, and the regional source and destination of both inputs and outputs presumably would foil such intentions. That consideration, coupled with the republic's lack of control over investment flows, complicates how one interprets "who's feeding whom?" and the data employed with which to answer it.[19]

For example, Estonian economists like to cite the huge Novotallinsky port that was constructed with the help of a massive import to Estonia of machinery and materials. The decision to build this port was made despite local objections. Moreover, its capacity for handling maritime trade greatly exceeds its current requirements (largely because grain imports were overprojected), entailing serious problems for Estonia. Meanwhile, while material imports to build the port are prominently represented in Estonia's trade balances, exports from the port are not included in the commodity balances because they are considered a part of "nonproductive" services.[20] Another example is importables such as military hardware, which certain republics may not have imported were they free to refuse them (Mikhaylov, 1990; p. 8). A large part of these goods imported to or exported by a particular republic escapes the purview of official statistics and is accordingly omitted from the trade balances. The part that is included has a positive impact for republics with a high share of machinery and equipment in their export structure and lowers the trade balance for republics with a high share of agriculture and consumer goods.

In summary, the various data analyzed in this paper together reveal something about the inherited interdependencies among the union republics and their varied contributions to the national economy. Nevertheless, they mask certain critical aspects of Soviet resource allocation. Foremost among these are central control over production and trade decisionmaking, central determination of interrepublic investment allocation and the requisitioning of financial resources with which to finance investments, and the absence of comprehensive services trade data. In addition, the answer to "who's feeding whom?" rests critically on the appropriate price weights used to value interrepublic and foreign trade flows. It bears mention, however, that Russia's net creditor status in world market prices is so dominant that it is largely insensitive to significant variations in the coefficients used to translate foreign currency prices into their domestic price equivalents.

With the Soviet Union's dissolution, the fundamental issue shifts from which republics have historically assumed the majority of the Soviet resource burden to which states are currently best able to survive independently, facing world market prices and competition.

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[19] In particular, one would expect that republics receiving a disproportionate share of per capita investment funds *ceteris paribus* eventually would become net commodity (and services) exporters.

[20] Conversation with Dr. Teet Rayasalis. Also mentioned in K. Kukk (1/13/88). In addition, in discussion Jan Laas cites Siberian exports of metal to the Baltics as an example of irrational central decisions that impact interrepublic trade flows.

Trade flows valued in "world market prices" suggest something about the relative survivability of the individual former republics immediately following the breakup of the Soviet Union. In particular, the best possible guesstimates of the short-run terms-of-trade adjustments based on comparisons between domestic and "world market prices" show the vast majority of former Soviet republics suffering a significant albeit variable degree of trade balance deterioration. However, such balances say little about the many uncertainties attending the dynamic development of these states as they restructure in response to evolving global opportunities.

## REFERENCES


*Argumenty i fakty*, No. 50, 1989.

Baltin'sh, G. "Zhivyet li Latvia za chuzhoy schet," *Cinya*, December 10, 1989.

Barry, Donna. *Outside Moscow: Power, Politics, and Budgetary Policy in the Soviet Republics*. New York, Columbia University Press, 1987.

Belkindas, Misha V. *Soviet Regional Economic Autonomy: Baltics versus Moscow*. Falls Church, VA: Delphic, 1989.

Brown, Stuart S. and Misha V. Belkindas "A Note on National Income and Special Earnings from Foreign Trade in the Former Soviet Republics," Manuscript, 1992.

Burkett, John P. "Allocation of Investment Among Republics in the 1980s," in Michael Ellman and Vladimir Kontorovich (eds.), *The Disintegration of the Soviet Economic System*. London, Routledge and Kegan Paul, Forthcoming.

Dellenbrandt, Jan Ake. *The Soviet Regional Dilemma*. Armonk, N.Y., M.E. Sharpe, 1986.

Dobbs, Michael. "Oil Subsidies Stir Russian Nationalism, *The Washington Post*, May 29, 1990.

E. Dole and G. van Selm, "General Aspects of Autonomy in the USSR; Soviet Republics' Costs of Independence: The Case of the Baltic Republics," Manuscript.

Goldenberg, L. "Pokazateli mezhterritorial'nykh ekonomicheskikh svyazey," *Vestnik statistiki*, No. 6, 1989.

Granberg, A.G. "Osnovy suvereniteta," *Sovetskaya Rossiya*, May 18, 1990.

Hanson, Philip, "External Relations of the Baltic States," Manuscript, 1991.

Kukk, Kalev. "Polmilliarda v dolg," *Vetcherniy Tallinn*, January, 13, 1988.

Marris, Stephen. *Deficits and the Dollar: The World Economy at Risk*. Washington, DC: Institute of International Economics, Revised, November, 1987.

*Material'no tekhnicheskoye obespechenye narodnogo khozyaystva SSSR*. Moscow, 1988.

Mikhaylov, L. "Kto i kak zhivyet," *Ekonomika i zhizn'*, No. 10, March 1990.

*Narodnoye khozyaystvo SSSR v 1988 godu, statisticheskiy yezhegodnik*. Moscow: Finansy i statistika, 1989.

*Naselenye SSSR v 1987 godu*. Moscow, 1988.

*Naselenye SSSR v 1988 godu*. Moscow, 1989.

Pogosov, I. "Ne po dolgam a po rezul'tatam," *Ekonomicheskaya gazeta*, No, 42, October, 1989.

Schroeder, Gertrude E. "Nationalities and the Soviet Economy," in Lubomyr Hajda and Mark Beissinger (eds.), *The Nationalities Factor in Soviet Politics and Society*, Westview Press, 1990.

*SSSR v tsyfrakh v 1990 godu*, Moscow: Finansy i statistika, 1991.

*Vestnik statistiki*, No. 3, 1990.

*Vestnik statistiki*, No. 4, 1990.

Vlasov, A.B. "Doklad na Sessii," *Sovetskaya Rossiya*, May 20, 1990.

# Appendix A

## TABLE A-1. Interrepublic and Foreign Trade, in Domestic Prices.

(Millions of Rubles)

| Republic | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|
| | Imports | Exports | Imports | Exports | Imports | Exports |
| Russia | 131,471 | 102,711 | 135,865.1 | 102,537.7 | 144,270 | 109,610 |
| Ukraine | 50,179 | 43,998 | 49,862.3 | 46,935.3 | 54,540 | 48,060 |
| Belarus | 17,707 | 18,864 | 17,843.8 | 19,917.2 | 19,350 | 20,300 |
| Uzbekistan | 12,974 | 8,974 | 12,327.1 | 10,486.9 | 14,160 | 10,170 |
| Kazakhstan | 16,352 | 8,811 | 16,420.1 | 9,164.8 | 17,570 | 9,090 |
| Georgia | 6,069 | 5,744 | 6,492.9 | 5,900.8 | 6,470 | 6,090 |
| Azerbaijan | 5,554 | 6,763 | 5,672.2 | 6,782 | 5,190 | 7,120 |
| Lithuania | 6,968 | 5,870 | 7,487.6 | 5,957.8 | 7,350 | 6,330 |
| Moldova | 5,915 | 5,627 | 6,080.4 | 5,057.5 | 6,610 | 5,460 |
| Latvia | 5,593 | 4,693 | 5,591.2 | 4,896.1 | 6,030 | 5,410 |
| Kyrgyzstan | 3,490 | 2,324 | 3,744.8 | 2,595.4 | 4,290 | 2,600 |
| Tadzhikistan | 3,451 | 2,264 | 3,492.4 | 2,358.7 | 3,930 | 2,530 |
| Armenia | 4,071 | 3,937 | 4,876.4 | 3,767 | 4,900 | 3,690 |
| Turkmenistan | 2,925 | 2,447 | 2,918.2 | 2,634.2 | 3.330 | 2,660 |
| Estonia | 3,633 | 2,944 | 3,708.6 | 2,961 | 3,920 | 3,120 |
| *Total* | 276,352 | 225,971 | 282,383.1 | 231,952.4 | 301,810 | 242,240 |

Sources: *Argumenty*, 1989; *Mikhaylov*, 1990; *SSSR v tsyfrakh*, 1991.

# HERITAGE OF THE GORBACHEV ERA

By Anders Åslund *

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## SUMMARY

In hindsight, it appears remarkable that Mikhail Gorbachev could receive so much acclaim for the economic policies that he pursued from 1985. From our current perspective, it appears all too evident that his rule was characterized by an unprecedented confusion in economic policies. Virtually every mistake that could be made was made. The Gorbachev administration carried out a massive destruction of the old Soviet system. In history, Gorbachev will go down as one of the greatest destructors of evil, [1] while he failed in all his many attempts at construction. Gorbachev's great achievement was that he swiftly and relatively peacefully broke down one of the most centralized and ruthless systems the world has seen to date.

In this paper, we scrutinize Gorbachev's mode of policy-making in a first section. The consecutive two sections focus on principles of Gorbachev's policy and how they have survived. The second section is devoted to Gorbachev's major shortcomings, and the third deals with Gorbachev's achievements. In a fourth section we sum up major remaining effects of his principles and actual policies. The fifth section draws conclusions. The economic policies carried out under Gorbachev's aegis from 1985 until 1991 appear of less relevance to his heritage. On the one hand, Gorbachev did not appear to be the decisive engine behind these policies but rather co-opted the policies of others. [2] The attempts at the revitalization of the old command economy from 1985 to 1987 by reinforcing morals and streamlining the system technologically failed altogeth-

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[1] This point was possibly first made by Hans Magnus Enzensberger, "The State of Europe", *Granta*, no. 30, Winter 1990, pp. 136–142.

[2] Anders Åslund, *Gorbachev's Struggle for Economic Reform*, 2d ed., Cornell University Press, Ithaca, 1991, pp. 25–69.

er and suggested that the only way out was a fully-fledged change of economic system. Similarly, the endeavors of combining plan and market during the last years of the 1980s implied that it was necessary to go further. The introduction of quasi-property rights in small scale activities was not enough. The public as well as the policy-making elite became increasingly convinced that real capitalism was needed. Little of the policies pursued had any attraction after they had been tried.

## GORBACHEV'S MODE OF POLICY-MAKING

The irony of history was that Gorbachev did not want to destroy socialism or the Soviet Union. He was among the last people in the world who thought it possible to reform Soviet-type socialism. It has frequently been stated that Gorbachev was a fast learner and that he swiftly adjusted to the situation. I would like to argue the opposite point of view. As early as 10 December 1984, three months before Gorbachev became General Secretary of the Communist Party of the Soviet Union (CPSU), Gorbachev outlined his program in vague but strategic terms [3] and to a surprising extent he stuck to this program until his not very bitter end and after it. [4] In his December 1984 speech, almost all the later famous catchwords were already present. Gorbachev called for "revolutionary decisions," "the acceleration of social-economic progress," "deep transformation in the economy and the whole system of social relations," "perestroika of economic management," "competition," "self-management," "self-government," "democratization," and "glasnost". [5] On the other hand, he continued to insist on the perseverance of the Soviet Union, the reformability of the CPSU, and the need for some kind of socialism. Considering the enormous amount of change between 1984 and 1992, it is rather more remarkable how little Gorbachev's position on strategic ideological issues appears to have changed. Points to be made are instead that Gorbachev was remarkably radical at the outset of the process; [6] that like the Bourbons he learned nothing and forgot nothing; but at the same time he was a very astute political operator and compromiser.

Gorbachev's outstanding strength was not strategic rethinking but political maneuvering. He appears a supreme political compromiser. Whatever the policy line was from 1985 till 1990, Gorbachev appears to have been on the winning side. [7] Considering that Gorbachev had taken such a radical stand in December 1984, it is hardly tenable to argue that he changed his views back and forth. Instead, it is obvious that he made sure that he joined the majority whatever the majority thought in order to reinforce his own political position. Initially, Gorbachev's knack for compromises was vital for his rise to power. Nobody could have climbed the highest rung

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[3] M. Gorbachev, *Ibrannye rechi i stati*, vol. 2, Politizdat, Moscow, 1987, pp. 75–108.
[4] See for instance his interview in *Time*, December 23, 1991, pp. 14–17.
[5] Åslund, *Gorbachev's Struggle for Economic Reform*, p. 28.
[6] Well made in an early article by Archie Brown, "Gorbachev: New Man in the Kremlin," *Problems of Communism*, vol. 32, no. 3, May-June 1985, pp. 1–23.
[7] Åslund, *Gorbachev's Struggle for Economic Reform*, pp. 61–68.

of Soviet Communist power without agreeing to the many principles of Soviet Communism.

A major difference between the start of the reforms in the U.S.S.R. and China was that in the U.S.S.R., the Communist party, the nomenklatura, and the ideology were intact, and there was no sense of crisis. In China, the Communist party had been devastated by the cultural revolution, which had discredited extreme Marxism-Leninism and crippled the state and party apparatus. The economic costs of the cultural revolution were just too obvious, and economic pragmatism came to the fore. Deng Xiao-Peng made his way by opposing the exaggerations of Maoism, while Gorbachev rose as a seemingly obedient servant to Leonid Brezhnev. Deng had a mandate for pragmatic economic change, when Gorbachev just had a mandate of preservation of status quo.

After Gorbachev had become General Secretary, his position was not very strong. He needed all his skills as a compromiser to stay in power without being able to influence economic policy much, since he remained a rather extreme liberal in the Soviet leadership. As time passed by, the Soviet political establishment underwent a considerable liberal drift. Significantly, in November 1987 Gorbachev for the first time warned people who wanted to go too far. [8] In March 1990, Gorbachev was elected President of the U.S.S.R. by the Congress of People's Deputies of the U.S.S.R. At long last he had sufficient powers not to have to compromise any longer. However, rather then forging ahead, Gorbachev turned himself to the conservative camp. First he appointed a Presidential Council that was rather more conservative than the Politburo it seemed to replace. Second, he played around with the radical 500-day reform program just to discard it. Third, he reinforced his powers in the fall of 1990 without seeming to have any intention to push reform but rather stall it. Finally, he gave in to the Communist and military hardliners from November 1990 until January 1991, making his hardest Communist speeches since 1985. [9] Gorbachev seemed to be unable to break with his old way of policy-making. Compromise with the old Communist establishment was his very way of living. As the Soviet discussion had been revitalized, Gorbachev appeared to have run out of ideas, and his speeches became ever more tedious and empty, suggesting a serious void. The usefulness of compromise had ended, and Gorbachev had no more political content to offer. It is all too characteristic that Gorbachev argued that it was necessary to distinguish between good and bad Communists even after the abortive coup of August 1991. He had failed to make a break with his Communist past.

If Gorbachev had not believed that it was possible to reform the old Communist system, he would never have been given the confidence to run it. As it turned out, Gorbachev destroyed both the Soviet Communist system and the Soviet state, but this, his outstanding achievement, was never his intention. It is therefore difficult to assess his work. The alterations of the old system that he advocated were commendable, but no such changes were feasible. By attempting them, Gorbachev forced much more far-reaching

[8] *Pravda*, November 3, 1987; with tacit reference to Boris El'tsin.

[9] *Pravda*, December 1 and 2, 1990.

transformations, but since they were not intended their social costs appeared very high. However, the Soviet system was extremely rigid, and it is possible or perhaps even likely that no other change could have been so smooth and peaceful.

### GORBACHEV'S PRINCIPAL SHORTFALLS [10]

It should be underscored that Mikhail Gorbachev could not have started the dismantling of Soviet Communism if he had not been a Communist at least in the broad sense that he identified himself with the party and its ideology. A logical consequence of this is also that Gorbachev's major shortfalls were results of his refusal to abandon Communism, since Communism does not appear to be a viable system politically, nationally, or economically.

All over Eastern Europe, we have seen that no country has undertaken a decisive change of economic system without a preceding democratization. Nor has any country gone through democratization without a radical systemic change coming soon afterward. Empirically, the links appear organic, and it seems to be. Authoritarian rule has nurtured the development of liberal market economies in many parts of the world, but in no case has state property been dominant, while it has been almost all-embracing in many Communist states. For a Communist state, it appears necessary to make a clear break with the previously ruling stratum, since it is not only dominating the state apparatus and the military but the whole of economic life. Since the Communists also dominate the military, the army cannot provide the necessary break, rendering democracy the only feasible option. This is not to say that democracy has to survive. The change of system may fail in several ways, and an authoritarian dictatorship may emerge after the initial emancipation of the economy from the state has occurred. Gorbachev, however, did not go for full democratization. He made his choice in the winter of 1990–1991 when he decided to be elected President of the U.S.S.R. by the Congress of People's Deputies of the U.S.S.R., but even so got only 59 percent of the votes as the single candidate. Thereby he sealed his own fate. Although he went on to extend his formal power, his authority was fatally undermined. [11] As a result, he became the prisoner of the conservative Communists and submitted to them altogether in November 1990. He stayed on as the leader of the CPSU until its bitter end regardless of it being the mainstay of antidemocratic sentiments. The current Russian Minister for Foreign Affairs, Andrei Kozyrev, has captured the situation:

> Today the parliamentary system is deeply rooted in public consciousness—one of Gorbachev's chief merits. The irony of history is such that the first and last Soviet president, who never competed in nationwide free elections, contributed to a situation in which people came to regard such elections as the only way of legitimizing power. [12]

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[10] I have discussed these in a recent article: see Åslund, "Russia's Road from Communism", *Daedalus*, vol 121, no. 2, Spring 1992, pp. 77–96.

[11] Peter Reddaway, "Empire on the Brink," *The New York Review of Books*, January 31, 1991, pp. 7–9.

[12] Andrei Koyrev, "Russia: A Chance for Survival," *Foreign Affairs*, vol. 71, no. 2, Spring 1992, p. 7.

In a similar vein, Theodore Draper has pointed out that there was something of a tragic hero in Gorbachev: "This man of contradictions had become, in his last phase, too much a democrat to be a Communist and too much a Communist to be a democrat." [13] He failed to make a clear break with the old Soviet society at the same time as he had broken it.

Gorbachev's most striking intellectual shortcoming was his complete oversight of nationalism. His ignorance stood in sharp contrast to the insights of some of his predecessors. Stalin made his career by specializing in national issues, his methods were admittedly very ruthless, but he knew what he was doing. Leonid Brezhnev let each national elite usurp its power in peace as long as its subservience to him was not in question. While many Soviet leaders had boasted about the unique Soviet solution of nationality problems, the problem with Gorbachev was that he seemed to believe in Soviet propaganda in this regard. In his book, *Perestroika*, Gorbachev made extremely naive statements on nationalism:

> Socialism ... has all the conditions for solving nationality problems on the basis of equality and cooperation. ... Against the background of national strife, which has not spared even the world's most advanced countries, the USSR represents a truly unique example in the history of human civilization. These are the fruits of the nationality policy launched by Lenin. [14]

Whenever Gorbachev discussed national issues, he seemed to be caught in the most simplistic Soviet stereotypes and slogans, and worse these attitudes also emerged when he visited various republics, displaying an incredible lack of comprehension about what the national complaints concerned. He never seems to have had any idea of the nature of nationality problems. Not surprisingly he tread ineptly whenever he had a chance. Time and again, he insisted on positions on national policies, notably the union treaty, that were no longer politically viable.

In the economic sphere, the foremost problem was Gorbachev's confusion over basic economic principles. While he had taken a positive stand on marginal private enterprise before coming into power, he did not move much further. He envisioned very little private enterprise: "When proprietors appear, even private ownership might emerge; I however imagine that it will be petty property. It will be decisive only in certain spheres, where the cooperative and state sectors do not work appropriately." [15] In 1990, the private ownership of land became a crucial divisive issue. After some vacillation, Gorbachev came out firmly against private title to land: "I, for instance, do not accept private ownership of land whatever you do with me." [16] Gorbachev's attitude to the market was more posi-

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[13] Theodore Draper, "Who Killed Soviet Communism?" *The New York Review of Books*, June 11, 1992, p. 14.

[14] M.S. Gorbachev, *Perestroika. New Thinking for Our Country and the World*, Harper & Row, New York, p. 119.

[15] *Pravda*, December 2, 1990.

[16] *Pravda*, December 1, 1990. For the broader policy debate at the time, see Anders Åslund, "Differences Over Economics in the Soviet Leadership," *Rand Note*, N-3277-A, The Rand Corporation, 1991.

tive: "I have always stood up and stand up for the market." [17] But in fact he opted for a highly regulated market economy. As the actual transition to a market started, Gorbachev came out against "shock therapy" and favored a more gradual transition, but his criticism was extremely vague, suggesting more political ambitions than economic substance. [18] Even after his demise, Gorbachev continued to praise socialism. [19]

To sum up, one of the most telling characteristics of the shortfalls of Gorbachev has been volunteered by Boris El'tsin:

> He wanted to combine things that cannot be combined—to marry a hedgehog and a grass snake—communism and a market economy, public-property ownership and private-property ownership, the multi-party system and the Communist Party with its monopoly on power. But these things are incompatible. He wanted to retain some of the old things while introducing new reforms. In his latest mistake he wanted our country to be a single state. That is impossible, that is unrealistic. But he decided to stick to his illusions and bide his time. [20]

In short, Gorbachev refused to opt clearly for democracy, private enterprise, and a free market economy, while he failed to distance himself from Communism and seemed unaware of the actual nature of nationalism. All these faults were palpable, but they were swept away with his departure, as they were some of the reasons why Gorbachev had made himself impossible and unpopular. Therefore, we can fortunately say that Gorbachev has not left any heritage in these regards.

## Gorbachev's Achievements

It might seem unfair to discuss Gorbachev's shortcomings before we move to his achievements, but the former are all too often overlooked. In broad terms, Gorbachev's achievements amounted to the breaking down of the old Communist system. With regard to the economy, however, this implied a sharp economic decline without any construction of a new viable economic system in sight. Therefore, it is easier to exude enthusiasm over Gorbachev's accomplishments within the sphere of politics. They can be discussed in three categories: glasnost, democratization, and new thinking in foreign policy.

The establishment of freedom of speech was one of the foremost services Gorbachev rendered his country. Glasnost was one of his key slogans from the outset of his rule, and he moved forward all the time. [21] The process was essentially completed with the first session of the new Congress of People's Deputies of the U.S.S.R. in May and June 1989, when virtually anything was stated publicly on TV and a vast share of the population watched. For the first time, the Soviet peoples could form a clear view of how low the

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[17] *Pravda*, December 1, 1990.
[18] *The Washington Post*, March 24, 1992; *Komsomolskaya pravda*, May 29, 1992.
[19] M.S. Gorbachev, "No Time for Stereotypes," *The New York Times*, February 24, 1992.
[20] *Newsweek*, January 6, 1992, pp. 11–12.
[21] For an account of how glasnost proceeded, see Alev Nove, *Glasnost in Action: Cultural Renaissance in Russia*, Unwin Hyman, Boston, 1989.

growth rate had actually been, how low their relative standard of living was, and how large the defense burden.[22] All the endemic problems of the command economy were exposed.[23] While Gorbachev's apparent purpose was to facilitate a fundamental reform of the socialist system, the actual effect—which Gorbachev did not block—was to debunk socialism as such.

As has been discussed above, Gorbachev did a lot for the establishment of democratization, introducing truly free elections of everyone but himself. Elected, democratic institutions, though unwieldy, were introduced at all levels of society. However, Gorbachev stopped short of distancing himself from the CPSU or the KGB and even the massacre carried out by the Soviet military in Vilnius on January 13, 1991. He had insisted on the creation of the clumsy Congresses of People's Deputies with too many deputies that were partly appointed rather than elected. While Gorbachev had launched the democratic process, he did not complete it.

One of Gorbachev's greatest achievements was his transformation of foreign policy not only of the U.S.S.R. but of the whole world. This had numerous repercussions also for the Soviet economy. First, the end to superpower hostility lay the groundwork for the easing of the Soviet defense burden, although the big cut occurred in 1992 after Gorbachev's demise. Second, the conclusion of ideological warfare made the Council for Mutual Economic Assistance (CMEA) and its obsolete trading system based on bilateral barter over five-year periods redundant. Third, without ideological and superpower competition, Soviet foreign aid of the old type also became superfluous. Fourth, Soviet hostility to capitalist institutions as well as secrecy had blocked the Soviet Union from entering into Bretton Woods institutions.

With the exception for Gorbachev's half-hearted attempts to build democratic institutions, his major achievements amounted to the destruction of the old ideology, the barriers against the freedom of speech and the old framework of Soviet foreign policy. He succeeded in the destruction but failed to build anything new. However, considering how enormous the task of destruction was, it would be too much to ask one man both to destroy a massive failure and to construct a successful new society. Still, this means that Gorbachev's heritage is most of all destruction.

## Remaining Effects of Gorbachev's Rule

Thus, the main effects of Gorbachev's rule are undoubtedly his destruction of the old order. Sometimes, Gorbachev really wanted to destroy parts of the old system, notably he tried to trim the old industrial branch ministries. Mostly, however, he tried to reform the old institutions, but failed. As a result, these institutions were neither reformed nor revitalized but declined. At the center of power, the administrative system deteriorated to such an extent that regions, enterprises and people were forced to take their fate into their own hands. This partly intended, partly accidental, decentralization was not accompanied by the envisioned rule of law.

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[22] Vasilii Selyunin and Grigorii I. Khanin, "*Lukavaya tsifra*," *Novyi mir*, vol 63, no. 2, February 1987, pp. 181–201.
[23] Nikolai P. Shmelev, "*Avansy i dolgi*," *Novyi mir*, vol 63, no. 6, June 1987, pp. 142–158.

Instead the growing administrative disorder was paralleled by a similar development of legal disorder. In the economic sphere, the Gorbachev era was characterized by large and growing budget deficits, which resulted in massive shortages on all markets. One consequence of the lack of financial restraints was a huge increase in the foreign indebtedness of the U.S.S.R. Another effect of the all-embracing shortages was that the national income started tumbling after a prolonged period of stagnation. All these effects were prevalent as Gorbachev finally departed at the end of 1991. The ultimate result, however, was that both the old system of the command economy and its ideology were so discredited and undermined that the ensuing administration was hardly given any choice but to abandon them altogether.

Gorbachev's approach to administration is very curious. In many ways it reminded one of Nikita Khrushchev. Notably, Gorbachev was incessantly proposing and introducing changes, whose main purpose was to bring about some change, less important what change. Initially, this seemed to make sense, since Gorbachev wanted to reduce the size of branch ministries and similar tentacles of the old command economy. However, he tended to amalgamate into very large central bodies that were pretty impossible to govern. The State Agro-Industrial Committee (Gosagroprom) was the case in point. Moreover, he did not push for the abolition of harmful bodies, but rather for their reduction, allowing them to struggle for both their survival and old purpose against more reformist bodies. In three years, the central administration had its staff cut by half, while it persisted with its old tasks, rendering the central administration severely overstrained and thus functioning ever worse. Partly this was apparently intended to allow for more liberalization, but partly society was left in a limbo without rights to act on its own but also without central direction.

While it is possible to understand Gorbachev's actions, with due regard to opposition, until 1990, his later actions appear increasingly confusing. Since the 19th Party Conference in the summer of 1988, Gorbachev had tried to reduce the power of the central party organs. He achieved his apparent triumph in March 1990, as the Politburo seemed to be effectively replaced by a new Presidential Council, which however was supposed to be an advisory body, leaving the President with much greater formal powers than previously. While this made sense, Gorbachev never clarified the situation. Some members of the Presidential Council saw it as a successor to the Politburo, others saw it as an advisory body, while others looked upon it as a inner cabinet.[24] Rather than giving a clear answer, Gorbachev abolished the Presidential Council in November 1990. Neither the Communist party nor the presidency had any body that was strong enough to form economic policy any longer, which was left to remnants of the old governmental apparatus that Gorbachev had not cut. Long before the Soviet Union itself had withered away, economic policy-making bodies had become unable to form any policy.

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[24] *Moscow News*, no. 33, 1990, pp. 8–9.

Because of the half-baked democratic reforms, rivalry developed all over the country between the legislative councils at all levels (the soviets) and the corresponding executives. These rivalries were never resolved. They were prevalent everywhere democracy had taken root. Partly this confusion was caused by a popular inability to distinguish between legislative and executive powers, but partly it was a consequence of Gorbachev's unwillingness to go for a proper democratization. He wanted to preserve his role as arbiter and middleman when it was no longer a realistic ambition.

The consequences of the administrative and organizational changes that Gorbachev brought about was that the Soviet Union seemed to approach administrative breakdown. Everywhere Gorbachev wanted to be a go-between, while he had no possibility of handling all the many conflicts he nurtured. However, it is difficult to believe that he was only Machiavellian. Presumably, much of the chaos was also caused by poor organizational skills. His legacy has been an extraordinary administrative disorder and complete confusion between legislative and executive powers. The administrative chaos has naturally grown worse after the dissolution of the U.S.S.R. and the further development of all kinds of political strife. Administrative ability seems to be one of the scarcest human skills in the former Soviet Union.

One of the most ironic features of Gorbachev's rule was that he who daringly spoke in favor of a rule of law and a *Rechtsstaat* in fact contributed to the contrary, extensive legal disorder. Much of what Gorbachev did had an impact on the legal situation. Two major policies initiated under his reign were the anti-alcohol campaign launched in May 1985 and the campaign against unearned incomes of May 1986. [25] Both campaigns but particularly the latter one were based on lawless administrative rule. The local authorities were given extensive legal discretion to do what they cared to for a vaguely formulated higher state purpose. This was contrary to the rule of law. The campaign against unearned income was targeted against private enterprise, although this might not have been the original intention of the Soviet leadership. The struggle against alcohol undermined legality in another way. It brought about extraordinary restrictions against drinking, which were not accepted by the public at large. As a result, wide-ranging criminal activities arose in order to provide the public with the liquor it desired. The anti-alcohol campaign has been pinpointed as one of the foundations of the substantial organized criminality that has developed in the U.S.S.R. in the latter half of the 1980s. [26]

More broadly, the massive shortages that developed in the late 1980s brought about all kinds of illegal economic activities. The aggravated shortages were partly caused by the anti-alcohol campaign, partly by the general increase in macroeconomic imbalances, essentially connected with a rising unfinanced deficit in the state budget. While Gorbachev tried to promote the adoption of proper laws rather than government decrees and increase the transparency of legislation, he turned in the opposite direction in 1990, when he acquired substantial rights to rule by decree.

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[25] Åslund, *Gorbachev's Struggle for Economic Reform*, pp. 78–80, 158–163.
[26] Shmelev, "*Avansy i dolgi*," pp. 162–163.

Contrary to Gorbachev's apparent intentions, the legal system itself was not transformed, and the prosecutor remained superior to the judge in a Soviet court. Nor was the training of lawyers reformed or extended. As a result, the human capital in the shortest supply as Russia transcended to a market economy was lawyers. To all this comes the general decline in the state administration which also effected the legal system with effects ranging from increasing disregard for formal decisions to the declining salaries of state-employed, budget-financed lawyers which meant that the state found it ever more difficult to attract able judges and magistrates. Gorbachev's legacy in the legal sphere is double. On the one hand, he was a pioneer in his advocacy of the rule of law. On the other hand, his actions ran in the contrary direction. Both in the short and medium term he undermined the establishment of any legal order in the U.S.S.R.

One of the most striking negative results of the Gorbachev era was the development of extraordinary financial and monetary imbalances. In 1990, the consolidated state budget deficit of the U.S.S.R. amounted to at least 20 percent of GNP and probably more if properly assessed. The devastating secrecy of the old Soviet system was illuminated when Gorbachev finally alleged that he and the top economic politicians (N. I. Ryzhkov and V. I Dolgikh) had not been allowed to see the real budget figures even under Yurii Andropov in 1982–83, when Gorbachev was a member of the Politburo and led the meetings of the Secretariat of the Central Committee.[27] As a result, the new leadership did not bother about the budget deficit but just decided to do something in 1985. Similarly, little attention was paid to the effects on wages of the Law on State Enterprises that came into force in 1988 as a major reform law. Thirdly, with the partial democratization introduced in 1989, social expenditures started skyrocketing from 1990, as the deputies could raise public expenditures but hardly oust the government. They were given opportunities to influence but no real responsibility. Finally, in 1991 the collection of tax revenues fell sharply. Monetary policies were hardly pursued at all, as money largely remained passive. The outcome was a complete destabilization of the financial and monetary system. An inflationary bomb had been nurtured under Gorbachev's irresponsible economic policies.

For a long time inflation was combatted with the old strict price controls. In 1991 the situation was no longer tenable. In steps prices were either raised or liberalized. One result was a huge inflation. Various statistics differ greatly, but the inflation probably amounted to at least 200 percent in 1991, though prices started skyrocketing toward the end of the year in anticipation of the price liberalization at the outset of 1992, leaving the shops empty; the few commodities that were at hand caught very high prices. Another result was a rising monetary overhang (excess of purchasing power over availability of goods to absorb it), which at the end of 1991 required at least a doubling of the price level. In addition, wages started rising ever faster, and shortages grew intolerable

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[27] *Pravda*, December 10, 1990, p. 1.

toward the end of 1991. Macroeconomic imbalances were about as bad as they could be.

Soviet growth rates had long been exaggerated, and the quality of Soviet statistics grew worse rather than better toward the end of the 1980s in spite of greater openness. In particular with regard to 1991, there is a great variety in the assessment of the growth-rate, or rather rate of decline. The generally cautious Economic Commission for Europe (ECE) put the decline in GDP in 1991 at 17 percent.[28] Thus, the Soviet economy was approaching a free fall as Gorbachev departed.

The domestic macroeconomic imbalances that had grown ever worse during the second half of the 1980s also resulted in a large foreign debt. When Gorbachev had come into power, Soviet gross foreign debt had been just over $25 billion.[29] When he left, it was approaching $70 billion, and the U.S.S.R. stopped serving its foreign debt in December 1991, a few days before Gorbachev's final demise.

While Gorbachev brought about the freedom of speech and impressive intellectual openness within the country, intellectual exchange with the outside world remained surprisingly limited. While the minds had opened up, the actual exchange was minimal. Around 1987–88, the leading intellectual lights of perestroika started traveling widely themselves. As late as 1991, only a minimum of student exchanges with the outside world had started. In 1990 and 1991, a few of the essential Western text-books in economics and management started appearing in the U.S.S.R. People realized that capitalism was necessary, but only around 1991 started the necessary intellectual training of market-oriented skills on a significant scale. A delay of several years had been caused for not very clear or good reasons.

Still, it is Gorbachev we must praise for the ultimate end of the Communist myth. No longer can anyone argue that Communism is economically or socially superior to capitalism or that Communist dictatorship is better than democracy. It is obvious that the standard of living and the GNP per capita are much higher in the West than in the former CMEA. Technological and qualitative progress are slower under socialism than under capitalism. There is no efficient economic system without private ownership and markets. There is no alternative socialist system of foreign trade, only arbitrary bureaucracy. Socialism does not provide any social guarantees or even decent social security. The theories of modernization and unbalanced growth have been severely discredited. Nor is socialism an effective means for the solution of national conflicts.

## CONCLUSIONS

Gorbachev is rightly perceived as a tragic hero. His task was one of destruction. Who else has broken an alliance, an ideology, an economic system, a political system and his own country? He is worthy of great praise for having undertaken such a complete destruction of so much of Soviet Communism. At the ideological level,

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[28] Economic Commission for Europe, *Economic Survey of Europe in 1991–1992*, UN, New York, 1992, p. 105.

[29] Ibid., p. 322.

he exposed all the Communist dogmas in the economic sphere and either debunked them himself or ridiculed them by his unsuccessful defense. The necessity of a market economy was broadly accepted already before his departure. Soon afterward, hardly anyone but a Stalinist crank would argue against privatization. Marxist concepts such as exploitation, central planning, the labor theory of value, etc. lost all relevance. Only the most popular concepts such as speculation had staying power.

In the political sphere, Gorbachev's nationality policies prompted the peaceful dissolution of the Soviet Union but without any preceding solution of a variety of potential conflicts. While Gorbachev instigated democratization, he tried to block its fruition, which was a virtual guarantee that it would continue. An unmitigated success was the establishment of the freedom of speech. The new thinking in foreign policy meant that it became possible to cut defense expenditure and generally diminish the role of the military in the economy. Other consequences of the new foreign policy was that the CMEA became redundant and Soviet assistance to countries in the Third World lost its prior meaning. Soviet resistance to the Bretton Woods institution was broken as the Soviet application to the IMF and the World Bank in July 1991 made evident.

An unfortunate side of the destruction of the old system was that an extraordinary administrative and legal disorder took over the stage. The succeeding regime was left with swiftly rising criminality and the question was raised whether even Russia had a sufficient structure to be governable. Here Gorbachev left a dangerous legacy of lawlessness. While an opening toward the West had taken place, it was only at the very end of Gorbachev's rule that a more effective exchange with the West began in education and training.

The economy could hardly be in a worse state. The combination of a huge budget deficit, a massive monetary overhang, and high inflationary expectations made hyperinflation a virtual certainty. The national income was experiencing its greatest fall in peacetime and the foreign debt could no longer be served, while the necessary structural changes had barely started. Given that the economy was in such a terrible state, it was obvious that economic policies had to change completely.

Thus, hardly in any regard will anyone later proudly state that this is a heritage from Gorbachev. His task was not construction, and it is strange how he failed to construct anything that is likely to survive. Instead, he is likely to be remembered as the man who broke communism and the Soviet Union without even realizing that he was doing just that.

# RUSSIAN FISCAL AND MONETARY STABILIZATION: A TOUGH ROAD AHEAD

By James A. Duran Jr., Ph.D. *

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## SUMMARY

The bases for restoring fiscal and monetary stability in Russia were not established by July 1, 1992. During the whole period of his tenure in power (1985–1991), Mikhail Gorbachev and his cabinets resorted to excessive deficit-spending. They followed the example of the Brezhnev Administration of counting emissions of credit by the U.S.S.R. State Bank (Gosbank) as revenues. However, the earlier government had limited its deficits to 2–3 percent of gross domestic product (GDP). After changing from a unitary state budget system to a decentralized federal one in 1991, the central and republic ministries increased the deficit to 26 percent of the total budgets. Emission of currency in 1991 reached twice the rate of 1990. Partial reforms designed to move to a market economy had undermined the controls of the centrally planned economy (CPE). The result was fiscal and monetary destabilization of the U.S.S.R. in 1991.

On January 2, 1992, the Yeltsin-Gaidar government of independent Russia made a dramatic break with the past gradualist approach to market-oriented reform by freeing most prices and enacting a very austere budget. Deep-rooted vestiges of the old CPE system distorted the outcomes of the reforms in an undesired direction. By July, 1992, deficit-spending approached 17–20 percent of GDP, not the target of 5 percent set after consultation with the

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IMF. The Central Bank of Russia (CBR) has extended massive credits to the government and the economy. Galloping inflation already projected to be from 1,000 to 1,800 percent for the year is threatening to turn into hyperinflation. The goal of reducing it to 9 percent by December seems unattainable. Future waves of rapid price increase are ensured as oil prices are to be raised in stages to world market levels. To pay wages, commitment has been made to septuple the currency during the year. Two and one-half trillion rubles in unsettled inter-enterprise debt caused most enterprises and commercial banks to be technically insolvent. Producers through debt had escaped hard budget restraints and the compulsion to drop prices to meet demand. Diversity in the fiscal policies of the independent members of the Commonwealth of Independent States (CIS) disrupted relations within the ruble zone and helped to undermine the value of the ruble. Russia has reason to blame others for failure to pursue strict budgetary and credit policies, but its own fiscal and monetary instability is a major cause of the breakup of the "common economic space" now under way.

Following the appointment in mid-year of ministers representing the industrial elite, a new 260-page program has been designed to push through broad structural reform by 1996 to deal with distortions caused by remaining vestiges of the old CPE system. Commitment to shifting to a market economy remains firm. However, fear of a catastrophic collapse of industry and of popular reaction to the sharp drop in standard of living has led to costly decisions. In particular, issuance of massive bank credits fundamentally violates the IMF conditions limiting deficit-spending. Key Russian officials have now recognized that it will not be possible to establish full convertibility of the ruble before the beginning of 1993 at the earliest. With the economic recession still deepening, that deadline appears to be very optimistic.

## Introduction

The radical economic reform program of the Yeltsin-Gaidar government implemented in January 1992 was but the latest stage in the effort to shift from a centrally planned economy (CPE) to a market economy. Substituting macroeconomic fiscal and monetary instruments for the direct commands of the government in economic affairs was initiated in 1988. As each of the officially approved 12 reform plans for the transition between systems have been debated and partially implemented, the rigidities inherent in the CPE have twisted the outcomes of decrees and statutes in unforeseen directions.

Concepts basic to 72 years' rule by Marxist-Leninists have so permeated the minds of political leaders, managers, and the masses that even supporters of market reform have difficulty understanding the scope of change required. Stalin denied the validity of Western "capitalist" macro- and microeconomics for the Soviet "socialist" model. His deliberate "classicide" against the private entrepreneurial classes of city and countryside prevented the development of a strong, independent middle class. Building a "normal" society and a market economy will inevitably take a very long time.

## The Classic Command System

During the Five Year Plan (FYP) period, the annual plan setting the parameters for virtually every institution was the center of policy debate by top leaders and managers. Bargaining to get as much as possible while limiting commitments was the center of politics on economic affairs. Within this, fiscal and monetary policy were merely instruments for implementing the plan to attain its physical indicators. The U.S.S.R. Ministry of Finance had as its duty to calculate the numbers basic for the U.S.S.R. State Budget to implement the targets set by the top authorities. This document was a unitary one since the budgets of lower levels of government were included within the budgets of the next higher level. [1]

The U.S.S.R. State Bank (Gosbank), a department of the Ministry of Finance, kept and monitored the accounts of all enterprises, industrial and agricultural, and of all budgetary organizations on direct government payroll to ensure observance of the requirements of the plan. These accounts were carefully divided into two circuits. The "cash account" was used primarily for wages and salaries. Since wages and prices were set by the government, control could be kept on the emission of currency so that demand would not unduly exceed the supply of consumer goods. The second "circuit" was the noncash account of transactions among enterprises and between them and the government. Should subsidies be needed to ensure resources were available to meet planned production levels, Gosbank would provide them even to loss-making enterprises. [2] Since consumer prices for basic foods were kept below the costs of production, the state had to pour huge subsidies, by 1990 two-thirds of the total, into agricultural enterprises to cover the costs of production. Keeping loss-making enterprises going at the expense of the state may have maintained full employment and produced impressive physical statistics, but the wastage of capital resources was immense.

For the most part, budgetary and monetary policy was left to the experts in the ministries. When Politburo member Mikhail Gorbachev asked Communist Party General-Secretary Yuri Andropov in 1984 if there were budget deficits, he was told that it was nothing to worry about. [3] In fact, secret deficit spending ranging from 2 to 4 percent of GNP had been the norm since 1976.

Traditionally at the regular November-December session of the U.S.S.R. Supreme Soviet the head of the State Planning Commission (Gosplan) first presented the next year's annual plan and was then followed by the Minister of Finance, who provided in his budget the figures needed to attain the goals set by the leadership. Prior to 1989, the budget, a brief document, was always passed

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[1] Anders Aslund, *Gorbachev's Struggle for Economic Reform*, Updated and Expanded Edition (Ithaca, New York: Cornell University Press, 1991), pp. 182–189; Robert W. Campbell, *The Socialist Economies in Transition, A Primer on Semi-Reformed Systems* (Bloomington, Indiana: Indiana University Press, pp.9–30, 92–118; Donna Bahry, *Outside Moscow, Power, Politics, and Budgetary Policy in the Soviet Republics* (New York: Columbia University Press, 1987), pp. 13–62; and Raymond Hutchings, *The Soviet Budget* (Albany, New York: SUNY Press, 1983), pp. 15–28.

[2] George Garvy, *Money, Financial Flows, and Credit in the Soviet Union* (Cambridge, Mass.: Ballinger Publishing Co., 1977),pp. 8, 158–62.

[3] Marshall I. Goldman, *What Went Wrong with Perestroika* (New York: W. W. Norton & Company, 1991), p.129.

after a *pro forma* debate with the inclusion of a few pre-arranged amendments.

## GORBACHEV'S REFORMS, 1985–1990

During Mikhail Gorbachev's tenure in power, 1985–1991, *perestroika, glasnost,* and democratization broke the "cake of socialist custom" as developed during the period of authoritarian Communist rule. Clearly, he came over time to understand that the stagnant CPE had to be transformed into a decentralized market economy if the U.S.S.R. were to keep pace with the advanced industrial countries. During his first two years, he sought to "perfect" the planning mechanism through *uskorenie,* a major campaign to raise the machine-building industry across-the-board to world standards. It failed at great expense. His simultaneous antialcohol campaign had the undesirable side-effect of reducing government revenues while not attaining its goal as production of moonshine mushroomed. Profits from foreign trade also dropped significantly since the price of Russia's key export, oil, fell sharply on the world market.

During the second stage from late 1987 to 1989, laws on enterprise, cooperatives, leasing, and individual enterprise were passed to give greater autonomy to managers and to improve incentives in limited areas for entrepreneurs. Involved were alterations in the tax laws that resulted in a significant reduction of revenues from profits. With greater autonomy, managers increased wages faster than the rate of growth of productivity. Also a source of the growth of the money supply was the relaxation of administrative controls on the accounts of enterprises. More cash was issued, especially through leaseholders and cooperatives, thus raising aggregate demand. During 1988, deficit spending reached about 11 percent of GDP.

By mid-1988, the authorities had come to understand the necessity of dealing with the budget crisis. During his presentation of the proposed 1989 unitary budget on October 27, 1988, the U.S.S.R. Minister of Finance shattered the myth that the country's budget had been balanced for decades. [4] This had ideological importance since Soviet leaders had long pointed to their deficit-free management of national finances as one proof of the superiority of the Soviet socialist system. As was to be expected, the Supreme Soviet deputies expressed no concern about the level of deficit spending. They had been trained not to do so.

Efforts to slow budgeted deficit spending had some success in 1989 and 1990. According to the IMF, deficit spending was cut to 9.5 and 8.5 percent, respectively. [5] This was done partly by reduc-

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[4] B. Pravda, 28 October 1988, in FBIS-SOV-88-209 (28 October, 1988, p. 53; Igor Birman, Secret Incomes of the Soviet State Budget (The Hague: Martinus Nijhoff Publishing, 1981), pp.1-9, 180-222; Judy Shelton, The Coming Soviet Crash, *Gorbachev's Desperate Pursuit of Credit in Western Financial Markets* (New York: The Free Press, 1989), pp. 3-28.

[5] International Monetary Fund, The World Bank, Organization for Economic Co-operation and Development, and European Bank for Reconstruction and Development, *A Study of the Soviet Economy,* (Paris: OECD, 1991), vol. 1, pp. 33-34, 54-55, hereafter referred to as *A Study of the Soviet Economy;* International Monetary Fund, *The Economy of the Former U.S.S.R.* in 1991, "Economic Review," (Washington, D.C.: International Monetary Fund, April, 1992), pp. 13, 67-68, hereafter referred to as *The Economy of the Former U.S.S.R. in 1991.*

ing subsidies to loss-making enterprises, who were supposed to become self-financing by 1990. Also, sharp reductions were made in budgeted outlays on construction projects. The budget lines for defense were to be cut by 1.5 percent in 1989, 7 percent in 1990, and 14.2 percent in 1991. However, consumer subsidies, especially for food, continued to rise steadily. On the revenue side, two major items, taxes on enterprise profits and foreign trade, declined as a percentage of GDP.

The monetary system also was increasingly being destabilized after 1988 as a result of the relaxation of central controls. The law granting enterprise managers more autonomy and the relative freedom of the new cooperatives led to the ignoring of centrally set wage rates and breakdown of strict separation between the two circuits in the banking system. By late 1990, a market rate, albeit illegal, of three noncash rubles for one cash had been established. Faced with competition from high-paying cooperatives, managers felt free to raise wages beyond levels justified by increases in productivity to retain key workers. In 1990, an increase in social security benefits by 25 percent also gave a major impetus to rapidly increasing the money supply. Potential demand far exceeded the annual increment in supply of consumer goods.

While state credits to enterprises were diminishing and consumer credits were minute, currency was the main form of monetary expansion. From 1985 to 1987, the annual increase in emission ranged from 4.1 to 5.9 percent. That jumped to 11.8 percent in 1988, 18.4 percent in 1989, and 28 percent in 1990. As a result of the shortage of consumer goods, a very large monetary overhang of more than R250 billion was held by the population in savings and cash. Due to this imbalance, the potential for very rapid inflation was in place. [6]

## BUDGETARY COLLAPSE IN 1991

The replacement of the unitary budget system by a federal one in 1991 led to a collapse of the fiscal system. An IMF staff team, which reported in April, 1992, concluded:

> The overall fiscal imbalance in the union as a whole (i.e., the sum of the union and republican deficits) dramatically deteriorated in 1991. The overall deficit is estimated at rub 482 billion, or 26 percent of union GDP. If the impact of the frozen part of the deposit compensation is excluded, the deficit is reduced to 19 percent of GDP, financed mostly by domestic bank credit, compared with a deficit of the general government budget of the former U.S.S.R. of rub 85 billion in 1990, or about 8.5 percent of GDP. A deterioration of this magnitude reflects virtually unprecedented loss of fiscal control, the counterpart of which was the strengthening of inflationary pressures and further increases in undesired money imbalances. [7]

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[6] Anders Aslund, op. cit., pp.191–196; *The Economy of the Former U.S.S.R. in 1991*, pp.70–71.
[7] *The Economy of the Former U.S.S.R. in 1991*, p.13.

Following the semi-democratic elections of 1989 and 1990, the nationalist-dominated governments of a majority of the republics aggressively asserted their "sovereignty." For most, this meant increasing the powers of the republics at the expense of the central U.S.S.R. government. In 1990, only the Baltics were pressing for full independence. Fiscally hard-pressed to meet their obligations, serious negotiations by leaders of the republics with President Gorbachev were possible because he admitted in principle that significant additional authority and power needed to be devolved to the lower levels of government. His formula was federal, "a strong center and strong Republics." He was opposed to a loose confederation.

In April 1990 a law was enacted by the U.S.S.R. Supreme Soviet on basic principles that would govern relations between the center and the constituent union republics in which fiscal arrangements were to be fundamentally changed. The unitary state budget would be replaced by a federal system whereby the two levels developed their budgets independently. Also, certain major funds, e.g. the Pension Fund, were made off-budget. Gorbachev reiterated his commitment to this new system in his Presidential Guidelines for economic reform issued in October 1990. [8] Gorbachev projected that 1991 would be a transitional year during which a new Treaty of Union would be negotiated with clauses providing for a "common economic space" with institutions to maintain an essential uniformity in fiscal, banking, and monetary policy.

Negotiations on the 1991 budgets were very difficult, particularly since R.S.F.S.R. President Yeltsin, supported by other republic leaders, sought to expand the powers of the republics. The agreement reached was a provisional one without any clearly defined, accepted common rules for allocating revenues and expenditures among the various levels of government. No restrictions were clearly stated on lending and borrowing. Especially crucial was Gorbachev's concession that the "single channel" for tax collection would continue to be under the control of the republics. [9]

Lack of effective power by the center to enforce the agreement soon became clear. Republics retained a higher proportion of shared revenues than agreed, amounting to 5.9 percent of GDP. Restructuring the corporate profit tax for all forms of business was a tax reform essential to developing a market economy. Of the 45 percent rate authorized in U.S.S.R. legislative guidelines, negotiators agreed 22 percent was to go to the central government and 23 percent to the republics. However, partly to curry political support and partly in recognition that the rate was too high, the Russian Federation levied only 38 percent, reducing revenues for both parties. A one-year U.S.S.R. sales tax had been imposed to go to a central stabilization fund, but some republics arbitrarily removed it from basic consumer goods, especially food, to lessen impact on the electorate. Most of what was collected was not forwarded to the center. Lower authorities also changed expenditure rules on investment, subsidies, and social welfare programs without prior consent of the center. Certain family allowances in the R.S.F.S.R. were 40

[8] *A Study of the Soviet Economy*, vol. 1, pp. 62–81.
[9] *The Economy of the Former U.S.S.R. in 1991*, pp. 10–13.

to 70 percent higher than provided in Union law. Ukraine provided higher consumer subsidies.[10]

The Council of Ministers, headed by former Minister of Finance Valentin Pavlov, compounded difficulties with two major miscalculations. Acting on KGB information, the Cabinet sought to reduce the reputed illegal profits of the "mafia" through a monetary reform in January, 1991. Large denomination bills were demonetized and exchanged only up to a certain level. Beyond that, owners had to show the source of their income was legitimate. Sums in savings accounts were protected. The regime by no measure reduced the money supply as much as projected, but did undermine faith in the currency. Much more serious for the budget was the staggered increase in wholesale prices in January, but with a delay in raising retail prices until April. This gap meant that state subsidies to producers to keep prices low, particularly on food, increased rapidly. A flat 45-ruble raise in wages and pensions to compensate for the April price increases was an added budget expenditure. Also, savings accounts were compensated by 40 percent so that they would not lose value, but depositors could not withdraw the added sums above R200 until January, 1994. That added a deficit of 7 percent of GDP to the budget.[11]

Rumors of further monetary reform, growing shortages of consumer goods due to production breakdowns and the end of COMECON, as well as higher prices all led to panic buying. Demand was far outrunning supply. Faith in money as a store of value was being undermined. Barter was becoming widespread at both the enterprise and individual levels. Central revenues were so reduced on the eve of the coup that due to lack of resources the Council of Ministers refused to implement the increase in pensions and benefits mandated for July 1 by the U.S.S.R. Congress and President Gorbachev.[12]

After the August coup failed, the center was largely stripped of power in a series of constitutional amendments. The Council of Presidents, union and republic, were to reach decision only on the basis of consensus. The union legislature was restructured in such a way as to put it firmly under the control of republic governments. The restructured executive branch was coordinated by the Committee for the Management of the Economy under I. Silayev, formerly Yeltsin's Russian Premier. Republics sharply reduced transfers of revenue to the center. They unilaterally took jurisdiction over all union enterprises on their territory as the central ministries were being dissolved. The key economist of the Committee, G. Yavlinskiy, devoted himself to negotiating a treaty to maintain a "common economic space." Much time was spent in seeking consensus on more than 20 specialized agreements in different economic sectors.[13] However, no deal could be reached on coordinating fiscal and monetary policy. Only massive and partially secret credits from Gosbank, i.e., deficit financing, kept the center operational. Emission of currency doubled during 1991 and inflation

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[10] Ibid.
[11] Ibid, p.1.
[12] Izvestiya, 26 July 1991, in FBIS-SOV-91-146, 30 July 1991, pp.61-62.
[13] *The Economy of the Former U.S.S.R. in 1991*, p.2

reached 400 percent. However, wage increases were so rapid in industry that real income reached a peak among workers in November. The economy had entered a deep recession with a fall in GDP of 17 percent in 1991. [14]

While the Russian government would have preferred to maintain the union, Yeltsin and his ministers understood that the economy was degenerating so rapidly that they needed to act decisively to keep the support of the public. Efforts to reach a consensus of all the presidents on the need for rapid radical economic reform were proving futile. Some of those leaders were still devoted to the principles basic to the CPE. On October 24, Boris Yeltsin announced that, if necessary, Russia would act alone in December. The "big-bang" program designed by a young group of economists around Deputy Premier Yegor Gaydar featured two measures that could be implemented rapidly by state action. On December 16, most prices would be "liberalized," i.e. freed from government control. In addition, an austere, balanced budget policy with harsh cuts was to be implemented during 1992. Key reformers in the U.S.S.R. central government, including Yavlinskiy, described the Russian decisions as premature since the institutional infrastructure for a market economy was not yet in place. They redoubled their efforts to negotiate the terms for a continued "common economic space."

In November, 1991, the central fiscal system collapsed. Reacting to the severe fiscal crisis, the R.S.F.S.R. Supreme Soviet had already passed an austere republic budget for the final quarter of 1991. With the U.S.S.R. government virtually broke, Gorbachev asked the parliament for authority to borrow an additional R30 billion from Gosbank to operate the rest of the year. The deputies refused his request since he did not provide a breakdown on how the money was to be expended and the deputies required that the loan be authorized by Russia. [15] When it was discovered that the center was already using billions in credits not authorized by the legislature, the Russian government moved to take over federal institutions, including the fiscal and banking systems. The budgets of the U.S.S.R. and the Russian Federation were merged for the last quarter of 1991 at an added cost of R43.5 billion for the republic. The other republics refused to pay anything. [16] After that point, Gorbachev was an "Emperor without clothes." Even the military payroll was met by Russia.

After the overwhelming vote for independence in the Ukrainian referendum of December 1, Yeltsin and his ministers realized that the struggle to preserve the old union was over. In order to maintain the "common economic space" so basic to the continued operation of the interdependent economies, the Belarus, Ukrainian, and Russian presidents at a summit held in Minsk formed on December 8 the Commonwealth of Independent States (CIS) and terminated the existence of the U.S.S.R. The other republics, except for the Baltics and Georgia, joined within two weeks. Gorbachev played no

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[14] Ibid, pp.11-12, 15-17, 62-63.

[15] Rossiyskaya Gazeta, 1 November 1991, in FBIS-SOV-91-23, 4 November 1991, pp. 53-54; Moscow TV, 22 November 1992, in FBIS-SOV-91-227, pp. 66-67.

[16] International Monetary Fund, *Russian Federation*, "Economic Review," (Washington, D.C., International Monetary Fund, April, 1992), pp. 11-13, hereafter referred to as *Russian Federation*.

role in these negotiations. On December 25–26, 1991, the U.S.S.R. ceased to exist because the U.S.S.R. President, legislature, courts, and Gosbank chairman abdicated their powers.

The overall outcome of this debacle was fiscal and monetary destabilization. According to the IMF, the overall central and republic 1991 deficit reached 19 percent of GDP, but this omits another 7 percent owed to depositors holding frozen savings accounts. Whereas under the unitary system only the center could run a deficit, in 1991 several republics did so. Russia had a deficit of 11 1/2 percent, Ukraine—14 percent, and Kazakhstan—18 percent. These three account for about 80 percent of the former union's GDP. Most of the smaller republics kept their deficit below 5 percent and some even ran surpluses. Emission of currency had grown by 106 percent in a single year and broad money (M2) by 77 percent. [17]

The successor states of the U.S.S.R. had major problems to face as they gained their new independence. Their presidents recognized that the Russian economy was so dominant on the territory of the former Soviet Union that they would have to pursue the same general course of economic reform whether they liked it or not. At their request, implementation of price liberalization was delayed by Russia to January 2. Time was needed to prepare the necessary administrative measures.

## Gaidar's Radical Reform: The First Six Months

After six months, January-June 1992 of implementing radical reform, the fiscal and monetary situation remains destabilized. Budgetary deficit-spending remains at 17–20 percent, roughly equal to that of the U.S.S.R. in 1991. Currency emission is projected to septuple in 1992. Trillions in quasi-fiscal inter-enterprise debts through the banking system have undermined price reform since the lack of hard-budget constraints has not pressured enterprises to move to market-clearing prices to maintain cash flow. Inflation has exceeded by a wide margin the goals set by the government. Yeltsin's promise to stabilize the economy has been postponed until late 1993 at the earliest.

Inheriting a severe crisis, the Yeltsin-Gaidar Russian government, in consultation with IMF experts, implemented two sets of policies that could be done quickly by central government decrees. The first was "liberalization" of the economy, i.e. freeing prices, the commodity markets, and foreign trade from most government controls. The second commitment was to strict fiscal and monetary policies focusing on virtually eliminating the budget deficit, strict reduction of credits to enterprises (the economy), and stabilization of the exchange rate. Commitment to carry out structural reforms through privatization, land reform, and development of market infrastructure remained strong, but these measures by their very nature would take several years to realize. [18]

Transfer to an efficient market system could not occur without the freeing of prices, a "big-bang," so that they would reflect rela-

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[17] The Economy of the Former U.S.S.R. in 1991, pp. 11–13, 15–17.

[18] Vladimir Capelik, "Yeltsin's Economic Reform: A Pessimistic Appraisal," *RFE/RL Research Report*, vol. 1, no. 4, 24 January 1992, pp. 26–32; Keith Bush, "Russia: Gaidar's Guidelines," *RFE/RL Research Report*, vol. 1, no. 15, pp. 22–25; *Commersant*, 2 March 1992, p. 15.

tive scarcity. Such action would also result in the reduction of the heavy burden of subsidies from the state budget. By May, central regulation of 95 percent of retail prices on consumer goods and services by the center had been lifted. Exceptions were still made for rents, communal services, and public transport. Commitment to the IMF to raise the price of crude oil to 33 percent of world prices by April and 66 percent by the end of the year was not honored. A raise in May did increase the charges from 3 percent to only 10 percent, not enough to pay for investment levels needed to sustain even present levels of petroleum production. [19] This failure builds in future waves of inflation as staged increases of energy prices are implemented.

Due to rigidities inherited from the CPE, consumer prices did not drop to market-clearing levels even though consumption dropped by more than 40 percent. The outcome was an inflation rate that continued to rise by 3–5 percent per week after the initial January spurt of 350 percent. For the first six months, the consumers' cost of living had increased by approximately 1,000 percent. [20]

Since major inflation was expected, only a quarterly, not an annual, budget was attempted for the first months of 1992. Revenues were to increase from 28 percent of GDP in 1991 to about 35 percent in the first quarter of 1992. Expenditures were to be cut from 48 percent in 1991 to about 36 percent of GDP. The deficit was projected at only 0.2 percent. However, the IMF team disagreed and, using standard international accounting categories, projected the deficit at 14 percent. [21] Since the first quarter budget was authorized only grudgingly by the Supreme Soviet in mid-March, many payments were delayed (sequestered) until the second quarter. This made it possible for Gaidar to claim at critical points in international negotiations for foreign aid that the budgets for the first quarter and even the second were balanced. He later explained in June that he referred to actual cash outlays during those periods, not to budget obligations. [22] Failures to fund commitments has become one of the sources of controversy between the deputies feeling the pressure from their constituents and the executive branch. The Russian Constitutional Court chairman sent a letter to Yeltsin in August informing him that delaying wages and pensions violates both statutes and the constitution. [23]

Severe cuts in expenditures included about halving defense expenditures from the 1991 national level of 9 percent. All state-financed investment projects except for a few vital ones in energy and agro-industry were suspended or dropped. Operation and maintenance outlays were frozen in nominal terms. Price-liberalization facilitated sharp cuts in producer and consumer subsidies. [24]

Revenue projections were optimistic. Revisions of the individual income and the enterprise profits taxes had already been enacted

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[19] Interfax, *Business Report*, 18 June 1992, p. 3; Pravda, 23 July 1992, in FBIS-USR-92-096, pp.62–63.

[20] Philip Hanson, The Russian Economy in the Spring of 1992," *RFE/RL Research Report*, vol. 1, no. 21, pp. 24–29; Izvestiya, 21 July 1992, in FBIS-SOV-92-141, 22 July 1992, pp. 30–31.

[21] *Russian Federation*, pp.13–15.

[22] Moscow TV, 1 July 1992, in FBIS-SOV-92-128, 2 July 1992, pp. 48–49;Moscow News, 24-31 May 1992, in FBIS-USR-92-076, PP. 35–36.

[23] *RFE/RL Daily Report*, No. 148, August 5, 1992.

[24] *Russian Federation*, pp.27–28.

to adapt the revenue system to one compatible with a market economy. A new measure was to replace CPE turnover and sales taxes by a Value-Added Tax (VAT) and by reforming export levies. Yet problems with the VAT emerged. The principle of a unified, single rate was violated when the deputies insisted on reducing the VAT on certain basic foods and consumer goods to 14 percent from the standard 28 percent.[25] Moreover, IMF studies show that it takes about 24 months to establish efficient administration of such a new tax. Both taxpayers and collectors have to be trained.[26] So part of the shortfall during the first quarter from this source was inevitable. The greatest error was to be in projected revenues from foreign trade. The imposition of heavy export taxes as well as licensing and quota problems were to cause a sharp drop in the level of activity.[27]

Emission of currency soon began to present dangers. At first, the government and the Central Bank of Russia (CBR) deliberately slowed printing to markedly below the rate of inflation in the hope that lower demand would become a factor in slowing the rise in prices. However, they did not stabilize, let alone drop to market clearing levels, and by May began to rise more sharply than projected. Wages, particularly for workers in industry, rose rapidly as managers made concessions to avoid strikes. The result was a lack of cash to pay workers sums totaling R150 billion by June. The government has had to react by promising to expand the total supply of currency by approximately seven times in 1992, from R263 billion to approximately R1.86 trillion.[28] Large-denomination bills being introduced in June should begin to mitigate the shortage of cash by September, but inflation could void this commitment. Pay delayed more than two months is now indexed at 80 percent to protect workers' incomes.[29] Since the underlying inflation for consumers remains at 3–5 percent per week, a dramatic increase in currency is needed to service the market even when retail sales have declined.[30] Shortages of cash have caused local authorities to issue surrogates such as coupons to fill pay envelopes. While such substitutes have now been made statutorily illegal, local officials will do what they must to avoid strikes and demonstrations by unpaid workers.[31]

At the heart of the problem has been the failure of enterprises, many of them monopoly suppliers, to reduce prices to market-clearing levels. Retail sales dropped by more than 40 percent, but prices continued to rise despite decreasing demand. Also, retail charges for various consumer goods radically differed from region to region within Russia, showing a poorly developed, monopolized and regionalized distribution network that did not operate on market

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[25] *Russian Federation*, p.27.

[26] Graham Holland, "II. Planning for VAT," Value-Added Tax: Administrative and Policy Issues, "Occasional Paper 88," Washington, D.C.; IMF, October 1991), pp. 23, 25–29.

[27] Izvestiya, 24 March 1992, in FBIS-SOV-92-057, 24 March 1992, pp. 49–50; Moscow TV, 27 March 1992, in FBIS-SOV-92-062, 31 March 1992, p.35; *Commersant*, April 13, 1992, p. 2,April 20, 1992, pp. 8–9;Philip Hanson, "The Russian Budget Crisis," vol. 1, no. 14, 3 April 1992, pp. 39–42.

[28] Interfax, *Business Report*, June 18, 1992, p.6.

[29] Moscow TV, 3 June 1992, in FBIS-SOV-92-108, 4 June 1992, p. 42.

[30] *Commersant*, August 4, 1992.

[31] *Commersant*, 19 May 1992, p. 24.

principles. Price setting by the center has been replaced by government authorities protecting their local markets or by enterprises and distributors continuing to operate monopolies at lower levels.

## BANKING PRACTICES UNDERMINE FISCAL POLICY

Huge quasi-fiscal inter-enterprise bank debt has undermined the purpose of an austere budgetary policy, denying direct support to the economy. By late June, the total sum involved was more than R2 1/2 trillion and was increasing by R25 billion per day. Under the old Gosbank clearance system, enterprise accounts had been credited when invoices were received. The Bank would automatically extend credits until noncash transfers were made from the state enterprise receiving the goods. In the CPE, deficits were covered either by subsidies directly from the government or through the ministries who took away large portions of the profits of efficient producers to cover losses of the inefficient ones within the sector. The system meant that managers did not have hard budget constraints put upon them by a negative cash flow and bankruptcy was not even legally possible. Unfortunately, many managers and bankers have continued to operate in the same old way.

The banking system of the U.S.S.R. had begun to be reorganized in 1987–88 into a three-tier reserve system. As explained earlier, the CPE Gosbank had essentially been a monobank that performed various monetary and control functions as directed by Gosplan and the Ministry of Finance. In 1988, Gosbank's role began to change toward that of a traditional central bank with duties for supervising the banking system and setting global parameters. Five banks specializing in different sectors conducted day-to-day business affairs, but until 1990 their regional offices were responsible to the regional branches of Gosbank and republic-level offices to republic branches of the state bank. The latter were renamed republic central banks in August, 1990. Also beginning in 1988 with the emergence of cooperative banks and subsequently of joint-stock commercial banks, the state banking system began to have competition. U.S.S.R. legislation on banks and banking activity formalized the existing three-tier system in December, 1990. [32]

Yet by 1991, the year the budgetary system was decentralized, central regulation of banking and credit policy for the whole USSR was also fundamentally undermined. Gosbank no longer prepared a credit plan and the Central Bank of Russia (CBR) as well as the other republic central banks were free to conduct their own credit policy. Gosbank directives on interest rates came to be viewed as indicators rather than as regulations. Though Gosbank still had a monopoly on the emission of currency, it appears to have met all of Russia's requests for cash. [33] After the coup, negotiations among the republics to coordinate fiscal, monetary, and credit policies have repeatedly broken down, a major factor in destabilizing the ruble zone.

After the U.S.S.R. Gosbank was terminated at the end of 1991, the CBR began to implement the radical economic program

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[32] *A Study of the Soviet Economy*, vol. 2, pp. 107–120; *The Economy of the Former U.S.S.R. in 1991*, pp. 14–15.

[33] *Russian Federation*, pp.15–16, 92–95.

through the macroeconomic levers it controlled. The discount rate was raised in January 1992 to 20 percent, in March to 50 percent, and on May 23 to 80 percent, all negative real interest rates well below the rate of inflation. Reserve requirements were also increased. On May 23, fines for commercial banks having negative balances in their central accounts were raised from 100 to 135 percent. Even authorized state loans through commercial banks authorized carried interest rates 3 percent over the discount rate. The result has been that enterprises have been very slow to draw the money. By June, commercial bank loans were almost entirely for terms shorter than 3 months at rates averaging around 135 percent. Under such conditions, long-term investment funds have simply dried up. Small business has been particularly hard-hit. [34] Barter keeps the system going.

The banking crisis is to a significant degree the result of 80 percent of the banks being owned by their debtors. During 1991, the CBR required all banks operating on Russian territory to recharter as commercial banks under its regulations, which differed somewhat from the requirements of central law. Many of the 1,580 commercial banks on Russian territory consisted of the ex-specialized state banks reorganized as joint-stock companies by large industrial associations that were the successors to the ministries. [35] The directors of the large enterprises holding the stock served on the Boards of Directors and approved loans to their own organizations at concessionary interest rates. Where necessary, the CBR provided the credit, albeit at high interest, to keep the system going even where institutions may actually be insolvent. [36]

Strictly speaking, the overwhelming majority of enterprises and banks in Russia are now insolvent. At the beginning of the year, it had been expected that 20–30 percent of enterprises would go bankrupt. By the end of June, estimations are that as many as 90 percent of enterprises and 70 percent of banks were in jeopardy if strict accounting rules were applied. Unless the government injected major credits into the economy, critics began to warn by March there was the danger of a "catastrophic collapse."

## Moderating and Deepening Reform: The Crisis Continues

Political pressures and deepening economic recession caused the Yeltsin-Gaidar team to moderate the austerity which was basic to their fiscal policy. By concessions, they aimed to protect the essentials of their program from defeat at the Sixth Russian Congress of People's Deputies in April. Effort was made to broaden support by including pro-reform moderates from the managerial elite in the government as key actors in meeting critical immediate problems and preparing a second-stage reform program to be implemented through 1996.

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[34] *Commersant*, 2 June 1992, p.7; 9 June 1992, pp. 18–19.

[35] *Russian Federation*, p. 94; Commersant, 23 June 1992, p. 7; Joel Hellman, "Breaking the Bank: The Political Economy of Banking Reform in the Former Soviet Union," Lecture at the Kennan Institute for Advanced Russian Studies, The Woodrow Wilson Center, 15 June 1992.

[36] Moscow News, No. 21, 24-31 May 1992, No. 22, 1-7 June 1992, in FBIS-USR-92-076, 22 June 1992, pp. 34-36.

To deal with the increasingly serious problem of insolvency, heavy additional commitments were made beginning in March and continuing into July. [37] Some were on budget, some off-budget, and some a mixture. Outlays postponed from the first quarter had to be paid. In March, Gaidar addressed the energy problem by signing a decree authorizing the nuclear power industry to restart its construction program at a cost estimated to be R20 billion per quarter. [38] Just before the Congress met in April, R200 billion in credits was promised to assist industries and agriculture to cover costs essential to maintaining production. [39] In June, a R30 billion credit at high interest was granted to the government by the CBR to the Ministry of Finance so that it could pay sums owed to the Ministry of Defense and other state agencies. Sums were also owed by the center to local governments. R74 billion would also be required to cover the potential demands for the formerly frozen portions of savings accounts that were released on July 1, 1992, instead of 1994. [40] Pension and social welfare payments were sharply raised effective May 1. [41] After labor actions, medical workers and educators received major wage increases. [42] Late wages after two months were to be indexed at 80 percent at a potential cost of R15–20 billion per month. [43] Hopefully by September 1992 the mint could print enough large denomination bills to keep that total down. The government has promised to expand the total supply of currency by approximately seven times in 1992, from R263 billion in January to R1.86 trillion. [44] As a result of these, by June on-budget deficit spending had reached R60 billion per month, enough to cause Gaidar to warn the deputies of the Supreme Soviet that the fiscal situation again was seriously deteriorating. [45]

When the cabinet submitted the consolidated budget for the last six months of 1992 to the Supreme Soviet on June 16, it projected a deficit of 2.3 percent of GDP. However, Gaidar in his budget speech to parliament on July 1 admitted that major revenues were very optimistically projected. Due to the settlements system being changed, neither VAT nor the enterprise profits tax are collected at the time invoices are submitted. [46] As a result, only 37 percent of projected tax from enterprise profits was received over the first five months. VAT fell short by R200 billion. The only reduction in tax rates that the government was prepared to concede was cutting the top rate of the individual income tax from 60 percent to 30. [47] Bracket-creep due to inflation had meant that workers receiving

[37] Keith Bush, "An Overview of the Russian Economy," *RFE/RL Research Report*, vol. 1, no. 25, 19 June 1992, pp.49–54.

[38] *Komsomolskaya Pravda*, 2 June 1992, in FBIS-SOV-92-108,4 June 1992, pp. 4-5.

[39] *Commersant*, April 13, 1992, pp. 8–9.

[40] *Krasnaya Zvezda*, 3 March 1992, in FBIS-SOV-92-043, 4 March 1992, p. 51.

[41] *Rossiyskaya Gazeta*, 20 April 1992, in FBIS-SOV-92-080, 24 April, 1992, pp. 26–27; Literaturnaya Gazeta, No. 18, 29 April 1992, pp. 41–45.

[42] Moscow TV, 14 May 1992, in FBIS-SOV-92-094, 14 May 1992, pp. 31–32; *Rossiyskaya Gazeta*, 15 May 1992, in FBIS-SOV-92-097, pp. 19–20.

[43] Moscow TV, 3 June 1992, in FBIS-SOV-92-108, 4 June 1992, p.42.

[44] Interfax, *Business Report*, June 18, 1992, p. 6, RFE/RL Daily Report, No. 96, 20 May 1992, p.2.

[45] Moscow TV, 16 July 1992, in FBIS-SOV-92-138, 17 July 1992, pp. 44–46.

[46] Moscow TV, 1 July 1992, in FBIS-SOV-92-128, 2 July 1992, pp. 48–49.

[47] Interfax, 1 July 1992, in FBIS-SOV-92-128. 2 July 1992, p. 50; Izvestiya, 14 July 1992,in FBIS-SOV-92-136, PP. 41–42.

pay increases had been pushed into the highest bracket while barely surviving.

The head of the parliamentary budget committee called the document "an interim budget of a provisional government.[48] He challenged the government's projections of revenue as being too low. The committee asserted that there would be R1 trillion additional in revenues since the GDP would be R20 trillion, significantly higher than the R15 trillion assumed by the executive branch.[49] Therefore, the committee proposed a major cut in VAT, something the Council of Ministers could not accept.[50] By the end of the budget debate, the deficit had risen from the R690 billion proposed by the government to R950 billion.[51] The Cabinet won a delay in lowering the VAT rates until January 1, 1993. By then it is hoped that there will be a more solid basis for making revenue projections.

The impact of inflation on the budget for the second half of 1992 is dramatic when compared with the U.S.S.R.'s in 1990. In the latter year, the central budget, which included all lower governmental units, is cited as having been R243.1 billion in revenues and R306.3 billion in expenditures.[52] The budget for the second half of 1992 for Russia alone provides for R2.369 trillion in revenues and R3.319 trillion in expenditures. Parliament set the deficit ceiling at R950.1 billion.[53]

President-Premier Yeltsin kept his promise to the April Congress to appoint representatives of the managerial elite to the Council of Ministers and to "deepen" the reform program by broadening practical activity to develop the institutions basic to a market economy. On July 3, Acting Premier Gaidar introduced a lengthy "Program for Deepening Economic Reforms by 1995–1996," the thirteenth such document in recent years. He made it clear that the budget would not be the source of salvation for weak enterprises—"our financial state is hopeless."[54] He asserted that major progress had been made during the first stage of liberalization and fiscal stabilization to deal with the immediate crisis. The second stage would be focused on building the economy on the basis of private property, i.e. implementing privatization. The third would be focused on reconstructing the main branches of the economy, attaining stable growth of 3–4 percent of GDP, and developing a positive balance of trade by stepping up exports. This latest reform program is to be taken up by parliament after the summer recess, but is already under heavy attack.[55]

A very major dispute within the government has broken out over the problem of the trillions of rubles of inter-enterprise debt. The outcome has been the resignation of the Chairman of the CBR and a firm delay by the IMF in granting funds for a stabilization fund since deficit spending would reach unacceptable levels. With an es-

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[48] Moscow ITAR-TASS, 1 July 1992, in FBIS-SOV-92-128, 2 July 1992, p. 50.
[49] *Commersant*, 7 July 1992, p.18.
[50] *Nezavisimaya Gazeta*, 14 July 1992, in FBIS-SOV-92-137, P. 39
[51] Moscow ITAR-TASS, 17 July 1992, in FBIS-SOV-92-139, 20 July 1992, p. 39; *Financial Times*, 18/19 July 1992; New York Times, July 18, 1992.
[52] *The Economy of the Former U.S.S.R. in 1991*, pp. 67–68.
[53] Moscow ITAR-TASS, 17 July 1992, in FBIS-SOV-92-139, 20 July 1992, p. 39.
[54] Moscow TV, 3 July 1992, in FBIS-SOV-92-129, 6 July 1992, p. 53.
[55] *Rossiyskiye Vesti*, 11 July 1992, in FBIS-USR-92-093, 24 July 1992, pp. 26–54

timated 90 percent of enterprises potentially insolvent, closing down loss-makers was not a realistic option for it would mean a catastrophic decline in production. Under the direction of Deputy Premier Khizha, one of the new cabinet appointees from the managerial elite, a presidential decree was prepared freezing inter-enterprise debts amounting to R2 1/2 trillion as of July 1. A special agency has been set up to audit these enterprise accounts by the end of 1993. Up to one-half of these debts were to be covered by completing settlements among enterprises. At the end of 1993, the remainder are to be transformed into some form of "negotiable bonds and other securities" backed by the credit of the state.[56]

Meanwhile, a crisis broke out over provision of essential working capital after July 1. The Council of Ministers agreed that R500 billion in bank credits was to be provided through the commercial banks on a creditworthy basis to crucial sectors of the economy. The Chairman of the CBR, G. Matyukhin, argued for less. Advocates of the industrial lobby suggested R1 trillion. The IMF warned that the proposed R500 billion would undermine any attempt to stabilize the currency and delay its financial support of a stabilization fund for the ruble. Under attack by both deputies and industrialists for supporting conservative fiscal policies, Matyukhin resigned. His replacement, former Gosbank chairman Viktor Gerashchenko, committed himself to cancel the inter-enterprise debts and issue large-scale credits, directly contradicting the Gaidar government's policy.[57] Gerashchenko appears to be repeating what he did as head of U.S.S.R. Gosbank in 1991. CBR officials believe the write-off of inter-enterprise debts and extension of credits to enterprises within cashless, "special balance" accounts not usable for paying wages will not give a strong impulse to inflation.[58]

Other decrees were issued to deal with related fundamental reform issues. A presidential decree on bankruptcy of non-creditworthy enterprises was put into force under emergency powers and will remain in force until the Supreme Soviet passes a statute on the subject, probably at its fall session. It had been blocked in the upper house of the Supreme Soviet by three votes, but a number of deputies who reportedly would support the measure were absent.[59] Loss-making businesses will be shut down and undergo privatization in a form that will develop owners with long-term stakes in industry and the power to make managerial decisions. The government clearly recognizes that the population lacks the resources to pay much into the treasury for these properties. Privatizing major enterprises will be at best a medium-term program.[60] Due to statutory limitations, a presidential decree forbidding loss-making enterprises to raise wages has had to be delayed. The purpose of such a decree would be to ease inflationary policies by a limited incomes policy.

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[56] *Commersant*, 7 July 1992, pp. 22-23.

[57] *Financial Times*, 28 July 1992, 5 August 1992, 14 August 1992.

[58] Izvestiya, 5 August 1992, Moscow ITAR-TASS, 4 August 1992, in FBIS-SOV-92-152, 6 August 1992, pp. 31-33, *Commersant*, July 3, p.7.

[59] *Commersant*, 30 June 1992, p. 18.

[60] *Commersant*, 7 July 1992, p. 22.

## Making the Ruble Internally Convertible

On July 2, 1992, the Russian government took the risky step of introducing limited internal convertibility at a floating unitary exchange rate for the ruble. This had been a guideline set in the April memorandum prepared in consultation with the IMF. It was also a key element of a comprehensive program proposed in May by the Ministry of Foreign Economic Relations to restructure and liberalize foreign trade over the next eighteen months. [61] Making the move at this time is risky. Without fiscal and monetary discipline in place, stabilization of the currency's value is very unlikely. Inflation is approaching the hyperinflationary level. Moreover, the balance of trade is seriously deteriorating, especially with the sharp drop in the production of oil. Russia had a trade surplus of only $491 million for the first half of 1992. [62] Hard currency in the central foreign exchange reserves has become so short that the CBR in late June had to stop its interventions in the auction market, the Moscow Interbank Currency Exchange (MICE), aimed at bringing the value of the ruble up toward $80 per dollar. That had cost an estimated $500 million through June. [63] Moscow is so short of funds that it has had to negotiate for a moratorium on the payment both of principal and of interest on its international debt in order to have the cash flow to maintain essential imports. Moreover, major disputes over coordinating fiscal, banking, credit, and monetary policies basic to maintaining a common ruble zone with other CIS states threaten to be more disruptive to commerce than was the breakdown of economic relations with Eastern Europe.

What was decreed on July 2 was a system of limited internal convertibility. For current accounts, domestic legal entities and individuals have the right to purchase hard currency to finance the import of goods and services and to remit profits to parent foreign companies. It is not full convertibility in both current and capital accounts with unrestricted access by residents and also foreigners. Regulations require enterprises to sell 30 percent of their hard-currency earnings to the CBR for the foreign exchange reserves at the official rate and an additional 20 percent on the auction market of the Moscow Interbank Currency Exchange (MICE). [64] On July 2, the CBR issued a decree specifying that the official rate would be set twice weekly at the auction price of MICE, thus ending fears that the government would arbitrarily set a low official value as it had in the past. [65] Foreign entities, including those from other CIS states, are excluded from the MICE. On July 2, the auction rate was R134.8 per dollar. In the last week of July, it stabilized around R161. [66].

Despite reasons not to set a single rate, the Russian government's decision has some rationality. Action was required to encourage international trade in order to increase the state's hard

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[61] Delovoy Mir, 16 May 1992, in FBIS-USR-92-075, 19 June 1992, pp. 7-9; *Commersant*, 2 March 1992 and 18 May 1992.

[62] Interfax, *Business Report*, 24 July 1992, p.4.

[63] *Commersant*, 23 June 1992, p.14; 4 August 1992, pp.16-17.

[64] *Rossiyskaya Gazeta*, 18 June 1992, in FBIS-USR-92-078, 26 June 1992, pp. 33-35; Interfax, *Business Report*, 28 June 1992, in FBIS-SOV-92-125,29 June 1992, pp. 35-26.

[65] Moscow ITAR-TASS, 2 July 1992, in FBIS-SOV-92-131, 8 July 1992, p. 33.

[66] *Commersant*, August 4, 1992, p. 16.

currency reserves. Capital flight, estimated at $5 billion-$20 billion, had occurred because the previous hard-currency and export control system had cut heavily into profits and encouraged barter. Exporters of energy and raw materials, 70 percent of the total trade, were required to sell to the CBR for the foreign exchange reserves 40 percent of their foreign earnings at the commercial rate of R55 per dollar, far below the official quasi-market rate, which varied from R90 to R110 in 1992. Another 10 percent had to be surrendered by all exporters at the quasi-official rate to support CBR intervention in the auctions. [67] The new floating unitary rate is much more attractive to those involved in foreign trade and the proportion of hard currency coming onto the market is expected to be much greater than in the past. Heavy export taxes on energy raw materials continue and new import duties averaging about 5 percent ad valorem were added on July 2. [68]

To ensure that the government gets its share of profits from international trade, new measures designed to centralize control of exports have been put in force. Export licensing of "strategic commodities" has been streamlined so as to concentrate control of "specially registered foreign trade firms," most of which are state-owned. [69] Recentralization of the gold and diamond complex is estimated to have cost R500 million this year. Independent commercial firms are being squeezed out. [70]

However, requiring all to use the unitary rate may have a quite devastating impact on many producers dependent on supplies imported for the central reserves and heighten inflation. Until July 1, the charge for purchases of these goods and commodities by Russian enterprises was set at the special rate of R5.4 per dollar. At current prices this rate is estimated to represent a hidden subsidy of R500 billion at the cost of the budget. Charging the unitary ruble rate will significantly raise the costs of producers and, consequently, prices. Half of the food industry and 40 percent of light industry will have their costs increased four- to six-fold. Enterprises in most industrial sectors will have to reduce sharply reliance on imports. [71]

## Deterioration in CIS Economic Relations

A major threat to fiscal and monetary stabilization is the increasing breakdown of economic ties among the CIS states. Already, the loss of markets and suppliers in Eastern Europe since 1990 has led to the disruption of production due to lack of key components. A similar breakdown within the CIS would be far more devastating. In 1990, 70 percent of Russian and just under half of all imports by value came from other U.S.S.R. republics. [72]

Gorbachev and his successors have all understood this reality. Since 1990, many general agreements have been signed with provisions for central institutions strong enough to ensure coordination

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[67] *Russian Federation*, pp. 96–97.
[68] *Commersant*, 23 June 1992, pp. 24–27; June 30, 1992, pp. 22–25;July 7, 1992, p.25.
[69] *Commersant*, 19 May 1992, pp. 18–19; 7 July 1992, pp. 25–26.
[70] Interfax, *Business Report*, 30 July 1992, p.2.
[71] *Commersant*, 12 May 1992, p. 6.
[72] *Russian Federation*, p. 64.

of fiscal, banking, credit, and monetary policy in a "common economic space." [73] If several states sharing a common currency engage in major deficit-spending and large emissions of cashless credits, that can have significant inflationary impact on others that pursue austere policies. With 60 percent of the former U.S.S.R.'s GDP, the Russian government's unilateral decisions are bound to have a particularly powerful, often decisive, impact on the policies of the other CIS states, now ruled by nationalists. Yet the Russian leaders have found it very difficult to treat the other states as equal, independent partners that must be consulted on major issues. With economic resources shrinking due to the recession, all of the member states have reacted by instituting degrees of economic autarchy at the cost of their immediate CIS neighbors.

Examples of Russian policies that have alienated the other Republics are numerous. Division of the assets of the former U.S.S.R. has been on the agenda of most of the summit meetings. Basically, the Russian Federation took over the central banks in November, 1991. While under Russian control, all the hard currency of the other republics and their enterprises in accounts of the U.S.S.R. Bank of Foreign Trade (VEB) were spent servicing foreign debts. After the bank went broke in December, these accounts were frozen and funds still have not been released. The new sovereign governments desperately need the foreign exchange to pay their dues to international organizations such as the IMF and World Bank as well as to stimulate foreign trade. Many of their enterprises have been seriously handicapped in conducting business due to their inability to draw funds frozen in their accounts. The Russians acted unilaterally on this despite the obligation in basic CIS documents that major decisions should only be reached by consensus. [74]

The other states also blame the current severe shortage of cash on unilateral Russian policy decisions on emission of currency. Since Russia has the only mint, its Central Bank was able to control its distribution. Formerly, only about two-thirds of newly printed currency went to Russia, but Moscow increased the proportion to 80 percent in 1992. Moreover, to overcome the severe shortage, the CBR practically stopped accepting invoices and checks from other republics in order to provide sums for wages to Russian enterprises. [75] The resulting shortage of rubles in the other states was proportionately greater than in Russia. Fearful of riots by unpaid workers, leaders of other republics introduced surrogate money in the form of coupons. So great has been the shortfall that even local authorities within Russia did so. As the situation continued to worsen, the determination of the leaders of other republics to control their own national money supply has grown stronger. [76]

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[73] *The Economy of the Former U.S.S.R. in 1991*, pp. 1-3; *A Study of the Soviet Economy*, vol. 1, pp. 37-38, 73-74.

[74] International Monetary Fund, Common Issues and Interrepublic Relations in the Former U.S.S.R., "Economic Review," (Washington, D.C.: International Monetary Fund, April, 1992), pp. 29-33

[75] *Commersant*, 19 May 1992, pp. 16-17.

[76] *Ukrayina Moloda*, 29 May 1992, in FBIS-USR-92-075, 19 June 1992, pp. 83-85; *Rabochaya Gazeta* (Kiev), 4 June 1992, in FBIS-USR-92-075, 26 June 1992, pp. 77-78.

On May 21 in Tashkent after a year of negotiations, representatives of all 15 former Soviet Union Central Banks signed an agreement setting guidelines for setting common fiscal, credit, and monetary policies. IMF pressure brought the republics together momentarily. The CBR conceded that decisions should be by consensus, thus giving up its previous insistence on a weighted vote that would give it a veto. An agreement on the procedures for introducing national currencies was also concluded. However, central banks continued to issue cashless credits unilaterally, thus undermining monetary discipline. Unfortunately, the Russian government continued to make basic decisions, e.g., on also granting major credits, without consulting the other governments. By June, the agreement was essentially dead.[77]

By June, Russian leaders in both the executive and legislative branch reached the decision that their Republic had to have its own national money. On June 12, non-Russian banks were banned from the MICE foreign-exchange auctions. On June 17. the CBR suspended direct settlements between Russian and Ukrainian enterprises. They now have to go through the Ukrainian Central Bank's correspondent account at the CBR. Moscow bankers and brokers vociferously objected and set up their own clearing house to make settlements for reliable customers. They maintained that to interrupt regular business relations among enterprises by forcing them to use the notoriously inefficient CBR settlements system would hurt the Russian economy. On June 19, the CBR recommended that shipments to all other CIS states be held up. It would no longer guarantee that they would receive payment. A Yeltsin decree followed on June 21. Reportedly, some of the new central banks had not even established correspondent accounts with the CBR. When Russia unilaterally froze inter-enterprise debts as of July 1, settlements with CIS counterparts were thereby blocked. Their debts were not frozen and they thus remained liable. Presidents Yeltsin and Kravchuk have agreed to clear the cashless inter-enterprise accounts affected by the freeze by October 1.[78] Administratively, that will be a very difficult task.

A June 1992 article in *Commersant* entitled "The Ruble Zone: Rubleless and Rudderless" provides the details on the diversity of policies being pursued in the other states.[79] Budgetary, credit, and monetary differences are so great that it would be difficult to ensure coordination. It makes little sense to have a state like Tajikistan with its 40-percent deficit financing in the ruble zone when a conservative fiscal and monetary policy is the goal. Bilateral and multilateral negotiations are now under way to divide up assets of the former U.S.S.R. On June 21, Yeltsin signed a decree mandating that states wishing to remain within the ruble zone must coordinate their fiscal, credit, and monetary policies with Russia.[80] The deadline for reaching agreement is now set at October 1.[81] Clearly,

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[77] *Commersant*, 19 May 1992, pp. 16–17; 30 June 1992, pp. 16–17.

[78] Philip Hanson, "The End of the Ruble Zone?" *RFE/RL Research Report*, vol. 1, no. 30, 24 July, 1992, pp. 46–48; *Commersant*, 23 June 1992, pp. 18–19; 30 June 1992, p. 26; *Rossiyskaya Gazeta*, 24 June 1992, in FBIS-SOV-92-122, pp. 16–17, 26.

[79] *Commersant*, 30 June 1992, pp. 16–17.

[80] *Commersant*, 30 June 1992,p. 26.

[81] Interfax, 16 July 1992, in FBIS-SOV-92-138, 17 July 1992, pp. 36–37.

most will leave the ruble zone. Not to do so would mean losing the right to control their own fiscal and monetary policy. The difficult task of organizing a new, reliable settlements system among the republics will for a time severely handicap trade just as it did with Eastern Europe.[82]

## Conclusions

While most Russian leaders remain committed to some type of market reform, broad disagreement continues on detailed implementation of necessary measures. With a fall since 1989 of 30 percent or more in GDP, political pressures from the populace and other vested interest groups are threatening to undermine the political stability gained by the first popular election of a Russian head of state. Boris Yeltsin is a skilled politician unafraid of initiating truly radical economic measures. At the moment, his coalition holds a majority in the Supreme Soviet, but it is shaky. The essentials of the reform program have been put in place through December 31, 1992.

However, the regime is not yet nor about to attain budget and monetary stability. Deficit-spending in 1992 is running at about the same levels as in the disastrous last year of the U.S.S.R. International standards have not yet been applied for calculating government spending. The inflation rate may reach hyper-levels of 50 percent or more per month by fall. This undermines all assumptions upon which budget estimates of revenues and expenditures are based. An explosive growth of the money supply, of government credits to industry and agriculture, and of outlays on social welfare all are contributory factors. The good news is that defense has reportedly been reduced to 5 percent. As prices for energy are raised in stages from the present 10 percent of world market levels to 100 percent, a series of inflationary "oil shocks" will pass through the whole economy. Similarly, prices for many key imported inputs are to rise dramatically if the unitary ruble rate is applied to commodities sold from the central reserves. All this could have dramatic effects on the consumer cost-of-living index as well as on government expenditures and revenues.

The banking and credit system is changing, but is far from having the capacity to provide the financial services for a modern, large-scale market economy. The CBR still does not perform the normal role of such banks, but engages in what should be the jurisdiction of the commercial banks.[83] One example is the extension of credits directly to the central government, e.g., R200 million in June.[84] The inefficient CPE settlements system has permitted grave abuses such as the multi-billion ruble Chechen scandal. Technically, the industry is very backward. The huge size of the Russian Federation is in itself a problem. Efforts to administer large-scale credits at high interest to industry and agriculture through the commercial banks are failing to achieve their purpose of reviv-

[82] Ben Slay, "Introducing National Currencies: Causes and Consequences," *RFE/RL Research Report*, vol. 1, no. 30, 24 July 1992, pp. 49-52.

[83] Nezavisimaya Gazeta, 25 April 1992, in FBIS-USR-92-056, 9 May 1992, pp. 22-26; Financial Times, 23 July 1992.

[84] Interfax, 29 June 1992, in FBIS-SOV-92-126, 30 June 1992, p.35.

ing production. According to Vice Premier G. Khizha, only 20 percent of R300 billion in authorized government credits had been lent by July.[85] At this point, the vast majority of businesses and banks are technically insolvent and are unwilling to add debt. Long-term investment has been dropping since 1989, which undermines the future of the economy.

A combination of Russian assertiveness and its poor fiscal and economic condition are major factors in the progressive breakup of the common CIS economic space. Due to an extraordinary degree of economic interdependence, trade among the states of the former Soviet Union will continue to be large-scale, but all the other republics are reaching out to foreign partners who have real money and world-level expertise. Their leaders recognize that, to be truly independent, they must have the means to control their fiscal and monetary policy. The ruble zone is rapidly deteriorating.

The illusion that there is some "magic key" to prosperity is past. The present Russian government projects in its new program that 1992 will see a decline in the economy of 15 percent, of 5 percent in 1993, and then some slight recovery in 1994. Meanwhile, major structural reforms will be under way to build the bases for a competitive economy on the basis of true market prices by 1996. The task that the citizens of the former Soviet states face in changing economic systems is one that will take decades to complete. Despite the flaws in the reforms to-date, the change in the approach by the leadership to macroeconomic policy is remarkable.

For the West, the challenge is to find ways to assist the process that are prudent and effective. Stabilization of the Russian fiscal and monetary system is an essential condition for large-scale aid from the West. As of mid-1992, conditions for support through the IMF of a fund to stabilize the currency have not been met. However, aid for specific projects, humanitarian purposes, and technical assistance is essential to building a strong base for what is to the Russians a new economic system.

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[85] Interfax, *Business Report*, 13 July 1992, p.2

# PROBLEMS OF FISCAL POLICY REFORM DURING THE TRANSITION: A BALTIC CASE STUDY

By John E. Tedstrom *

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## SUMMARY

Financial instability has emerged as perhaps the most burdensome problem associated with the transition from state socialism to market-oriented economies in Eastern Europe and the former U.S.S.R. Because monetary and fiscal policies played only passive roles in the traditional Soviet-type economic systems, policymakers in the Soviet successor states have had a particularly difficult experience in designing and implementing prudent monetary and fiscal policies. The three Baltic states represent a special example because they were afforded a significant measure of economic autonomy from the USSR some two years before the formal dissolution of the Soviet Union. Because they are further ahead in their fiscal policy reforms, they can serve as useful case studies for the other Soviet successor states. This paper examines Baltic experience with

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* John E. Tedstrom is a researcher with the RAND Corporation. This paper benefited greatly from the advice and comments of nearly a dozen Baltic tax and finance officials during a working trip to the United States in October 1991 under the auspices of the Hudson Institute's International Baltic Economic Commission. Some material for this paper is taken from those interviews. The author is grateful to those Baltic colleagues and the Hudson Institute for its support, and to Philip Hanson for comments on an earlier draft. The comments in this paper do not represent RAND policy.

fiscal policy in the early stages of transition, and focuses on issues and problems that are likely to arise throughout the former Soviet region.

## INTRODUCTION

A major component of the economic reform programs in the Baltic states is the development of new fiscal institutions and policies. As with other elements of the reform process, the Balts have some 50 years of experience with the Soviet model of public finance. During this time, they were for most practical purposes merely administrators of Moscow's fiscal policies. At different periods in Soviet history, republics of the U.S.S.R. were afforded different degrees of latitude regarding regional revenue collection and spending issues, but these questions were mostly settled in Moscow. The main influences on the size and shape of the republic budgets were political, and satisfaction of local objectives (education, housing, and other social and cultural services) more often than not depended on the political position of regional leaders in the all-Union structure and their skills of persuasion. [1] As one observer of Soviet regional economics and politics notes, " . . . no major program can be mounted without approval and funding from Moscow." [2]

Fiscal policy was primarily used as a tool for the allocation of resources toward national goals. A secondary goal was the redistribution of wealth from rich areas to poor. [3] Almost totally neglected was the stabilization aspect of fiscal policy. All three of these aspects of fiscal policy take on heightened importance in market economies with significant private sectors. In fact, during the transition period from a Soviet-type to a market economy, fiscal policy is bound to play an especially important role that will shape the outcome of other policy issues later. [4] The experience of reform in East/Central European countries in the last three years confirms this notion. Especially complex and important during this transitional period is what the Baltic policymakers, like policymakers in other Soviet successor states, know and understand least well—namely, the use of fiscal policy to achieve macroeconomic stability.

The Baltic economies have already begun to face the new, sometimes contradictory pressures that emerge from the reform process and shape fiscal policy. They have had some two years of experience in developing their own budgets (albeit within the Soviet system) and have used their period of semi-independence (roughly

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[1] The bargaining for regional resource allocations was an extremely complicated and uncertain process. See Donna Bahry, *Outside Moscow: Power, Politics, and Budgetary Policy in the Soviet Republics*, New York, Columbia University Press, 1987, for detailed description and analysis.

[2] Donna Bahry, *Outside Moscow*, op. cit., p. 31.

[3] Among the tools the Soviet government used to redistribute resources were budgetary transfers, centralized investment programs, and differentiated tax policies for the different regions. See Donna Bahry, *Outside Moscow*, op. cit. Whether central policy has transferred wealth from richer to poorer regions is a matter of some debate in the literature. For opposing views, see James Gillula, "The Economic Interdependence of Soviet Republics," Joint Economic Committee, US Congress, Vol. I, Washington, DC, USGPO, 1979 and Gertrude Schroeder, "Soviet Regional Development Policies in Perspective," in Nato Directorate of Economic Affairs, *The USSR in the 1980s*, Brussels, NATO, 1978.

[4] See Ronald I. McKinnon, *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*, Baltimore and London, The Johns Hopkins University Press, 1991.

1989-91) to study the fiscal systems of other countries in search of an appropriate model. Even larger challenges loom on the horizon. The three Baltic states are now almost totally independent—in a formal sense—of the former U.S.S.R. (there are still numerous institutional and economic linkages between the economies, the most important of which is, arguably, a common currency). For the first time in nearly half a century the Baltic governments must manage their own national budgets and create fiscal systems that are both durable and flexible enough to see them through the difficult transitional stage. The development of fiscal policies and institutions in Latvia, Lithuania, and Estonia from 1989 through 1991 is reviewed here, and some considerations are examined for fiscal planners as they look toward 1992 and 1993.

## 1989-1991: A Period of Transition

By late 1989, a decision had been taken in the Baltic states to design and implement totally independent fiscal systems. In part, the emergence of these new policies was a response to a centrally administered devolution of economic responsibility proposed in the draft "General principles for restructuring the leadership of the economy and social sphere in the Union republics on the basis of broadening their sovereign rights, self-management, and self-financing." [5] (Hereafter, the General Principles.) At first, these new fiscal systems were of necessity more or less copies of the republican-level systems the Baltic governments managed until then. [6] There was neither the economic justification (the Baltic economies and fiscal systems were still part of a larger Soviet whole) nor the economic and administrative expertise to carry out a more thorough reform.

For a variety of political and economic reasons, however, the Baltic states were not satisfied with what they saw as the too-limited autonomy afforded them in the General Principles, and they worked toward fuller economic autonomy. [7] As a result of extensive collective bargaining, all three Baltic republics gained more autonomy in economic affairs generally as a result of a four-way agreement with the U.S.S.R. in November 1989, and fiscal reform programs became more radical as a result. [8] Nonetheless, this arrangement allowed the Baltic governments the opportunity to establish control over the existing system first and move toward fiscal reform and total fiscal independence later.

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[5] *Ekonomicheskaya gazeta*, no. 12, 1989, pp. 10-13. See also John Tedstrom, "USSR Draft Program on Republican Economic Self-Management: An Analysis," *Report on the USSR*, no. 16, 1989, pp. 1-8.

[6] See, for example, the Estonian plan, adopted on November 17, 1989, in *Sovetskaya Estoniya*, December 5, 1989, pp. 1-2. It establishes a three-tiered system of state, regional, and local budgets and retains many of the Soviet-style taxes existing at the time. The main points of Lithuania's new tax and budget system was presented in Zakon Litovskoi SSR, Ob osnovakh ekonomicheskoi samostoyatel'nosti Litovskoi SSR, *Sovetskaya Litva*, May 24, 1989, pp. 1, 2. Finally, Yu. Payders provides a good discussion of fiscal policy during this period in *Atmoda*, November 5, 1990, p. 3.

[7] See the interview with the then Estonian Gosplan Chairman Reyn Otsason, in *Sotsialisticheskaya industriya*, June 24, 1989, in which he emphasizes that the government wished to control its own financial and fiscal systems and criticizes the General Principles for being too restrictive in that regard. For a briefer discussion of the same questions in Latvia at that time, see the report of the Latvian Council of Ministers meeting in *Sovetskaya Latvia*, June 23, 1989, p. 1.

[8] See the law *Ob ekonomicheskoi samostoyatel'nosti Litovskoi SSR, Lativskoi SSR, i Estonskoi SSR*, *Sotsialisticheskaya industriya*, December 2, 1989, p. 1.

Already by late 1989, important problems (such as disputes over ownership and jurisdiction over assets, government spending, and revenue policies, and the like) began to arise that underscored the complexity of disengaging from the Soviet economic system.[9] As a result, over the course of 1990 and through 1991, the Baltic governments mounted significant efforts to develop the resources, institutions, and policies that would help to separate their economies from the Soviet Union. In obvious ways, the unexpectedly early attainment of internationally recognized independence in August-September 1991 accelerated the need for autonomous economic (including fiscal) systems. Even at that time, though, none of the Baltic governments was well-prepared to take full charge of its tax and budget systems. (For the other former Soviet republics, none of which had progressed as far as the Balts toward autonomy, the economic ramifications of the dissolution of the U.S.S.R. have been even more stark.)

### TAKING CHARGE OF THE SOVIET SYSTEM

From mid-1989 through 1990, the primary problem was making the switch from managing a secondary-level federal tax system to a primary-level one. In practice, this switch meant that the Baltic governments had to take on all the fiscal and administrative activities of a federal-level government. A common near-term objective in this regard was to reshape Baltic-U.S.S.R. fiscal relations, focusing especially on a single, annual transfer from each of the Baltic budgets to the U.S.S.R. Ministry of Finance.[10] In this way, fiscal relations with the center would be limited and the Baltic governments would have total policy control over how the funds were raised and spent.

A key issue in Baltic-U.S.S.R. negotiations at the time was jurisdiction over enterprises in the Baltic states. In concrete terms, there was a struggle over who owned, controlled, and collected tax revenues from all-Union and Union-republic enterprises on Baltic soil. Prior to full independence, title to state property in the Baltic states did not pass from U.S.S.R. to Baltic possession, though, through decentralization of economic activity generally, the Baltic governments gained part of the usufruct associated with all-Union property as well as some direct managerial control.[11]

Although the debate gradually shifted in the Balts' favor, the situation remained unclear, and throughout 1990 and 1991, the institutional as well as the constitutional subordination of Soviet enterprises was complicated. For the most part, all-Union enterprises paid taxes to the republican budget in 1990. The same rule held for Union-Republic enterprises. A portion of total tax receipts in each of the Baltic republics was then turned over to the all-Union budget per an agreement with the center. Under this arrangement, tax receipts in Estonia were shared according to a formula: 84.1 percent to the republican budgets and 15.9 percent to the union

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[9] See Payders, op. cit. See also, Philip Hanson, *The Baltic States: What Price Freedom?* London, Economist Intelligence Unit, April 1990.

[10] This is referred to in the Soviet literature as the "one channel" approach. It would replace the traditional system of republic-center sharing of various proportions of many different taxes.

[11] Estonian Prime Minister Edgar Savisaar discusses the subtleties of this problem in an interview in *Sovetskaya Estonia*, May 11, 1990, p. 2.

budget. Likewise, Latvia kept 57.5 percent, and Lithuania 78 percent of total tax receipts. A good share of the receipts earmarked to the U.S.S.R. budget was designated to all-Union spending programs (such as hospitals) in the republics. The exceptions to this rule of thumb were the all-Union defense industry enterprises, which were off limits to Baltic government officials. These enterprises continued to pay taxes (and, presumably, received subsidies when needed—the data on specific enterprise relations with the U.S.S.R. budget are not available) directly to the center. Republic enterprises and organizations paid taxes to the republic budget, and those funds for the most part remained within the republic budget. It is worth noting, however, that many of the all-Union enterprises that should have paid Union taxes chose to pay republic taxes because Baltic corporate tax rates were lower than all-Union rates. (At the time, corporate tax rates in the Baltic region were 35% of net income while the Soviet rate was 45%.) Because Baltic governments were making transfers to the all-Union budget subject to official agreements, there was little to which the center could object.

Another major problem at this time was that the Baltic governments by and large did not have a reliable cadre of experts on either fiscal policy or tax administration. [12] Economists and officials at the republic level had never had to think independently about fiscal policy or deal with the fundamentals of public finance. On the contrary, these people were responsible mainly for processing Moscow's data within a centrally determined set of instructions. In addition to a shortage of appropriately trained personnel, the Balts lacked the necessary administrative institutions and technology to collect and audit tax payments effectively. [13] On a very practical level, while the fiscal responsibilities and activities of the republic governments increased several-fold almost overnight, they did not have the requisite network of offices distributed throughout their countries or enough computer hardware to manage the new tasks properly.

An absence of fiscal discipline and responsibility at the republic level added to the Baltic governments' policy troubles. There have always been incentives for republic governments to act in fiscally irresponsible ways. The main incentive was that overspending provided a rationale for higher budgetary requests in the next year's budget negotiations with the U.S.S.R. Ministry of Finance. Moreover, budget deficits were generally costless, and the financial costs that did show up were spread throughout the federal system via transfers from the center and from the policies of monetizing debt

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[12] This remains a problem and one that the Balts often refer to in requests for technical assistance from the West. See, for one example, Maris Gailis, Deputy Foreign Minister of Latvia, *Assistance Needs and Priorities for Latvia*, a background paper for the G-24 meeting on the Baltic States, December 11, 1991, Brussels, Belgium.

[13] This was also true throughout the U.S.S.R. The roundtable discussion led by V.F. Khritinin in *Finansy SSSR*, No. 2, 1989, pp. 18–24, provides a comprehensive and illuminating overview of the problem at the republic, regional, and local levels. The Baltic states, however, were further along in the process of removing enterprises from state tutelage and in creating a market-oriented economy generally. This fact meant that the need for an effective, independent tax administration was more immediate for the Balts than for the slower-moving USSR government.

through expansion of bank credit, inter-enterprise debt, and the supply of notes and coins. [14]

As the Baltic governments gradually took control over their republic budgets, they faced many policy problems and administrative tasks that previously had been Moscow's responsibility. Among the most important of these were:

1. Projecting revenues and spending needs (As Moscow's agents, Baltic officials and bureaucrats were not, for the most part, experienced in the practice of financial analysis and programming.);
2. Reestablishing spending priorities and limits as well as revenue sources for each level of government (As national-level fiscal authorities, the Baltic governments had to establish a fiscal regime that promoted efficiency within the fiscal federal system.) ;
3. Ensuring that planned revenues were adequate to cover planned expenditures (Macrostabilization is especially important in terms of government credibility. On one hand, three major all-Union spending programs, financing capital investment, subsidizing nonfood items—especially electricity, and subsidizing food items represented serious budgetary strains. On the other hand, it was already apparent in 1989–90 that the Baltic economies were beginning to show signs of serious economic downturn that would reduce output, profits, and hence tax remittances.)
4. Structuring taxes so that they were progressive (income elastic) and taxed taxpayers with like incomes and assets at the same rate (Meeting the tests for vertical and horizontal equity, respectively);
5. Encouraging economic development from both domestic and foreign sources (This often involves tax holidays and public investment in the economic infrastructure, and perhaps above all, stability in the political and economic framework, including tax legislation);
6. Creating convenient, transparent, payment systems to maximize compliance (This is very important given the primitive administrative and tax collection systems in the Baltic states and the large black markets in which incomes could be hidden.);
7. Creating the necessary tax administration institutions (This has proved at least as important as having the proper taxes.).

These seven points are not peculiar to the Baltic states. The two dynamics that defined the political-economic landscape in the Soviet region at the time (disintegration from the central command

[14] See John Williamson and Oleh Havrylyshyn, *From Soviet Disunion to Eastern Economic Community?*, Institute for International Economics, Washington, D.C., 1991. See also Stuart Brown and Misha V. Belkindas, "Who's Feeding Whom? A Balance of Payments Approach to Soviet Interrepublic Relations," Working Paper #90-21, Department of Economics, Georgetown University, December 1990. In late 1990 and early 1991, the center took steps to rein in credit availability by charging interest on credits that were used to finance republican budgetary deficits and were funneled through republican level banks. There is no evidence that this policy stemmed credit flows. Because inflation was so high, the real rate of interest on the loans was negative, and, at least in the Baltic states, attitudes about independence were so strongly positive that the governments would have been willing to incur stiff costs for their independence policies.

structure and radical economic reform) took their toll on fiscal policy formation throughout the U.S.S.R., as earlier chapters have shown. Even in the early phase of economic transformation the all-Union government was compelled to grapple with numerous fiscal policy issues. Further, all of the Soviet successor states were forced to approach these issues from the unenviable position of unstable quasi-independence and rapid internal institutional change. The Baltic states, however, because they were further along the road to independence, were charting new territory and could not follow another republic's example.

### SOVIET DISUNION AND BALTIC FISCAL POLICIES

In terms of economic disengagement from the Soviet Union, Baltic officials were constantly testing the waters with unilateral declarations of authority and jurisdiction over policy and real assets on their territories. The resolution of these questions naturally had a fundamental impact on both the size and structure of the potential revenue base and on spending requirements. Two key issues motivating Baltic policies at this time were: (1) insulating the Baltic economies from the economic and financial chaos exported from Moscow, and (2) negotiating acceptable amounts of transfer funds from the Baltic budgets to the all-Union budget. These issues resolved into the following considerations.

Battling Economic Chaos

- Importing inflation and macro instability from Moscow;
- Financing economic activity in the midst of a Union-wide economic depression;
- Managing the various economic blockades and trade stoppages that occurred in 1989–91;
- Meeting social obligations that Moscow either could not or would not fulfill.

Negotiating Transfers to the Union Budget

- Changing revenue and spending plans in mid-stream;
- Dealing with a situation in which Moscow insisted on shares of various revenue sources, making it virtually impossible to negotiate a simple lump sum that would have given the Balts more freedom to determine spending and taxes internally.

The on-going efforts to establish independent fiscal systems in the Baltic states in 1990 and 1991 required a series of budgetary revisions. On the whole, this iterative process arguably had a negative impact. On the one hand, the budgets adapted somewhat to the changing economic and federal situations in which the Balts found themselves. On the other hand, the benefits of this adaptation were arguably outweighed by the uncertainty the revisions generated about the tax systems and fiscal policies of the Baltic governments.[15] The inability to negotiate a satisfactory arrangement

[15] This was a main point of discussion at a meeting of the Estonian government in June 1990. The changing fiscal environment in Estonia put the pursuit of the entire economic reform plan (IME) in jeopardy at that time. See Yu. Kindov's account of the meeting in *Sovetskaya Estonia*, June 13, 1990, pp. 1, 2.

with Moscow provoked all three Baltic governments to withhold their contributions to the U.S.S.R. budget in 1991. [16]

ECONOMIC REFORM AND BALTIC FISCAL POLICIES

The Baltic drives toward establishing market-oriented systems have also created problems for fiscal policy formation. The two most important factors in this regard are the movement toward a private economy and the shift away from Soviet-administered prices toward market-oriented prices.

The emergence of a private economy brings several challenges from the standpoints of economic development, economic stability, and the breadth and depth of the social safety net. First, encouraging the nascent private sector requires that disincentives to investment be avoided if possible. The corporate income tax is widely regarded as a drag on investment, but it carries several deceivingly seductive advantages, especially for newer, less established economies.

One advantage of the corporate tax is that corporations, as compared with other taxpayers, usually keep detailed financial records that can be used for audits. [17] There are also fewer corporations to keep track of than there are personal income taxpayers. [18] In Estonia, for example, the tax base in mid-1991 consisted of 772,500 personal income taxpayers, and 70,700 private persons scheduled to pay a land tax. In contrast, there were 20,150 registered companies that should have filed corporate income tax returns at the end of the year and 3,914 of those that also should have filed to pay land tax. [19] (One advantage in the Baltic states is that in all three countries about 70% of the population is urban. High shares of urban populations tend to facilitate tax collection.) Finally, personal income taxpayers vote while corporations do not, a nontrivial issue in emerging democracies. These factors often lead to the conclusion that corporations might tolerate higher tax rates relative to income than personal income taxpayers.

Nevertheless, especially in poor economies trying to foster entrepreneurship and privatize state-owned enterprise, excessive corporate income taxes tend to hold back growth. [20] Baltic governments have, in general, been sensitive to the corporate income tax issue, and for the most part have kept total corporate tax rates at or below 35 percent of net income. Still, in practice, it has thus far proved difficult to translate the strong positive public attitudes in the Baltic states toward entrepreneurship to actual business formation, though recent experience gives cause for hope. [21]

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[16] See John Tedstrom, "Soviet Fiscal Federalism in a Time of Crisis," *Report on the USSR*, no. 31, August 2, 1991, pp. 1–5.

[17] Though in the Baltic states as in the rest of the Soviet Union at the time, corporate accounting practices needed to be overhauled and codified by legislation. See Khritinin, op. cit. See also, *Accounting Reform in Central and Eastern Europe*, OECD, Paris, 1991.

[18] This is especially true of communist economies where central planning tends to create a small number of monopoly or near monopoly producers.

[19] Information provided to the International Baltic Economic Commission by the Estonian Ministry of Finance, 1991.

[20] Chad Leechor, *Tax Policy and Tax Reform in Semi-Industrialized Countries*, World Bank, Washington, D.C., 1986.

[21] See Dzintra Bungs, "Privatization in Latvia Begins," RFE/RL Research Report, No. 17, April 24, 1992, and Saulius Girnius, "Privatization in Lithuania," in ibid.

As a result, policies on corporate income taxes are still in flux in all three Baltic states. The corporate tax systems in each of the three countries are a mixture of the traditional Soviet system and Western concepts.[22] In Estonia, the corporate income tax is simple and straightforward. There are few exemptions and the calculation of taxable income is fairly easy. There is not a special tax on foreign-currency earnings. The marginal tax rates on corporate incomes are the lowest in the Baltic region. For taxable incomes up to 500,000 rubles the tax rate is 15 percent. For income between 500,001 and 1,000,000 rubles, the marginal rate is 23 percent, and for income over 1,000,000 rubles the marginal rate is 30 percent.

Latvia's corporate tax system is much more complicated and includes slightly higher marginal rates applied at much lower incomes. On taxable income up to 10,000 rubles, the tax rate is 15 percent. On income between 10,001 and 30,000 rubles, the marginal rate is 25 percent, and on income above 30,000 rubles the marginal rate is 35 percent. The corporate income tax law does not cover foreign firms and some joint ventures (the Law on Foreign Investments is applicable in these cases). New firms in Latvia are exempt from all corporate taxes for two years, and many specific exemptions and exceptions exist that make calculating taxable income a more hazardous exercise. There are numerous special cases for such expenses as insurance and legal fees that unnecessarily complicate the Latvian law. Especially worrisome is the two-year exemption for new firms. First, it is generally the case that this type of protection does not create efficient firms but, rather, firms that rely on low or absent taxes. Second, in the turbulent state of economic reform in Latvia, who defines a new firm? Could a firm close its doors at the end of the twenty-third month only to open again under another charter and name in the twenty-fifth? Also, could a firm simply open a subsidiary in another location, claim it as a new firm, and channel income through it? Clever entrepreneurs will spend a good deal of time finding the loopholes.

Lithuania has the simplest corporate income tax scheme. In 1991, Lithuania switched from a progressive corporate income tax to a single tax bracket of 35 percent. Also, in 1990 profits went into an economic stimulus fund that was used to finance bonuses and other incentives. In 1991, these payments were considered expenses and are thus separated from profits. The shift to a single tax bracket and the change in calculating profits in 1991 were expected to reduce corporate tax revenues by about 25 percent, all else equal. Information on corporate taxes in Lithuania through the first quarter of 1991 shows that receipts were down only about 5 percent, though the effects of inflation and new business creation cannot be accounted for with available data.[23] The major problem in Lithuania at the time was that there was still no standard accounting system, and how properly to account for capital expenditures and enterprise expenses was open to debate.

[22] The relevant laws are cited in the Bibliography.
[23] R. Kutra, E. Leontieva, B. Povilaitis, R. Žabasrauskas, and S. Jurna, Working Paper on Monetary and Fiscal Policy, unpublished, prepared for International Baltic Economic Commission.

While many Baltic officials charged with developing tax policy recognize the importance of guaranteeing low and stable corporate tax rates, political concerns dictate that they play "the corporate tax card" very carefully so as not to create the impression that business is enjoying tax benefits at the expense of individuals or social programs. There is pressure in some circles to raise corporate tax rates. There is also pressure to protect certain industries, and the tax systems in all three countries do include clauses providing favorable tax rates for particular industries and enterprises (domestic and foreign or joint ventures).

The emergence of a sizable private sector also requires new tax policies and administrative (collection and audit) techniques. State-owned enterprises are somewhat easier to monitor because their books are part of the state ministerial system and their incomes, expenditures, and investments are largely predetermined.[24] Private firms present a totally different accounting and auditing challenge to the tax administration.[25] This is especially true when the private sector emerges in the form of many small-owner or family-operated firms.[26] Another concern associated with an emerging private sector is that the quick growth of private incomes—especially during the early, transitional period—could undermine macrostability by increasing existing inflationary pressures. There has been impressive growth of private incomes in the last two years, and Baltic tax officials are concerned that a large share of that income may go undetected. This problem underscores the importance of designing taxes that do not discourage compliance.[27]

Likewise, the emergence of a private sector suggests new considerations for government spending patterns. Soviet-type enterprises have traditionally supplied large shares of local social and cultural services. Once privatized, those responsibilities will be shifted back to the state. In Estonia, public spending patterns already reflect this dynamic. In the mid-1980s, enterprise subsidies represented about 60–65 percent of total republic budget expenditures in Estonia. In the 1991 budget, they represent only about 25 percent. In contrast, social expenditures have increased from 35 percent of total expenditures in 1985 to nearly 68 percent in 1991.[28] This

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[24] The experience of economic transformation has shown that state firms may progress through several stages of independence, from a relatively autonomous state enterprise of the traditional sort, to official, legal private companies, to, in some cases, illegal, black market enterprises. Each of these forms of ownership presents a challenge to the traditional Soviet-type revenue collection system.

[25] See Hans Bloomenstein and Michael Marrese, eds., *Transformation of Planned Economies: Property Rights Reform and Macroeconomic Stability*, OECD, Paris, 1991. See also, Ben Slay and John Tedstrom, "Privatization in the Postcommunist Economies: An Overview," *RFE/RL Research Report*, no 17, 1992, pp. 1-8 for a brief discussion of the juxtaposition of privatization and macroeconomic stabilization issues during the transition period.

[26] This is also true to a lesser extent of firms which have been denationalized but not yet privatized. Even in the early stages of privatization, while the state remains the ultimate owner of the enterprise, greater autonomy from the ministerial apparatus changes the tasks of the tax administration system.

[27] The Estonian government, for example, established a new Tax Department in 1991. As of the end of that year, it employed only 800 people, less than one fifth of the number Estonian officials estimate they need. In 1991, only 1 percent of individual income tax returns could be audited because of human and technological capital constraints. IMF communication, November 7, 1991.

[28] *Gosudarstvennyi byudzhet SSSR*, Finansy i statistika, various years, and Estonian Ministry of Finance, *State Budget of Estonia*, 1991.

shift of spending responsibilities has obvious implications for revenue generation as well. [29]

Finally, shifting to an economy with a significant private sector also gives the Baltic governments a natural way to begin the process of integration with Western Europe. This process implies harmonizing fiscal policies with Western economies, especially those to which the Balts become most open. An important, though problematic, dimension of Europe 92 is fiscal harmonization and integration. If the Balts want to be part of this integration process, they cannot ignore the fiscal issues. [30] For a concrete example, membership in the European Community requires a value added tax (VAT). The Baltic states are not experienced with this tax, which is relatively complicated to administer, and have been hesitant to implement it, though all have at one time or another discussed it in their respective legislatures.

All three Baltic states have studied the fiscal systems of market economies, especially their Western and North European neighbors. Often they have tried to imitate the policies and institutions of EC countries. The new Estonian tax system draws to a large degree on Sweden's and Germany's systems, for example. Lithuania and Latvia are also likely to use some version of an EC model. One point to note here, though, is that more emphasis should probably be given to the *fundamentals* of these systems, recognizing that their nuances and refinements have emerged over the course of many years and are peculiar to the individual economies. Parts of the tax systems now in place in the Baltic states are already complex and may, in fact, be too complex for effective collection and auditing, given the technical constraints in the Baltic states. [31]

Simplicity need not jeopardize the attainment of the seven points for Baltic fiscal policy reform outlined above. For example, there was some encouragement in late 1990 for the Estonians to adopt a nonprogressive personal income tax scheme because it would be simpler to manage than a progressive one. [32] Yet a progressive tax is not appreciably more difficult to collect and verify than a flat rate income tax. Moreover, as income disparities increase in the Baltic region, a flat rate tax would soon be seen as too advantageous to the rich. The most important issue in this regard is to minimize exemptions and loopholes. These make tax returns costly to verify and carry several other problems (such as creating an environment of tax evasion and strong lobbies that benefit from the exceptions and will undermine efforts to eliminate them) that inhibit tax reform in later years.

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[29] Even though the majority of production has not been privatized, many enterprises have been "corporatized," that is, the state has relinquished its control over decision making in favor of an independent management. As the enterprise moves further away from the state, its support of the social and cultural infrastructure will take the form of remittances to the state budget which will administer the various spending programs.

[30] Peter Robson, *The Economics of International Integration*, London, Allen and Unwin, 1987, Chapters 7-9.

[31] It is worth noting that the relatively quick introduction of the VAT in the Russian Federation, even after the government had established a sales tax in 1990, has led to disappointingly low revenues. For this reason the IMF is said to have dissuaded the Ukrainian government from rushing to introduce the VAT. See the *Times*, December 24, 1991.

[32] Author's interview with Mr. Enn Roose, Deputy Minister of Finance, Republic of Estonia, October 1991. Some policymakers in the R.S.F.S.R. were also considering a non-progressive personal income tax, at least in the early post-Soviet period. That notion was rejected, finally, in favor of a progressive tax.

The switch to free prices is beginning to have several consequences (both static and dynamic) for tax policy, but none of them need be difficult. First, the value of production and assets throughout the economy will change, altering the size and structure of the corporate tax base. There is no guarantee that real corporate incomes will not shrink, and the experience of Eastern European countries suggests that income reductions ought to be the expected response. [33] This could seriously diminish the size of taxable real incomes in the economy as a whole. Second, both the retail price level and the relative price structure of consumer goods will change.

Inflation is a major concern, especially when a large portion of the inflation is "imported" from abroad as it is in the case of the Baltic states importing inflation from Russia. According to official Estonian statistics, the price level in the fourth quarter of 1991 was about 130 to 140 percent of the same period last year. The Estonian Ministry of Finance estimated the inflation rate at roughly 2 percent per week at the end of 1991. [34] For that reason, and the planned introduction of the Estonian currency in the second half of 1992, the Estonian government had planned only the first six months of the 1992 budget by the end of 1991. The second half of the year's budget was to be drafted in the spring of 1992, when a better idea of price trends is available.

Although the general price level will no doubt continue to rise for some time throughout the Baltic region, the structural price changes are more difficult to predict, though no less important. The relative price structure is important because of the large number of excise and turnover tax rates levied on different goods and services. Tax policies based on the current price structure will need to be reviewed in light of these changes. For example, Estonia plans to replace the commodity-specific excise taxes with a single rate value-added tax at the rate of 10 percent, probably in 1993.

In some East/Central European countries, notably Poland, the wage-price spiral following liberalization provoked government authorities to add supplemental wage and salary taxes to the existing income tax regime in order to reduce excess consumer demand. These schemes invite cheating and evasion—costly from the standpoint of tax administration—and should be approached with caution. [35]

A final point that needs to be made about prices has to do with balancing budget revenues and expenditures in uncertain times. Again, basic principles serve well. Broad, progressive taxes with low marginal rates encourage compliance and help ensure that as large a share of the total tax base as possible is actually taxed. They also reduce growth of consumer demand during inflationary periods. After the initial price adjustment, however, it should be possible to stabilize tax revenues and expenditures in the absence of outside shocks.

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[33] One useful discussion of this phenomenon is Jan Winiecki, "The Inevitability of a Fall in Output in the Early Stages of Transition to the Market: Theoretical Underpinnings," *Soviet Studies*, No. 4, 1991, pp. 669–678.

[34] TASS of November 15.

[35] By indexing wages to 80 percent of the Consumer Price Index, Poland helped to reduce inflationary pressures in 1990.

## Baltic Fiscal Systems After the Coup

With the Baltic declarations of independence in August 1991, the complex issue of "who owns whom and who pays whom" became more immediate and practical, creating even more headaches for the Baltic governments than before. Theoretically, all enterprises on Baltic territory are now subject to the Baltic states' jurisdiction and should pay taxes to their Baltic governments. In practice, though, there are exceptions to this rule as late as April 1992 in all Baltic states. In Latvia, for example, the official transfer of some U.S.S.R. defense plants to the Latvian authorities has yet to take place, and there is not yet a clear mechanism through which to organize such a transfer. There remain several practical questions about transferring enterprises and ministries from Union (in most cases now, Russian) to Baltic subordination. At the level of plant managers and accountants, few people have a concrete sense about how the process of transferring ownership is to go. [36] Many enterprises will be shut down and their employees "freed." Others will be privatized but with substantial tax holidays to encourage growth. Still others are likely to remain state enterprises within the framework of the Baltic ministerial systems for the foreseeable future. The final resolution of these questions will have obvious consequences for both the tax base and for expected revenues and expenditures.

A comparison of the budgets of the three Baltic states is difficult because of the lack of symmetry in their budget formats. Budget income is easier to look at than expenditures, and this section will therefore focus on Baltic budget incomes. Table 1 outlines the different tax schemes of the three Baltic states as they stood at the end of 1991. The table is as complete as available sources allow, and relies on a mixture of published and unpublished documentation from the finance ministries of the three states as well as on personal interviews with finance and other government officials from the Baltic states.

One point that became clear in the course of compiling table 1 is that not even government officials involved in the process of designing tax policy could agree on some details of established tax policy. In late 1991 and early 1992, tax policy in the Baltic states remained in flux and at any one time no single individual can keep up on all the developments. This, of course is a problem not only for finance and tax officials, but for taxpayers and potential business people as well. An important contribution to economic policy in the Baltic area would be the stabilization of fiscal and monetary reform legislation.

The budgets of the Baltic states for 1991 are presented in tables 2, 3, and 4. As mentioned above, because each country uses a different reporting format, direct comparisons, especially on expenditures, are not possible. (Standardizing the reporting systems would be a significant contribution both to Balts concerned with Baltic tax policy and for outsiders, as well as contribute to Baltic economic integration.) The Lithuanian system is easiest to analyze from an end-use point of view. Lithuanian expenditures are broken down

[36] Author's interview with Enn Roose, October 1991.

TABLE 1. Tax Schemes in the Baltic Countries in 1991.

| Type of Tax | Estonia | Latvia | Lithuania |
|---|---|---|---|
| Corporate income tax | 70% State 30% Local | 70% State 30% Local (20% in Riga) | Local Corps pay to local budgets. Others pay 80% to State, 20% to local budgets |
| Personal income tax | Local | 20% State 80% Local | 40% State 60% Local |
| Value-added tax | No | No | No |
| Turnover tax | 70% State 30% Local | State | State * |
| Excise tax | State | State | State * |
| Social Security tax | State | State | |
| Natural Resource tax | State and Local | 25% State 75% Local | State |
| Land tax | Local (very small) | Local | Local |
| Customs duties | State | few and small | few and small |
| Vehicle tax | Local | No | Local |
| Capital tax | In special cases | Property tax | No |
| Activity license | Local | ? | No |
| Pollution tax | Off budget State Environment fund | (Covered under natural resource tax.) | State |
| Performance tax | Local | No (under discussion) | No |
| Official filing tax | Local | No | No |
| Enterprise registration | No | No | State |
| Foreign investment tax | No | No | State |
| Oil products tax | State | Paid to the State road fund. 50% slated for State roads and determined by State government; 25% for regional roads; and 25% for rural roads. | No |
| Hard currency tax | No | No | State |

Sources: Documentation from Finance Ministries of the three Baltic states and interviews with respective Balt officials.
* The Lithuanian budget does not distinguish between the excise and the turnover tax.

into activities such as science, social security, education, and road repair. Both the Latvian and the Estonian budgets list expenditures according to which part of the administrative apparatus spends the funds. Thus the Ministry of Industry, Ministry of Machine-Building, and the Ministry of Ferrous Metallurgy all have budget entries in these two countries. Their actual expenditures and activities, though, are still a mystery. [37]

[37] As Table 5-2 shows, the Latvian budget also breaks down spending into 6 activity categories, the largest—totalling nearly 35 percent of expenditures—is "Other expenditures." The Latvian budget also gives some details about spending within each ministry and department. It is not clear, however, that a summation across administrative organs of similar entries would be

Continued

TABLE 2. Latvian National Budget for 1991.

(Thousands of Rubles)

| Budget Item | National Budget | Percent of National Budget |
|---|---|---|
| Income | | |
| Corporate income tax | 411,608 | 14.19 |
| Turnover tax | 1,111,456 | 38.31 |
| Excise tax | 715,500 | 24.67 |
| Personal income tax | 241,081 | 8.31 |
| Land tax | 22,265 | 0.77 |
| Property tax | 66,682 | 2.30 |
| Road tax | 211,000 | 7.27 |
| Fines for late payment of taxes | 52,083 | 1.80 |
| Fees for using natural & labor resources. | 16,300 | 0.56 |
| Fees and other non tax income | 52,874 | 1.82 |
| Total | 2,900,849 | 100.00 |
| Grants and Subsidies to local budgets. | 517,563 | 17.84 |
| Expenditures | | |
| State capital investment | 379,130 | 11.70 |
| Financing national economy | 754,744 | 23.29 |
| Social cultural measures | 684,018 | 21.11 |
| Science | 72,430 | 2.24 |
| Financing state bureaucracy | 223,794 | 6.91 |
| Other expenditures | 1,126,319 | 34.76 |
| Total | 3,240,435 | 100.00 |

Sources: Documentation from Finance Ministries of the three Baltic states and interviews with respective Balt officials.

Nonetheless, some observations about budget revenues in the Baltic states are possible. First, there is a large disparity in the relative size of the corporate income tax. Latvian and Lithuanian corporate taxes represent a significantly smaller portion of their total budget incomes than does the Estonian. Second, consumption taxes in all three states are relatively high as a share of total income. [38] In less developed economies, this is probably a good trend to pursue because indirect taxes are more difficult to evade than direct taxes and they tend to encourage savings. In both Latvia and Lithuania, part of the personal income tax goes to the state budget while in Estonia it goes exclusively to the local budgets. It has been a Soviet tradition to focus income taxes in the localities because it was believed that spending hard-earned rubles on local needs was more easily justified than spending them on "national" projects.

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an accurate estimation of spending by activity, because the activities that are listed are very general and vague.

[38] The share of consumption taxes in total tax receipts in other countries are: Germany—15.6%; Portugal—20.4%; Iceland—37.9%; Turkey—22.9%; United Kingdom—16.5%. OECD country studies, various editions, 1991.

TABLE 3. Lithuanian Budget for 1991.

(Thousands of Rubles)

| Budget Item | State | Percent of State budget | Local | % Local budgets | National | Percent of National budget |
|---|---|---|---|---|---|---|
| **Income** | | | | | | |
| Corporate income | 605,000 | 10.70 | 255,000 | 17.18 | 860,000 | 12.05 |
| Excise (turnover) | 3,800,000 | 67.23 | 0 | 0.00 | 3,800,000 | 53.25 |
| Personal income | 479,893 | 8.49 | 719,817 | 48.51 | 1,199,710 | 16.81 |
| Land tax | 0 | 0.00 | 347,249 | 23.40 | 347,249 | 4.87 |
| Vehicle tax | 0 | 0.00 | 5,500 | 0.37 | 5,500 | 0.08 |
| State filing tax | 0 | 0.00 | 101,870 | 6.86 | 101,870 | 1.43 |
| Customs duties | 3,000 | 0.05 | 0 | 0.00 | 3,000 | 0.04 |
| Fees for using state property | 376,000 | 6.65 | 0 | 0.00 | 376,000 | 5.27 |
| Other | 13,000 | 0.23 | 54,494 | 3.67 | 67,494 | 0.95 |
| Special fund of financial resources | 375,600 | 6.64 | 0 | 0.00 | 375,600 | 5.26 |
| Total | 5,652,493 | 100.00 | 1,483,930 | 100.00 | 7,136,423 | 100.00 |
| Subsidies from state budget | | | 712,297 | | | |
| **Expenditures** | | | | | | |
| Education | 399,857 | 8.09 | 725,617 | 33.04 | 1,125,474 | 15.77 |
| Culture | 121,579 | 2.46 | 50,149 | 2.28 | 171,728 | 2.41 |
| Health care | 308,292 | 6.24 | 442,320 | 20.14 | 750,612 | 10.52 |
| Sports | 6,500 | 0.13 | 1,940 | 0.09 | 8,440 | 0.12 |
| Social security | 297,770 | 6.03 | 322,040 | 14.66 | 619,810 | 8.69 |
| Science | 257,261 | 5.21 | 0 | 0.00 | 257,261 | 3.60 |
| State archives | 3,578 | 0.07 | 0 | 0.00 | 3,578 | 0.05 |
| Road maintenance and repair | 76,000 | 1.54 | 0 | 0.00 | 76,000 | 1.06 |
| National economy | 1,805,763 | 36.55 | 224,551 | 10.22 | 2,030,314 | 28.45 |
| Ecological maintenance | 95,379 | 1.93 | 0 | 0.00 | 95,379 | 1.34 |
| State government and bureaucracy | 72,264 | 1.46 | 42,096 | 1.92 | 114,360 | 1.60 |
| Legal organs | 19,434 | 0.39 | 0 | 0.00 | 19,434 | 0.27 |
| Internal organs | 195,665 | 3.96 | 0 | 0.00 | 195,665 | 2.74 |
| State-wide programs | 534,769 | 10.82 | 0 | 0.00 | 534,769 | 7.49 |
| Payments to enterprises | 350,624 | 7.10 | 0 | 0.00 | 350,624 | 4.91 |
| Other expenditures | 72,338 | 1.46 | 73,218 | 3.33 | 145,556 | 2.04 |
| Capital investment | 320,900 | 6.50 | 314,296 | 14.31 | 635,196 | 8.90 |
| Housing projects | 2,223 | 0.04 | 0 | 0.00 | 2,223 | 0.03 |
| Totals | 4,940,196 | 100.00 | 2,196,227 | 100.00 | 7,136,423 | 100.00 |

Sources: Same Lithuanian data as table 1.

There is more information about Estonia's post-coup budget than about Lithuania's or Latvia's, but Estonia's experience is similar to that of the others. All three Baltic states ran surpluses in 1991 because of inflation and because the prices of major fuel and raw materials imports from the U.S.S.R. had not yet risen much whereas Baltic exports to the U.S.S.R. had, making enterprise profits temporarily buoyant. As mentioned above, nominal incomes and prices were rising rapidly in the Baltic region, and tax revenues were rising correspondingly. Government costs, however, were contracted in prices current in late 1990 for 1991 spending programs. Those prices held for many government contracts in all three Baltic states throughout 1991. Estonia has estimated its 1991 budget surplus at just under 130 million rubles, and is transferring that sum to local budgets. The size of Latvia's surplus is not known, but it is being used to rebuild and repair churches and cultural monuments.

The effect of inflation on tax revenues in Estonia is seen in table 4.

TABLE 4. Estonian 1991 State Budget and Budget Supplements.

(Rubles)

| Income Source | 12/20/90: Original State Budget | 9/5/91: Budget Supplements | Total | Percentage Share |
|---|---|---|---|---|
| Turnover tax | 640,000,000 | +307,313,000 | 947,313,000 | 34.9 |
| Excise tax | 605,800,000 | −9,200,000 | 596,000,000 | 22.0 |
| Corporate income tax | 167,300,000 | +632,700,000 | 800,000,000 | 29.4 |
| Natural resource | 19,670,000 | | 19,670,000 | 0.7 |
| Oil products tax | 173,500,000 | | 173,500,000 | 6.4 |
| Customs duties | 10,000,000 | | 10,000,000 | 0.4 |
| Other | 11,100,000 | +158,900,000 | 700,000,000 | 6.3 |
| Total | 1,627,370,000 | | 2,717,083,000 | |
| Transfer to local budgets | 228,300,000 | +72,100,000 | | |
| Budget surplus to local budgets | | +128,900,000 | | |

Sources: Same Estonian as table 1.

There are several interesting points to be made about the revision of the Estonian state budget for 1991. First, it is worth keeping in mind that the entry for turnover taxes represents only 70 percent of total planned turnover tax receipts. The rest (roughly 405 million rubles) is included in the local budgets. The turnover tax is, for practical purposes, a retail sales tax, equaling 10 percent of the retail price of a good or service. The tax rate did not change in 1991, and the reason for the expected increase in turnover tax receipts is simply inflation.[39]

The reason excise tax receipts fell so dramatically is that Moscow drastically cut back on alcohol exports to Estonia. This highlights the sensitivity of Estonia's budget to the outside world.[40] The oil products tax is the equivalent of the Latvian road tax and is an excise tax placed on oil products to support road and highway maintenance and construction. The oil tax was scheduled to increase to discourage consumption of scarce resources, but parliament voted the proposal down.[41] The absence of personal income tax is explained by the fact that it is wholly a local tax.

## CONSIDERATIONS FOR THE FUTURE

Following the demise of the Soviet Union, all of the Soviet successor states face the formidable challenge of developing and implementing their own economic reform programs. Fiscal policy reform will constitute one of the key elements in those programs. As we have seen from this case study of the Baltic states, fiscal policy is intimately intertwined with other economic reform issues. There is

[39] Author's interview with Enn Roose, October 1991.

[40] Unfortunately, it is not possible with available data to quantify the effect of lower U.S.S.R. alcohol exports, but they were cited as the main reason for the drop in overall excise tax revenues, and must be significant.

[41] Revenues were unofficially earmarked for road maintenance. When asked why the proposal failed, one skeptical Estonian finance official responded, "They all have cars, don't they!"

little doubt that the way in which fiscal issues are handled by the former Soviet republics will in part determine the speed with which they can emerge onto the global economic stage as small, immature, but well-managed and functioning economies. Several aspects of fiscal policy reform and development will prove especially important.

### MACROSTABILITY

Using fiscal policy as a stabilization tool is new to the Soviet successor states, but their experience with runaway budgets in the last three years of their Soviet period and the prospect of hyperinflation looming over the entire ruble zone has generated a good deal of appreciation on their part for the importance of a balanced budget. For example, it is unlikely that the budgets of the Baltic states will run surpluses in 1992 because terms of trade with the other former Soviet republics will deteriorate as a result of a planned shift to market prices, and they will be lucky if they achieve a balance without strong spending austerity measures. Unfortunately, the experience of reforming East/Central European countries is not encouraging and paints a picture of both falling output that constricts the real tax base and rising social needs that increase the requirement for spending.

Two chief pressure points for state spending are likely to emerge in the foreseeable future. One is local pressures. Public opinion in the Baltic states has already indicated the degree to which Balts believe that they deserve to have a standard of living on par with Scandinavia. [42] On the one hand, this attitude will increase pressure for economic development and, inasmuch as the public sector will fuel economic development in the near term, pressure for public spending to support industrial growth is likely to be strong. While similar arguments are not as obvious in the other Soviet successor states, public opinion throughout the region indicates that many believe the Soviet system retarded economic growth and development. On the other hand, all of the former republics stand a fair risk of rising unemployment that will put strains on the budget to care for those people who cannot provide for themselves. A third concern of public opinion in the Baltic region is reversing the environmental damage of the last fifty years that is universally blamed on the policies of Soviet planners in Moscow.

A second influence for public spending will come from the outside. Aid and investment will flow to the former republics only under certain conditions. International organizations, foreign governments, foreign businesses and foreign academics acting as advisors and consultants will all have their own ideas and priorities about how much and to what ends public resources ought to be spent, and those will contradict each other as often as not. Extremely important in this regard is the external financial position of the Baltic states, both vis-a-vis Russia and the CIS, and with the West. [43] Revenues from exports, taxes, and new borrowing must be

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[42] See Philip Hanson, *The Baltic States, What Price Freedom?* op. cit.

[43] This applies, of course, to the other Soviet successor states as well.

reconciled with expenditures, including imports and debt service, and achieving this balance is likely to have an impact on both government spending and tax policy.

### COMPLICATED VERSUS SOPHISTICATEDLY SIMPLE TAXES

The basics of tax policy formation and not the nuances should guide the development of new tax systems in the Soviet successor states. Taxes should be broad to capture as many types of taxable incomes as possible. Tax rates should be low to encourage investment, increase productivity, and encourage compliance. Taxes should be simple and transparent so that taxpayers know what they are paying and why. Taxes should meet tests for horizontal and vertical equity.

There are several problems with otherwise good taxes that are corrupted with too many exemptions and loopholes. First, they encourage tax evasion by encouraging earning income that won't be taxed or by claiming that taxable income meets the exemption requirements. Second, and more important for the long term, is that vested interests often grow up around different loopholes and exemptions, making it difficult for politicians to simplify the tax later. Hungary's tax reform of 1988–89 serves as a good example. In an effort to keep the total tax bill low, Hungarian officials riddled their new taxes with loopholes, exemptions and tax holidays. The idea was that they could win support for the tax reform in the short run and modify it later. This has often proved to be impossible, and now Hungary is having a difficult time revising those taxes. [44]

The Balts are already in jeopardy of making their tax systems overly complex at this early stage. The example of the Latvian corporate income tax was discussed above. But there are many other examples. The movement away from the traditional Soviet turnover tax with multiple, arbitrary rates to a unified consumption tax is a positive trend. [45] But all too often, tax laws are littered with exemptions and loop holes because lawmakers in these new democracies bend to public pressures. The goal in establishing these exemptions is, of course, to make the tax more palatable to various interest groups. Other countries' experiences show, however, that it will be difficult to reverse that decision. A better way to start is to keep the tax base broad and tax rates low.

### THE CRITICAL IMPORTANCE OF EFFECTIVE TAX ADMINISTRATION

Experience in other emerging market economies has shown that developing appropriate tax administration institutions and systems is at least as important as the tax policies themselves. One problem that is already emerging in the Baltic and Russian budgets is the use of off-budget funds that separate both revenue collection and expenditure authority from the central fiscal authorities. The number of these off-budget funds and the administrative units that manage them are still relatively small and are probably managea-

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[44] See OECD Economic Surveys: Hungary, Paris, OECD, 1991 for a recent picture of Hungary's fiscal reform problems.

[45] Although implementation of a VAT is complicated, all three Baltic countries' efforts to move in that direction is also a positive development.

ble. They do not come close to the number of off-budget funds that characterize many Latin American governments, for example. Still, each off-budget fund and program brings its own overhead costs and vested interests. More important, without a comprehensive, unified budget, it is impossible to execute a unified fiscal policy.

Effective tax assessment and collection is essential to the success of any budget program. It is especially critical to establish a good compliance record from the beginning. Once a culture of tax evasion develops, it is virtually impossible to overcome. The importance of broad, simple taxes with low marginal rates to the issue of compliance has been discussed above. The higher the voluntary rate of compliance, the lower the need for costly interference by tax collectors.

Second, many small countries have neglected the problem of administrating tax collection policies to guard against inflation. Often, the preferred penalty system is a simple percentage of delinquent taxes. In high-inflation economies, this can be very costly to the budget as delinquent taxpayers pay the flat penalty in weaker currencies. The higher the rate of inflation, the more the need for inflation-sensitive penalties.

Another concern for emerging or reforming economies is unemployment. In terms of tax administration, unemployment has proven to lower the opportunity cost of protesting tax assessments because the time spent protesting is less valuable to the taxpayer. Tax collection systems ought to be designed to minimize the opportunities for taxpayers to draw out their challenges to the tax assessor. Stiff, interest-bearing penalties suggest themselves as one effective way of combating this problem.

Finally, it is important that the various departments of the Ministry of Finance that are concerned with tax administration have adequate communications with each other. The departments of corporate income tax and personal income tax need to have easy access to each other. Deficiency in this area has allowed tax revenues to get lost in the shuffle in other countries. In the Baltic states this may be a particular challenge given both the compartmentalism of the economic bureaucracy of the Soviet-type economy and the rapid pace at which the Baltic states are reforming their economic institutions and policies.

## Conclusion

The Baltic states, newly independent, face many challenges in their quests for modern, growth-oriented market economies. Fiscal policy is but one aspect of the overall challenge. But, as shown here, fiscal policy affects and is affected by numerous other aspects of the overall reform effort, including privatization, price policy, and policy on industrial development in particular sectors of the economy.

Fiscal policy was always of secondary importance in the Soviet-type economies. In many respects, fiscal policy in the Soviet period was based on political considerations and tended to ignore economics. At the republic level, finance and tax officials busied themselves filling out Moscow's forms and processing Moscow's data according to Moscow's instructions. The only proactive role was left

to the politicians who vied, one against the other, for larger shares of the Union's budgetary pie. To the extent that fiscal policy represents an essentially new field for both government bureaucrats and academic analysts, there is a good deal to learn before the world can expect competent fiscal management from the Baltic states.

To date, Latvia, Lithuania, and Estonia have been careful not to mismanage the transitional period and have established a number of the cornerstones of a full, independent, and effective fiscal system. Moreover, the three Baltic states enjoy the support of international and foreign organizations that are willing and eager to help them develop their reform programs. Finally, the Baltic states have the advantage of size. Smaller countries are easier to manage from a tax administration point of view, all other things equal. The importance of developing efficient tax administration institutions and competent tax administration personnel cannot be overemphasized. Fortunately, the Balts are beginning to talk with international and foreign organizations including the World Bank, the International Monetary Fund, and the U.S. Internal Revenue Service about developing such institutions and cadres. Although many obstacles remain, there is good reason for taking an optimistic view of the outlook for the Baltic economies. As other Soviet successor states embark on their own programs for transition, they would be well advised to consider the Baltic experience.

## BIBLIOGRAPHY

### SELECTED BALTIC SOURCES

(Unless otherwise noted, these sources are unpublished copies of original government documents).

**Estonia**

*Pravitel'stvo Estonskoi Respubliki,* Polozhenie o bukhgalterskom uchete, July 6, 1990.

*Pravitel'stvo Estonskoi Respubliki,* Poryadok, O oblozheniya podokhodnym nalogom c predpriyatiya, October 10, 1990.

*Pravitel'stvo Estonskoi Respubliki,* Poryadok, oblozheniya nalogom c oborota, October 10, 1990.

*Zakon Estonskoi Respubliki,* O byudzhete, November 17, 1989.

*Zakon Estonskoi Respubliki,* O naloge za razreshenie na deyatel'nost', September 25, 1990.

*Zakon Estonskoi Respubliki,* O nalogooblozhenii, December 28, 1989.

*Zakon Estonskoi Respubliki,* O podokhodnom naloge c chastnogo litsa, October 11, 1990.

*Zakon Estonskoi Respubliki,* O sotsial'nom naloge, 12 September, 1990.

*Zakon Estonskoi Respubliki,* Ob aktsiznom sbore, June 26, 1990. With Attachments on rates.

**Latvia**

Republic of Latvia, Law on Natural Resource Tax, December 12, 1990.

Republic of Latvia, Law on Profit Tax, December 20, 1990.

Republic of Latvia, Law on Property Tax, December 18, 1990.

Republic of Latvia, Law on Road Tax, February 13,1991.

Republic of Latvia, Law on Taxes and Duties in the Republic of Latvia, December 26, 1990.

The Republic of Latvia Supreme Council, Resolution on Implementation of Latvia's Law, "On profit tax," December 20, 1990.

The Republic of Latvia Supreme Council, Resolution on the Introduction of the Republic of Latvia's Law, "On land tax," December 20 1990.

The Republic of Latvia Supreme Council, Resolution on the Order of Latvia's Law, "On natural resource tax," December 12, 1990.

The Republic of Latvia, Law on Budget Authority.

The Republic of Latvia, Law on Land Tax, December 20, 1990.

**Lithuania**

Economic Independence and the Distribution of Resources, *The Economist of Lithuania*, 1990, no. 3.

How will an Independent Lithuania's Economy Function? *The Economist of Lithuania*, 1990, no. 1.

Lithuanian Republic, Law on Temporary Personal Income Tax, Ekho Litvy, November 3, 1990.

National'nyi byudzhet Litovskoi Respubliki na 1991 god, June 11, 1991.

On the Basic Principles of Economic Self-dependence, *The Economist of Lithuania*, 1990, no. 1.

Pravitel'stvo Litovskoi Respubliki, Postanovlenie, O nalogooblozhenii nekotorykh tovarov, February 2, 1991.

Programma Pravitel'stva Litovskoi respubliki, October 11, 1990, chap. 4.

Republic of Lithuania, Law on on Taxes on Profits on Legal Persons, July 1990.

# THE GAINS FROM PRIVATIZATION

by Joseph S. Berliner *

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## SUMMARY

The economic case for rapid privatization of large state enterprises in Russia is based on the large efficiency gains that would be secured. Taking the productivity of a group of OECD countries as a measure of the efficiency that a fully transformed Russian economy might hope to attain, the total gains from both marketization and privatization would be about 55 percent. Most of those gains could be secured by marketization alone, however, without the privatization of large state enterprises.

Moreover, if privatization were carried out as rapidly as possible, the realized gains would be much smaller than the potential gains. The reasons are that rapidly privatized enterprises would not be as efficient as private enterprises in established market economies; that the state will have to continue paying subsidies for some time in order to prevent an unacceptable level of unemployment; that the absence of an infrastructure of legal, accounting, financial, and other services will depress the efficiency of the privatized enterprises; and that a large part of the state's property will fall into the private ownership of the former nomenklatura, many of whom are unlikely to develop into successful businessmen. The Chinese economy demonstrates that large efficiency gains can be secured by extensive marketization combined with freedom of entry of inde-

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pendent enterprises, without the rapid privatization of the large state enterprises.

The policy conclusion is that Western governments and international agencies should concentrate on supporting the Russian government in stabilization, marketization, and promoting free entry, but should not pressure them into rapid privatization of large state enterprises.

## INTRODUCTION

"To be a normal country" is a popular expression that captures the aspirations of most of those Russians who describe themselves as democrats. The economies that count as "normal" span a very wide range, including the German conservative social economy, the Scandinavian welfare state, and the US-British liberal economy. Despite their diversity, however, they share two of the basic characteristics of capitalism: economic transactions are conducted primarily in markets, and production enterprises are predominantly privately owned. To be "normal," as the democrats intend the term to mean, is to have markets and private property, a combination that can accommodate a variety of different social and economic policies.

There is fairly general agreement on the broad measures required to make the transition to normalcy. One is macrostabilization, with its preeminent requirement of a balanced government budget. Another is marketization, which requires that the right to set prices and quantities of output be transferred from central planners to enterprises. The third is privatization, which means that the proportion of output produced by state-owned enterprises should become as small as in normal countries. [1]

Most supporters of normalization accept all these measures, although there is some disagreement on the speed with they should be implemented. The disagreement is greatest on the appropriate pace of privatization. It is this issue that the paper addresses.

There is general agreement on rapid small-scale privatization—that is, the sale of small state-owned retail stores, workshops, service facilities, trucks, apartments, and so forth. The contentious issue is the speed of privatization of the 20,000-odd large state-owned enterprises. The term "privatization" will be used hereafter to refer to large state-owned nonagricultural enterprises.

One point of view holds that privatization should be pursued as rapidly as possible. The other holds that it should be done gradually. The difference between the two derives from the initial condition of insufficient private wealth in the country to purchase all state-owned productive properties at their full value as income-producing assets.

Rapid privatization would deal with the absence of private wealth by procedures that simply give shares of ownership of the property away, at a small or zero price, to such non-state owners as investment banks, public holding companies, individual citizens,

[1] Some democrats promote worker ownership, and others advocate market socialism in which the enterprises will be permanently state owned. Most democrats, however, appear to regard these alternatives as yet more of the "experiments" they would sooner have tried out in other countries than their own this time.

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and other non-state agents. The pace of privatization is then limited only by the size and competence of the administrative resources that the government devotes to carrying out that procedure, and could perhaps be accomplished in one to three years.

Gradual privatization would deal with the private-wealth problem by first providing maximum support for the entry and expansion of newly founded private enterprises and for small-scale privatization. Because of the extensive initial disequilibria, private wealth is expected to accumulate rapidly in this "natural" private sector. The assets of state enterprises are then gradually put up for privatization, at market prices, in proportion to the growth of private demand (both domestic and foreign) for the purchase of state owned assets. The pace of privatization is limited by the growth rate of production, profits, and savings in the private sector, and will take many years to accomplish.

Russia today is leaning toward rapid privatization. That disposition was evident in the "500-day report" that first propelled privatization to the head of the reform agenda during Gorbachev's time. The Yeltsin-Gaidar government has promoted stabilization and price liberalization to the head of their agenda, but it continues to declare rapid privatization to be a major goal. [2] The IMF and the U.S. government also routinely remind the Russians that progress in privatization is one of the conditions of their continued support.

## THE ECONOMIC CASE FOR RAPID PRIVATIZATION [3]

The core of the economic case for rapid privatization is the proposition that there are overwhelming efficiency gains to be had by the replacement of state ownership by private ownership. [4] I understand that proposition as a statement in comparative statics. It says, in effect, that if you had two economies, alike in all respects except that one consisted of private enterprises and the other of state-owned enterprises, the first economy would produce an overwhelmingly larger output than the second. [5]

There is indeed strong evidence of the superior efficiency of private ownership, although the magnitude of the difference is difficult to establish. However, regardless of the correctness of that proposition about the comparative static efficiency of the two forms of ownership, it can support no conclusion at all about how to manage the transition from state to private ownership, which is quintessentially a dynamic process. The fact that it would be better

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[2] Gaidar has criticized those who urge that privatization should be carried out before price liberalization. But he hopes that once market prices are established, privatization will proceed "as rapidly as possible." *Current Digest of the Post-Soviet Press.* XLIV, 1, February 5, 1992, pp. 1–2. Translated from *Rossiskaia gazeta*, January 11, 1992.

[3] Political considerations should no doubt weigh heavily in the decision regarding the pace of privatization, but they seem to me to cut both ways. I do not address the political arguments in this paper except in passing, as in footnote 24 below.

[4] Lipton and Sachs report this as the view of some East European authors, but it appears to be the basis of all proposals for rapid privatization. They base their own case on the "high costs of maintaining the present system." It comes to the same thing, however, since the costs of maintaining the present system can be regarded as high only in relation to the large gains expected from rapid privatization. David Lipton and Jeffrey Sachs, "Privatization in Eastern Europe: The Case of Poland," *Brookings Papers on Economic Activity*, 1990, vol. 2, 293–339.

[5] The normalized economy is also likely to grow more rapidly, because of superior dynamic efficiency. This paper deals only with the transition to such an economy, which involves a limited period of time, over which the benefits of superior dynamic efficiency are not likely to be very large.

to have had private enterprises rather than state enterprises in the first place is not an argument for rapid privatization, or for slow privatization, or even for any privatization at all. It all depends on what funny things might happen on the way to the Forum.

At least two questions must be asked before the static proposition can be taken as a prescription for policy. One is how large a gain in efficiency can reasonably be expected from the rapid privatization of enterprises that had been state owned since their founding. The second is the magnitude and duration of the cost, if any, of a rapid change in the ownership structure of an entire economy.

There is no simple way of quantifying the potential gains and costs of rapid privatization. A close examination of the factors that will determine what the gains and costs are likely to be, however, suggests that the gains have been greatly exaggerated and the costs not sufficiently appreciated. In this paper, however, I deal only with the potential gains.

## The Size of Efficiency Gains

The gains from full normalization may be resolved into two components. One is the gain from the privatization of enterprises. The second is the gain from the marketization of transactions between and among enterprises and households. The case for rapid privatization depends primarily on the size of the privatization gain.

No one can doubt that there are gains to be made from privatization. But no one has a clue as to the magnitude of those gains. On the basis of the anecdotal evidence on the inefficiency of Soviet enterprises, the gain might be supposed to be about 5 percent, or 50 percent, or 100 percent or whatever number would support one's previous policy inclinations. Since there are no historical precedents for the rapid privatization of an entire economy, no one can claim to be a qualified judge on the matter. Yet the size of the gain is crucial to the policy debate because the larger that gain, the stronger the case for enduring the costs of rapid privatization.

While there is no quantitative evidence on the possible size of the privatization gain alone, there is some evidence on which to assess the magnitude of the potential gain from full normalization; that is, from the combined effect of both marketization and privatization. In a comparison of seven OECD countries and four socialist countries, Abram Bergson found that, with labor, capital, and land held constant, the output of the socialist countries in 1975 was in the range of 25–34 percent lower than the OECD countries. For the U.S.S.R., the figure was about 30 percent. [6] Subsequent research suggests that a similar calculation for 1985 would find Soviet relative productivity to be somewhat lower, roughly 35 percent below that of an equivalent normal country. [7] That result may be inter-

[6] The coefficient of the dummy variable for the U.S.S.R. was negative and significant, corresponding to a level of productivity 25–34 precent below the regression line for the OECD countries. Abram Bergson, "Comparative Productivity: The USSR, Eastern Europe, and the West," *American Economic Review*, vol. 77, no. 3 (June 1987), p. 353.

[7] On the basis of CIA studies of relative product quality, Bergson concludes that earlier estimates of Soviet output should be discounted by 10 percent. Abram Bergson, "The USSR Before the Fall: How Poor And Why," *Journal of Economic Perspectives*, vol. 5, no. 4, Fall 1991, p. 39. It is also likely that relative Soviet productivity also declined somewhat between 1975 and 1985. Hence the 1985 figure may be about 35 percent.

preted to mean that when Russia completes the transition to full normalcy, its output will be about 55 percent higher (35 percent/65 percent) than it would have been had it remained a Soviet-type economy (assuming Russian productivity in 1985 was close to the Soviet figure).[8]

That number may seem surprisingly small to people who have studied or experienced the inefficiency of the centrally planned economies. A gain of that magnitude, however, could make an enormous difference in the quality of a society's economic life. I should think it would justify a very rapid transition even if the costs increased greatly with the speed of the transition process.

The potential 55 percent gain, however, cannot be credited entirely to privatization. Some part of it would come from marketization alone; and that, in my opinion, is much the larger part.

## A Semi-Normal Economy

The estimated 55 percent potential gain from full normalization reflects the combined effect of the superiority of both markets over planning and the private market over state ownership. In the long run, the Russian economy would perform at its best if it incorporated both the economic mechanism and the property form of a normal economy. Suppose, however, that the government did not have the resources required to introduce them simultaneously, but had to marketize first and privatize later. How much of the gain would be captured from marketization alone?

To gauge the relative contribution of marketization and privatization, imagine a transition strategy the objective of which was to establish rapidly the best possible conditions for the emergence of markets for all products and factors. The government would concentrate its resources on macrostabilization, price liberalization, and limited ruble convertibility. Maximum support would be given to newly founded private enterprises and joint ventures, and small-scale state-owned property would be rapidly privatized. All large enterprises, however, would continue to be owned by the state, but they would be "commercialized," as recommended in the report of the international organizations, meaning that they would be required to operate under market conditions and would be evaluated on the basis of their profitability.[9] Those that can be divided into one or more separate enterprises without loss of efficiency would be split up.[10] During the transition the enterprises would be con-

[8] The productivity of the Russian economy in 1992 is no doubt much lower than in 1985. The potential gains today may be thought to consist of the gain from recovery to the productivity level of 1985, plus the gain from the transformation of a Soviet-type economy to a normal economy with markets and private property. The latter is the subject of this paper. Privatization as a component of recovery involves somewhat different issues, mostly political, from privatization as a component of normalization. I doubt that the conclusions would be very different, but space precludes the exploration of those issues here.

[9] International Monetary Fund, The World Bank, Organization for Economic Cooperation and Development, and European Bank for Reconstruction and Development, *The Economy of the USSR*, (Washington: The World Bank, 1990), 27-28.

[10] One promising course of demonopolization would be to split the large production associations into the enterprises out of which they were formed by merger in the 1970s. That move alone would increase the number of enterprises threefold to fourfold.

A recent study of the production association *Rezina* reports that two of the enterprises out of which it was originally formed are now striving to regain their independence. Michael Burawoy and Kathryn Hendley, "Strategies of Adaptation: A Soviet Enterprise Under Perestroika and

Continued

trolled and monitored by holding companies or boards of public directors appointed by government.

This transitional economy would resemble a normal economy in all respects except that the large state enterprises inherited from the Communist past would initially continue to be owned by the state. In the course of time some would be shut down and most of the others gradually sold off, at market prices, to private purchasers.

The question is, how much of the potential 55 percent normalization gain could be captured by marketization alone, without the further step of rapid privatization? If marketization without privatization would increase efficiency by only 5–10 percent, the case for rapid privatization would be very strong, but if the increase were as large as 40–45 percent, the case for rapid privatization would be correspondingly weaker.

## THE HIGH COSTS OF CENTRAL PLANNING

The pages of this venerable periodical have been filled in past years with horror stories detailing the numerous elements of inefficiency in the Soviet economy. A review of those stories would provide convincing evidence that the predominant source of the inefficiency is the effort to plan and to manage the entire economy centrally, and only to a minor extent to the fact that the enterprises were owned by the state. I recount some of the evidence below.

1. No feature of Soviet inefficiency has commanded as much attention as the irrationality of the price system. If price liberalization accomplished no more than bringing prices to market-clearing levels, there should be a tangible increase in allocative efficiency. The quantitative losses from irrational pricing must have been substantial, or else a great deal of ink has been wasted on a minor matter. I should think that a gain in efficiency of at least 10 percent should be expected from the establishment of market-based prices. [11] True neoclassicals would no doubt expect much more, even in a world in which large enterprises are still owned by the state.

2. Hayekians should expect even greater gains from informational and technical efficiency than neoclassicals might expect from al-

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Privatization," *Soviet Studies*, vol. 44, no.3, May 1992. It is likely that many of the mergers never resulted in an organically unified enterprise, and a return to the pre-merger structure could be easily accomplished.

[11] The econometric evidence is mixed. In her pioneering work, Thornton estimated the allocative loss from differential capital charges at 3–4 percent. Desai and Martin found an efficiency loss rising from 3 percent in 1950 to 10 percent in 1975; sensitivity estimates, however, showed a possible loss of up to 15–17 percent. Thornton estimated the loss at only 3 percent. Baretto and Whitesell found a Soviet allocative efficiency loss of 6.1 percent, but the same method produced a loss of 4.1 percent in the United States. Most of the econometric studies deal with industry alone. (Judith Thornton, "Differential Capital Charges and Resource Allocation in Soviet Industry," *Journal of Political Economy*, vol. 79, no. 3, 1971, 545–561; "Padma Desai and Ricardo Martin, "Efficiency Loss From Resource Misallocation in Soviet Industry," *Quarterly Journal of Economics*, vol. 98, August 1983, 441–456; and Humberto Baretto and Robert S. Whitesell, "Estimation of Output Loss from Allocational Inefficiency," *Economics of Planning* (forthcoming)).

A major limitation of the econometric studies is the high degree of data aggregation, normally at the branch-of-industry level. The analysis therefore captures only the allocative losses due to inequality of marginal rates of substitution across branches. It cannot capture the losses due to inequality of marginal rates of substitution across products and enterprises, which may be much larger than the industry-level losses. Under these conditions, as Thornton notes, estimates of static misallocation typically yield extremely small numbers, so that an estimated loss of 3–4 percent reflects "a comparatively large magnitude."

locative efficiency. Those gains would come particularly from the noisy presence of the new private entrepreneurs. Even under the turbulent conditions of the present-day Russian economy, there are hordes of new entrepreneurs discovering profitable niches for productive and distributive activities with which the central planners could never cope. More generally, the absence of free entry and the relative scarcity of small-scale enterprises was a major drag on the old system's ability to generate technological advance, to provide least-cost sources of supply, and to capture potential gains from international trade. Small-scale privatization of the mass of state-owned stores, workshops, trucks, and other assets would add to the size and vitality of the private sector. The productive activity of this private sector may contribute more to closing the efficiency lag behind normal countries than any of the other elements listed here.

3. The poor quality of Soviet output and the relatively high cost of production derive from many causes, most of which can be traced to such elements of central planning and management as physical production targets, centralized supply of inputs, centralized distribution of output, and so forth. The replacement of central planning by markets cannot fail to compel enterprises—even state enterprises—to seek more reliable sources of supply, to strive to minimize cost, and to worry more about finding customers for their output. Competition may not be as keen as in a normal country, but it will surely be keener than under central planning. The welfare gain from improvements in quality and availability of consumer goods may not all be picked up in the statistical measures of efficiency gain, but quality improvements in inputs will be picked up and will account for a nontrivial gain.

4. The opening of the economy and the marketization of foreign trade would enable the economy to capture some of the gains from trade that were lost in the past because of the total protection of domestic manufactures and the rigidity of the foreign trade monopoly and the central planning mechanism. Aligning domestic with world prices would itself greatly increase the gains from trade; energy conservation alone could increase exports by 10–20 billion dollars annually in the short run and 25–50 billion dollars annually in the long run. [12] Increased international intercourse would also improve the rate and quality of technological innovation. The relationship between export orientation and economic growth is now so firmly established that the gain from this element of marketization should be worth more than a few percent.

5. The domestic obstacles to technological advance can be traced overwhelmingly, though not entirely, to the ways in which the central government managed the process of research, development, and innovation, rather than to the ownership form of the enterprises. [13] If innovation were driven by profit-seeking state-owned

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[12] Manmohan S. Kumar and Kent Osband, "Energy Pricing in the Soviet Union," International Monetary Fund, Working Paper WP91/125, December, 1991. The numbers were derived from simulation exercises, based on Hungarian price elasticities of demand for energy. If Russian industry responded to a mere doubling of domestic energy prices in the same way that Hungarian industry did, for example, energy savings at world prices would amount to 8.4 billion dollars annually in the short run and 24.9 billion dollars annually in the long run.

[13] Joseph S. Berliner, *The Innovation Decision in Soviet Industry* (Cambridge: MIT Press) 1976.

enterprises rather than by career-seeking bureaucrats, the rate of innovation and the efficiency of new technology would surely improve, providing a few more percentage points of efficiency gain.

6. Farming has suffered particularly from excessive centralization of agricultural activities, inappropriate price policies, and inadequate incentives for ancillary activities like transport and processing activities.[14] Other sectors in which efficiency has been particularly depressed by excessive centralization of planning and management are construction and services of all kinds.

7. Centralized direction of technological progress and of the distribution of investment has resulted in low returns to new investment. If enterprises had to compete for investment funds for capital expansion and for the innovation of new technology, the returns to investment should rise. That outcome presumes that the budget constraint would be harder to handle than in the past, even if it could not be as hard in the semi-normal economy as it would be under full normalization (see below).

Economists in both the West and the U.S.S.R. have long criticized the planning system for the heavy losses that these and many other sources of inefficiency have imposed upon the Soviet economy. The implication of that extensive research is that if planning is now replaced by markets, there should be very large gains, even if the enterprises continued to be owned by the state.

How large is a matter of conjecture, but if M percent is the marketization gain and P percent is the privatization gain, my own guess is that M percent is by far the larger part of the 55 percent total normalization gain and P percent much the smaller.[15] That is to say, normalization is mostly about markets, and only secondarily about ownership.

## INTERACTION BETWEEN MARKETS AND OWNERSHIP

It is possible that the gains from marketization cannot be assessed apart from the form of ownership, as I have sought to do above. That is, the marketization gain, M percent, may be very small if enterprises continue to be state owned, but it may be very large if state ownership were replaced by private ownership. In that case the gain from privatization, P percent, would be larger than argued above, because of the interaction effect.

The possibility of such an interaction between the economic mechanism and the property rules cannot be excluded. Consider the gain from the replacement of the centrally planned prices by market-determined prices that are more reflective of relative scarcities. The potential gain derives from the fact that millions of production decisions would be made more efficiently, so that a larger volume of output could be produced with the same resources. That

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[14] D. Gale Johnson and Karen McConnell Brooks, *Prospects for Soviet Agriculture in the 1980's*, (Bloomington: Indiana University Press, 1983), 195–204.

[15] My own highly subjective judgment is that if the gains from the elimination of every source of inefficiency in planning were tallied up, they would come close to the full 55 percent normalization gain; perhaps to 45–50 percent. The underlying notion is that the performance of Soviet enterprises was poor not primarily because they were run by salaried managers appointed by the owner-state, but because of the success criteria, incentives, price signals, protection from competition, and other characteristics of the planning environment. See the following section on the interaction between markets and ownership.

potential gain will not be secured, however, unless managerial decision makers are profit-oriented and responsive to profits. If they are not, then the gain from marketization would be very small despite the superiority of the new price structure.

The evidence from the past, however, is that the managers of the state-owned enterprises have been highly responsive to the signals given by their ministries about the kinds of decisions they would be rewarded for. The trouble was that under central planning, the signals were often mixed and contradictory. Managers might be told officially that they must concentrate on cost reduction, but informally they understood that the most important criterion of reward was overfulfillment of the production plan target; and overfulfill it they did, to the neglect of cost of production, quality, and innovation, and in violation of the laws that sought to restrict their access to inputs they were not supposed to have. The story of Soviet management is not one of bureaucratic inertness but of substantial initiative, unfortunately misdirected because of the inefficiency of bureaucratic central planning and management. It therefore provides a basis for expecting that if their personal rewards depended on the profits that their enterprises could earn, and if profits depended on the prices of their inputs and outputs, they would be more responsive to prices than they had been in the past, though they would very likely fall short of the responsiveness of managers of capitalist corporations. [16]

Therefore, of the total 55 percent gain that might be secured from full normalization, the marketization gain of M percent is likely to be very large even if all large enterprises continued to be state-owned for a period of time during the transition. When the transition is completed and the economy is fully privatized, the additional gain from privatization, P percent, is likely to be correspondingly small, whether it is carried out rapidly or gradually.

## The Privatization Process

If rapid privatization is to produce the full potential P percent gain in efficiency, the privatized Russian enterprises must operate as efficiently as the private enterprises of normal economies. [17] It is difficult to imagine so favorable an outcome.

The term "privatization" originally referred to the sale of a state-owned enterprise by the government of a capitalist country. It usually involves competitive bidding by private companies, each one of which decided that this asset would be a more profitable investment than all the other investment opportunities they had under consideration. The privatized enterprise rapidly becomes a private enterprise in every respect. [18] I shall refer to this process as "normal privatization."

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[16] The argument in the text applies to current production activity. With respect to innovation, however, an economy based primarily on state enterprises is unlikely to be as successful as one based on private enterprises. See Joseph S. Berliner, "Innovation, The USSR, and Market Socialism, in P. Bardhan and J. Roemer, *Market Socialism: The Current Debate*, (New York: Oxford University Press) forthcoming.

[17] Because the potential total gain of 55 percent is based on the performance of normal enterprises in a sample of OECD countries.

[18] The sale agreement, however, sometimes involves an obligation to accept some social commitment, such as to maintain employment at a certain level for a period of time.

Rapid privatization differs from normal privatization in at least two respects. First, the people who will have to carry out this task in all the cities of Russia will have had experience as ministry officials, economists, and lawyers, but none will be knowledgeable about the legal, financial, and other means employed in market economies for establishing a strong financial base and maintaining stockholder control over enterprises. Western countries will provide essential technical assistance, but the actual work of negotiating and carrying out the process will have to be done by people with no experience of how the institutions of a normal country actually operate. With a given quantity of administrative resources available for the job, the more rapid the pace of privatization, the less competently can it be carried out.[19]

Second, the enterprise once privatized lacks many of the essential features of normal privatization. None of the new owners have their own private capital to place at risk in the transaction. Management is to be controlled by various institutions, such as mutual funds or pension funds, the officers of which are not principal stockholders but agents of the mass of citizens, each of whom owns a few shares. Neither enterprise managers nor their institutional monitors have ever owned a piece of productive property, sold or bought in a market, studied an income statement or balance sheet, or written a personal check on their own private bank account.

Privatization under these conditions does not produce what one has in mind by the term "private enterprise." It might better be called a "privatoid enterprise," having some but not all of the properties of a private enterprise. Obliged to operate under market conditions instead of central planning, the privatoid enterprise is likely to be more efficient than the state enterprise it had been before. But it cannot be expected to produce the 20 percent efficiency gain that might be attained under normal privatization.

## The Hard Budget Constraint

One of the expected gains from rapid privatization is that the inefficiency caused by the "soft budget constraint" will be eliminated. The case is based on the works of Janos Kornai, who argues that, markets or no markets, as long as the enterprises are owned by the state, managers know that the government will not let them fail and their losses will be made up by subsidies from the state budget. When enterprises know that the state will pick up the bill for unproductive investments and wasteful production expenditures, the enterprises cannot be subjected to cost-economizing discipline.[20]

Kornai's argument is strongest when it is understood in comparative static terms: other things equal, private ownership exerts more pressure for economizing behavior than state ownership. The argument is a critique of those who defend "market socialism" rather than normal capitalism as the long-run goal of normalization.

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[19] The advantage of a more gradual pace of privatization is that people can learn by doing. Errors committed in the first wave of privatizations can be studied and better solutions incorporated in the next wave.

[20] Janos Kornai, *The Economics of Shortage* (Amsterdam: North Holland, 1980).

Like the efficiency-gains argument, however, it is not directly applicable to the dynamic process of transition from one static state to another. In fact, in addressing the question of the transition, Kornai concludes that "the sale of state property should *not* be governed by the guiding principle of speed." [21] His concern, like that of most critics of rapid privatization, is that if it is done rapidly it cannot but be done badly, which would hamper, rather than promote, the transition.

A major source of the efficiency gain expected from rapid privatization is that the privatized enterprises would no longer have a claim on the subsidies they received when they were state-owned. If subsidies were in fact rapidly withdrawn, it is indeed likely that many enterprises would suddenly find ways of economizing on inputs and searching out new markets. The question is, will (or ought) the government eliminate subsidies that rapidly?

If it did, it would be the most abnormal of normal countries, for it is the rare country that does not subsidize some production activities, farming and air transport being only two of the more prominent sectors. The case for subsidization is that some socially important national objective would not be attained if left entirely to market forces; and all normal democratic countries accept the legitimacy of that claim in selected instances.

In no country, however, are there more compelling political and social reasons for continued subsidization than in the post-Communist world. The main reason is the high level of unemployment that would occur when market pressures are introduced. [22]

There are at least three waves of unemployment likely to ensue if subsidies were rapidly withdrawn. One is the closing down of enterprises in industries that were of high priority under the Communist regime in the U.S.S.R. but will have to contract greatly under the new political and economic conditions; these are military and heavy industry, the relative sizes of which were larger in the U.S.S.R. than anywhere in the world. The second wave would be the closing of inefficient civilian enterprises that would be unable to survive without subsidies under market conditions. [23] A third wave will be the shakeout of the labor force that had been accumulated in enterprises generally as a consequence of the extreme job-rights and full-employment policies of the Communist government.

Macrostabilization and price decontrol alone are likely to lead to a larger level of unemployment than normal countries usually face under similar circumstances. The government has to deal with that

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[21] Janos Kornai, *The Road To A Free Economy* (New York: W.W. Norton, 1990, 93. The italicized "not" is in the original text.

[22] A recent ILO study forecasts an unemployment level of 10–11 million in Russia by the end of 1992, or about 11–12 percent of the labor force (*Financial Times*, April 28, 1992, p. 3). Other estimates range as high as 40 million. (Geonomics Institute, "The Russian Economy in 1992: Forecasts and Annual Survey of 1991," Middlebury, Vermont, 1992, p.34).

[23] During January-September 1991 about 13,000 Russian enterprises were operating as a loss (Geonomics Institute, "The Russian Economy in 1992: Forecasts and Annual Survey of 1991," Middlebury, Vermont, 1992, p. 34) That number, however, represents insolvency under the relatively controlled price system of the past. As market pricing is expanded, the output prices of some subsidized enterprises may rise and they may be able to cover their costs. In other cases input prices may rise, and enterprises that had been solvent in the past because of subsidized inputs may become insolvent for the first time. Thus the number of loss-making enterprises is reported to have risen after the large price increases of January 1992 (Ibid.). I know of no reliable estimate of the number of enterprises that would have to close down under strict market conditions.

problem politically and socially if there is to be any reform at all. If on top of that inevitable unemployment, however, those three additional waves of workers are thrown onto the yet-unformed job market by the rapid withdrawal of subsidies, one must expect the political reaction to be beyond the capacity of any government to withstand. Privatization or no privatization, one must expect that subsidies will have to be provided for some time, hopefully at a declining rate, if the transition is not to be stopped dead by political reaction. Political necessity is therefore another reason that the economy is unlikely to capture the full potential P percent gain from rapid privatization. [24]

### The Institutional Infrastructure

In a well-functioning normal economy, the privately owned production sector is embedded in an institutional network that includes a great many organizations that provide it with specialized services of many kinds. These include the courts of law and the legal profession, the accounting and auditing professions, the financial and banking institutions, and the marketing and distribution industry. As a private-enterprise economy evolves under normal conditions, that infrastructure develops in proportion to the demand for its services by the production sector.

Since the centrally planned economy had no need for a large infrastructure of that kind, the transition must begin with very few of those services available. Marketization will create the demand for the services, and with sufficient freedom of entry, they should develop apace, but the process will no doubt take many years. During that time legal adjudication of disputes, floating a stock issue, getting a reliable certified audit for a property—all services provided in a normal economy—will not be available.

Therefore, if a huge number of rapidly privatized enterprises are deposited upon a newly marketized economy before those institutions are reasonably well developed, their efficiency will have to be well below their potential. For this reason also, the efficiency gains from rapid privatization will be well below the P percent that might be attained under normal privatization.

### Nomenklatura Privatization

The earliest version of rapid privatization can be found in the 1987 Law on the State Enterprise. That law gave ministry officials and enterprise managers almost a free hand in designing new ownership forms, different from the direct ministry control of the past. The law launched the process that came to be known as "spontaneous privatization." There has since developed in Russia a complex variety of organizational forms that come under the name of "privatization:" lease agreements (*arenda*), small enterprises (*malye*

[24] Compromise solutions are also possible. For example, the government could negotiate firm declining subsidies with the newly privatized enterprises. The notion behind this solution is that what undermines financial discipline is not the subsidy as such, but the prospect that if the subsidy is exceeded, the government will still bail the enterprise out. In principle, a hard subsidy can be as hard a budget constraint as no subsidy. In practice, of course, it will be difficult to hold the line on individual subsidies and to phase them out in time. But it would be better for the government to face that difficulty while it still owns the enterprises than after it has ceded all rights of ownership over them.

*predpriiatii)*, conversion of state properties into cooperatives, concerns (*kontserny)*, state corporations, joint stock companies (*aktsionernye obshchestva*).[25] The government has sought to regain control of the privatization process, but any rapid privatization program will have to be run by the ministerial and managerial officials who ran the economy in the past. It is inevitable that in the rush to privatize, those officials will look after themselves. The consequence is that in the long run the former nomenklatura will end up as the private owners of much property that formerly belonged to the state, or the people.

One objection to nomenklatura privatization is the inequity of it. I can appreciate the impatience that some Russians manifest toward those Western colleagues who lecture them, all too piously, on what their moral responsibilities are. "Rich Americans," they feel, "can afford to worry about equity, but when our economy is on the verge of collapse, equity is a luxury we Russians cannot afford. The hard fact is that the nomenklatura has most of the experience required for our country to recover, and if we have to give them the property to get it to run well, equity should not stand in the way of our one chance for normalcy."

The equity issue is a matter of values, with which only the Russian people can deal. There is also an efficiency aspect, however, that should be taken into account. It is no doubt true that among the former nomenklatura are many officials who may be capable of learning to run their enterprises under profit-maximizing market conditions. It must also be true, however, that many people who grew up in the bureaucratic politics of Soviet management will never learn the very different rules of the market game very well.

It may be noted that in the American business community there is a widely shared view that executives whose careers were made in government contracting never quite make it when they try to retool for the civilian economy, and the record of companies and corporate divisions in converting to civilian production is not very bright either. I expect that the same will be true of many Soviet executives who gain control of state property and try to run it in a market economy.

Rapid privatization will inevitably place the ownership of the former state enterprises largely in the hands of the people who ran them before. Gradual privatization, on the other hand, will leave time for the development of a cadre of true entrepreneurs who have built their own companies on the basis of their proven skills in operating in a market economy and dealing with foreign capitalists. Under the disequilibrium conditions that are likely to prevail for some time, their private wealth should grow rapidly and they will increasingly be in a position to buy out the assets of the state enterprises. In the long run the ownership of the former state property will have been transferred to more competent hands than would be the case with rapid privatization.[26]

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[25] Simon Johnson and Heidi Kroll, "Managerial Strategies for Spontaneous Privatization," *Soviet Economy*, 1991, vol. 7, no. 4.

[26] Political considerations appear to lead to the conclusion that there is no realistic way of preventing the nomenklatura from acquiring ownership of a disproportionate share of state property one way or another. Under rapid privatization, they will end up owning much of the

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## The Chinese Reform

No country has yet completed a post-Communist transition to a normal economy, so there is no direct empirical evidence on what the size of the efficiency gains might be. The Chinese, however, have been moving along a different reform path for well over a decade, and their experience offers some relevant evidence on the potential benefits of stabilization and marketization unaccompanied by rapid privatization. [27]

The success of their reforms is indisputable. The annual growth rate between 1978 and 1990 was 7.2 percent, and output per worker in state-owned industry rose 52 percent during the reform years 1980–1989. Consumption grew at a somewhat greater rate than GDP. Moreover, the transition has occurred with virtually no significant rise in unemployment; the only interruption in growth occurred in 1988–1990 in connection with an anti-inflation stabilization program and the turmoil at the time of Tiananmen.

The Chinese program of economic reform conforms in many respects to the "evolutionary strategy" that has been proposed as an alternative to rapid privatization in the former Soviet Union and Eastern Europe. [28] First, the state retains ownership of the prereform state enterprises, but they have been partly "commercialized;" that is, they buy and sell an increasing share of their inputs and outputs in free markets. They are allowed to retain a share of their profits, and managerial compensation is linked to profits. Prices have been partially decontrolled; prices of output sold under government quotas are still fixed, but over-quota output is sold in markets at free prices.

Second, extremely liberal conditions for free entry have led to a massive increase in the number of nonstate firms, which have provided vigorous competition to the state firms. The nonstate sector has grown by 17.6 percent per annum since 1978 and accounted for 45 percent of total industrial output in 1990. Nonstate-sector firms have been established mostly in rural areas and are largely owned not by individuals but by villages and townships. They are completely independent of higher government authorities, however; they are primarily profit seeking and operate under the same hard budget constraint as strictly private enterprises.

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property by direct grant from the government, as well as by other means. If privatization is spread out over time, the government will be unable to prevent the ministries and managers from simply carving up the enterprises among themselves in the meanwhile. Rapid privatization may then have the advantage of at least "buying them off," so that they will have an interest in promoting economic transformation rather than obstructing it.

A major consideration ought to be the potential popular political backlash from the sense of betrayal by a government that simply turned the people's property over to the nomenklatura and their children. The government's complicity would appear to be greater under rapid privatization than it would be if the appropriation of state property occurred spontaneously over time, without the sanction of the government. This consideration argues for gradual privatization.

[27] This section is based upon John McMillan and Barry Naughton, "How To Reform A Planned Economy," *Oxford Review of Economic Policy*, 8(1), Spring 1992; and Kang Chen, Gary H. Jefferson, and Inderjit Singh, "Lessons From China's Economic Reform," in A. Hillman and B. Milanovic (eds.), *Socialist Economics in Transition*, Kluwar Academic Publishers.

[28] Janos Kornai, *The Road To A Free Economy*, (New York: W.W. Norton, 1990). Peter Murrell, "Big Bang versus Evolution: East European Reforms in the Light of Recent Economic History," *PlanEcon Report*, June 29, 1990; Joseph S. Berliner, "Strategies for Privatization in the USSR," in Michael Keren and Gur Ofer (eds.), *Trials of Transition: Economic Reform in the Former Soviet Bloc* (Boulder: Westview Press, 1992).

Russian circumstances differ from Chinese in a great many well-known respects—economic, political, and cultural—and Russia will have to find a way that is different from the Chinese, as well as from the Polish or Hungarian. The Chinese experience is nevertheless highly relevant to the central concern of this paper—the pace of privatization. It demonstrates the effectiveness of marketization, along with free entry, in an economy whose government has no intention at present of privatizing their state enterprises.

The Chinese economy still has its share of problems. State enterprises still operate under a soft budget constraint, despite which productivity has increased significantly and continuously. The dual price system and the lucrative profit opportunities in the nonstate sector continue to spawn corruption in the nomenklatura, which was one of the factors that brought the protestors out in Tiananmen Square. Nevertheless, if the Russian government could be promised a transition over the next decade that is as successful as the Chinese over the last decade, they would be wise to go for it.

## Conclusion

Most of the efficiency gains that the Russians might look forward to from a successful transformation into a normal economy will come not from the rapid privatization of the large state enterprises, but from the marketization of the economy, the entry of private firms, and the privatization of small productive assets. Moreover, the more rapid the pace of privatization, the smaller the proportion of the potential gains that will actually be realized. Among the reasons are that the enterprises produced by rapid privatization are private in name only, and are not equivalent to private enterprises in a normal market economy; that the "soft budget constraint" cannot be eliminated rapidly because of the unacceptable level of unemployment that would follow the rapid termination of subsidies; that the absence of an infrastructure of legal, accounting, financial, marketing and other institutions of an established normal economy will further reduce the efficiency with which enterprise decisions can be made; and the more rapid the privatization, the more of the state's property that will end up as the private property of the former nomenklatura, many of whom will not be as competent as managers experienced in the operation of a market economy.

A full assessment of the policy of rapid privatization would have to consider not only the gains but also the costs, as well as the complex political issues not addressed here. Since the promise of very large gains is crucial to the case for rapid privatization, however, the policy recommendation that follows from this analysis is that Western governments and international agencies should reconsider the policy of making the privatization of large enterprises a condition of aid. My own view is that the conditions for aid should be confined to stabilization, price liberalization, and the aggressive promotion of entry of newly founded true private enterprises. I also believe that the Russian government would benefit by backing off from the rapid privatization of their large enterprises, but that is for the Russians to decide. It would be irresponsible of the West, however, to pressure the Russians into such a decision, the benefits of which are likely to be much smaller than its proponents assert.

# LARGE-SCALE PRIVATIZATION IN THE CIS REPUBLICS: SOME COMPARISONS WITH CENTRAL EUROPE

By Marvin Jackson *

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## SUMMARY


This paper surveys available information about privatization of large-scale enterprises in the CIS republics and then compares the processes observed with what has happened in Central Europe. No attempt is made to cover the questions of privatization of small enterprises, farms, and housing. The paper starts with a look at the situation in the CIS. Then it summarizes the experiences of Poland, Hungary, and Czechoslovakia, based on the author's previous research on these cases. Differences and similarities are discussed, along with possible reasons for them. The paper ends by suggesting the extent to which the future of the CIS might be seen in the experiences of the Central European countries.


## INTRODUCTION

Most privatization of large state enterprises in the CIS republics, as in Central Europe, will be done in two stages: (a) the conversion of the state enterprise into a joint-stock or limited liability company, and (b) the transfer or sale of ownership shares to legal and physical persons other than the designated property holder for the state. The objective is better management, while the actual transfer of ownership shares involves a major redistribution of wealth and, therefore, major issues of equity.

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In Central Europe, in the minds of citizens, concerns with equity take precedence over concerns with efficiency. Also, the problems of getting any program whatsoever up and running has taken up most of the energy available. This expenditure of energy on getting privatization underway contrasts with much of the western literature on privatization. It focuses on the questions of what should be the forms of institutions, once the process is complete. [1]

The processes began in the Soviet Union before the August 1991 coup, taking the form of setting up joint-stock companies, which were legally possible in the mid 1980s. Sometimes this involved conversion "from above" and sometimes conversion "from below" in the form of employee buy outs. Management employees sometimes acquired property on lease from state enterprises. In fact, leasing was the favorite device for so-called "nomenklatura" and "spontaneous" privatization by the bureaucracy.

At the turn of year, the Russian laws on privatization of 1991 were supplemented by the Yeltsin government through presidential decrees and state regulations in order to provide better regulation of privatization in the public interest. While locally controlled privatization of small enterprises in trade and catering went forward, action on large enterprises was mostly suspended while the legal basis was redefined and better administration set up. An attempt was made to stop leasing of state property to "nomenklatura" companies.

Formal amendments to the 1991 privatization law were submitted to the Russian parliament in May and approved on 11 June 1992 after much debate. Leasing was restored and provisions for voucher privatization added (first planned for late 1992). The result was a compromise between the Gaidar liberals and the "industrialists" or the managers and old economic bureaucracy. One issue was possible discrimination against foreign participants. Another was that the government sought a strong voucher program to distribute ownership widely in the population and opposed takeovers through leases and other devices. [2] The conservatives and old bureaucracy opposed vouchers and sought forms of managerial control by an alliance with workers.

Only Kyrgyzstan, among the other CIS republics, seems to have taken significant steps in privatization. The other republics have announced principles that could yet be changed before their implementation. They have accomplished little in passing laws and setting up the administrative apparatus needed to change their former systems.

Although there are good reasons to have expected rather rapid privatization in Central Europe, the actual privatization of large enterprises has been slow. Also, there is no hard evidence about the effects of various forms of privatization on enterprise efficiency or on the growth of output. There is, however, good evidence from

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[1] See, for example, Joseph E. Stiglitz, "Theoretical Aspects of the Privatization: Applications to Eastern Europe", Working Paper Series, Institute for Policy Reform. Washington, DC, September 1991; and Ken Mayhew and Paul Seabright, "Incentives and the Management of Enterprises in Economic Transition: Capital Markets Are Not Enough", Discussion Paper Series No. 640, Centre for Economic Policy Research, London, March 1992.

[2] On the anniversary of the coup against Gorbachev, President Yeltsin said that the vouchers would be issued on October 1 and would be worth R10,000.

Poland that the new private sector is growing rapidly. If and when the former state enterprise sector can be turned around remains a big question.

Poland, Hungary, and Czechoslovakia in 1990 set up central agencies and careful evaluation on a company-by-company basis in order to control earlier "spontaneous" privatization by the former managers and bureaucrats. Hungary's approach contrasted with those of Poland and Czechoslovakia because it did not rely on a comprehensive privatization law or a voucher scheme. In Poland and Hungary, the new privatization agencies were soon seen as posing too many obstacles to privatization, so recent effort has been directed toward finding ways to accelerate the process. Both country's privatization agencies developed forms of batch privatization in which numerous enterprises could be processed simultaneously through essential preparations for offer. Also, a second look has been taken at the potential benefits of "spontaneous" forms, especially now that more market infrastructure is in place than was the case in early 1990.

One way of evaluating what is happening in Russia as of the summer of 1992 is to consider its program of privatization as having arrived roughly at the same stage as the Central European countries were in the summer of 1990. Judging from this experience, the Russian voucher scheme can be expected to fall behind schedule, if for none other than technical reasons. After all, it took Czechoslovakia two years to get its system going, while Poland still is trying to implement its own program. In any case, the political and technical challenges are much greater in Russia. It remains open if Russia, with the help of international experts, can learn anything from Central Europe to hasten its voucher program.

Case-by-case privatization by a central agency will accomplish little if resources are applied on the same relative scale as in Poland and Hungary. While the head of Russia's Property Committee has already warned against the dangers inherent in direct sales, it can be expected that most privatization will probably take such forms; similar to what already has happened in Poland and Hungary, as well as Russia. That has involved some form of manager and employee takeover. In Russia there are even fewer alternatives to the existing managerial cadres. It would, therefore, pay to consider new variations of "spontaneous" privatization led by managers and bureaucrats that are more in the public interest. Unfortunately, this form of privatization will be politically most successful when it is allied with workers against marketization programs. This constitutes the greatest long-run threat to economic reform in Russia and the other CIS countries.

## THE STATUS OF LARGE-SCALE PRIVATIZATION IN THE CIS

### PRIVATIZATION BEFORE THE AUGUST COUP

According to a World Bank report published last November but written before the August coup, "privatization" began to be a legitimate term among high political figures only in late 1990. [3] Its

[3] Sergei Shatalov, "Privatization in the Soviet Union: The Beginnings of a Transition" Policy Research Working Papers, *Socialist Economic Reform*, The World Bank, November 1991.

euphemism, "destatization" was first used in an October 1990 Plenum of the Central Committee, while the term itself appeared first in the Presidential Decrees drafted in March 1991. The author of the report noted that the Russian Federation, even before the coup, seemed more ready to move swiftly than the Union authorities to implement the concept. [4]

Informal privatization in the sense of greater managerial control of firms dates back to the decentralizing of 1987-1989. The formal institutional framework took the form of leasing assets of state enterprises first to cooperatives and then to joint stock and limited companies recognized by decree of the U.S.S.R. Council of Ministers on 19 June 1990. [5] A big step was taken in the formation of the U.S.S.R. State Property Fund on 9 August 1990. Recommendations for local authorities on small privatization were adopted by the U.S.S.R. Council of Ministers in February 1991. The notion of private property was defined in the Law on Private Enterprise in April 1991, while the June 1991 All-Union law on privatization laid out principles of a privatization program. The Russian Federation laws, however, moved more consistently toward a resolution of conflict between private and socialist property. [6]

The Russian law allowed both open and closed (state owned and employee controlled) joint stock companies. The latter essentially became managerial property if the manager was not carefully limited by central authorities. Cases began to multiply in the second half of 1990. Although the author of the World Bank study did not include closed joint-stock companies in his "spontaneous" category, he did note some 200 known cases of employee buy outs and conversion to closed joint stock companies where managers were the main force. [7] These were certainly mostly "spontaneous," that is, done in the managers' interests. No other estimates of numbers of spontaneous privatization have been found, but by early 1991 "dozens of cases" were being reported each month. [8]

Privatization also came from above. Most conspicuous is the case of the KAMAZ truck factory, employer of 140,000 persons, in July 1990. [9] Some 26 percent of its shares were held by the automotive ministry, with the rest scheduled to be sold to public and foreign investors. Another noteworthy case is that of the conversion of Agroprom units for fertilizer and pesticides to Agrokhim, a joint stock company controlled by Agroprom and ministry officials.

## THE RUSSIAN FEDERATION

After the August coup the confused legal conditions slowed privatization from above. What was happening to "spontaneous" privatization from below is somewhat unclear. Possibilities for mana-

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[4] Unfortunately, the author's judgment might be doubted because he also considered coup leader Valentin Pavlov to be a strong supporter of privatization.

[5] For an excellent analysis of leasing (arendnyi podriad) see: Katlijn Malfliet, "The Contract of Independent Work (Podriad) at the State Enterprise" in *The Emancipation of Soviet Law*, no. 44 in the series, *Law in Eastern Europe*. A.W.Sijtoff-Leiden, Leiden, 1992 forthcoming.

[6] The Russian Law on Privatization of State and Municipal Enterprise of July 1991, Survey of East European Law, 2:8, October 1991.

[7] Shatalov, 10.

[8] Shatalov, 9.

[9] It is suggested that the KAMAZ and BUTEK schemes were developed in 1989-1990 at the direct request of then Prime Minister Ryzhkov. See Shatalov, 12.

gerial manipulation of property would have been greatly increased by confusion in the central bodies as power shifted from union to Russian units. Also, under the new government simplification of the central apparatus resulted in one Ministry of Industry to oversee some 32,000 state enterprises. It would not be expected to exert as close control as the previous multiple branch ministries.

The Russian government found itself in a position not unlike that of Poland's government in 1990 of trying simultaneously to stop misappropriation of property by the nomenklatura and promote rapid privatization. It undertook a series of actions that virtually halted privatization at the end of 1991 and the beginning of 1992, according to Anatoli Chubais, chairman of Goskomimuschestvo—the State Property Committee. By that time, according to one progress report: [10]

> In Russia firms worth about 2 billion rubles were privatized in 1991. They included 127 enterprises in trade and public catering, 47 repair and craft shops, and about 500 industrial enterprises (most of which were small, employing fewer than 200 people). [11] In all, roughly 80,000 new businesses were registered in the course of 1991. While not all of these were "privatized" in the strict sense of the word, they do show that the nonstate sector is growing. The new businesses include nearly 9,000 joint-stock companies, about 3,000 associations, 227 concerns, and 123 consortia. Also registered were about 1,300 commercial banks and more than 110 exchanges. The nonstate sector accounted for about 4% of the total Russian capital stock in 1991 and about 14% of total Russian output.

The legal measures to control and promote privatization encompassed a series of measures that built on the Russian law on joint stock and limited companies of 1990 and the Russian laws on privatization and a citizens' voucher system of 3 July 1991. [12] Included were the Basic Provisions of the Privatization Program of 31 December 1991 (basically setting out targets and priorities by branches of the economy and subordinate governmental units) [13], Decree 66 of the President on Accelerating Privatization of State and Municipal Enterprises (basically aimed at defining the rights and obligations of the various property control committees at all levels of government) [14], and a new government program that was

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[10] It is not known how many of the 2,600 foreign joint ventures were included in the above count. John Tedstrom, "Russia: Progress Report on Industrial Privatization" *RFE/RL Research Report* 1:17 (24 April 1992), 48.

[11] Chubais is reported in EcoTass, 13 April 1992, to have said on January 1, 1992, only 70 enterprises belonged to private owners and 922 to collective owners (as many as 11,000 privatization applications had been filed by March 15, 1992). In Russia, as elsewhere, statistics on privatization at various stages are unreliable.

[12] Tass in English, 3 July 1991 in BBC/SWB-SU, 5 July 1991.

[13] See, for example, *Financial and Business News* (Moscow), January 1992, 14. Earlier, in November 1991, the government set itself a goal of privatizing 70% of state property in a decade. *Financial Times*, 27 November 1991. The above-cited IMF report gave a figure of at least 25% of state enterprises before the end of 1992.

[14] Sources are *Ekonomika i zhizn'*, no. 31, 1991, 15–17, and "Osnovnye polozheniya programmy privatizatsii gosudarstvennykh i munitsipal'nykh predpriyatii v RSFSR na 1992 god, in *Ekonomika i zhizn'*, no. 2, 1992, 18–20. Other measures related to privatization are in *Pravitel'stvennyi vestnik*, no. 8, 1992, 1–4. See citations in Tedstrom, 47–48. A compilation of documents

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proposed to the full parliament on 25 March 1992 as an amendment to the law on privatization of 1991.[15] After much debate, the new law (actually an amended law) passed the Parliament on June 11, 1992.

In the West, reporting of these measures and various public remarks of Russian officials has tended to confuse the situation. It is unclear, for example, on what legal basis and at what point in time new concepts and proposals were to be followed by someone interested in the possibilities for privatization. As elsewhere in Central and Eastern Europe, discussions often confuse "commercialization" or conversion of state enterprises to joint stock and limited companies with "privatization," a term more properly reserved for the subsequent sale or transfer of shares to some other person, legal or physical, than the designated agent of the state (such as the treasury). Many of the large enterprises that had been privatized in Russia have only reached the stage of being converted into joint-stock ownership. They also have benefited from help of Western advisors.[16] This was permitted under the Russian and the earlier Soviet laws passed in 1991, as well as included in the Basic Provisions of the Privatization Program published early in 1992.

In any case, the measures and proposals, culminating in the revised law in June, have followed certain more or less consistent approaches:

First, some sort of large scale program for conversion of many state enterprises to joint-stock companies with subsequent ownership or general property control under a state agency until actual transfer to new "private owners".

Second, transfers of ownership shares by auction, commercial competition, or sale of shares to employees.[17]

Third, some form of advantage to the employees (the "working collective") of large enterprises is offered, such as free or price-discounted shares.[18]

Fourth, some form of wide distribution to all citizens using vouchers.[19]

Fifth, categories of enterprises both where privatization is prohibited and where it is mandatory are defined.

Sixth, variable targets by branch of activity for the percentage share of capital to be privatized for each year are given.

These principles apply to large enterprises. Most of the responsibility for privatizing small and medium enterprises falls to the re-

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and other useful information appearing before 1 March 1992 is available in a special publication of *Ekonomika i zhizn'*, Vse o privatizatsii gosudarstvenn'kh i munitsipal'n'kh predpriiatii v vossiiskoi federatsii (Moscow 1992).

[15] *ITAR-TASS*, 25 March 1992.

[16] For example, Bankers Trust and Daiwa Europe are formulating recommendations for Rosneftegaz Corporation, the Russian State Oil and Gas Company (cited in *PlanEcon Business Report*, 2:10, 13 May 1992, 11); French consultants are working with the automobile company, ZIL (cited in *Finance East Europe*, 2:11, 4 June 1992, 4).

[17] *Izvestiia*, 27 March 1992, 2.

[18] *Financial Times*, 31 December 1931 and 12 May 1992; also Tedstrom, 48.

[19] It was said that up to 85–90% of all Russian state property would be sold off for vouchers (*AP* and *ITAR-TASS*, 16 April 1992, citing the deputy chairman of the Russian State Property Committee, Dmitri Vasiliev. Also, workers' collectives were to be required to prepare plans for such privatization before 1 September 1992 (*PlanEcon Business Report*, 2:10 (13 May 1992), 11, also citing Vasiliev).

publican, regional and local governments. The federation government set ambitious goals, seeking to push republican, regional and local administrations to privatize 42,000 enterprises or 50–60 percent by the end of 1992.[20] There has been significant conflict at this level.[21] Still, it appears that auction activity has proceeded and spread, according to Chubais, even to the outlying oblasts and rayons.[22] He reported that over 5,000 enterprises in public catering, transport, light industry, and construction with a value of R3.5bn had been privatized, and bids for another 19,000 were under consideration.[23] In the case of Nizhni Novgorod (Gorki), Russia's third largest city, which is often cited as a model and has pushed ahead faster than in Moscow or St. Petersburg, the International Finance Corporation has designed a program for 2,000 enterprises, including auctions and commercial sales, sometimes allowing installment payments.[24] A British consulting firm is reported to have worked out plans for privatization and reorganization of Moscow's bakeries; and now Translink GmbH, a German consulting company is the official adviser to Moskomimushchestvo.[25]

The actual number of privatizations of large enterprises since the beginning of 1992 and the actual terms applied remain very unclear in the available materials. This is partly due to the conflicts over the program, which have been part of a broader conflict over economic reforms between Gaidar liberals and parliamentary conservatives, who are allied with or represent enterprise managers. The latter have been trying to use their opposition in order to attract industrial workers to their causes.[26]

One issue was the terms upon which foreigners could participate in the privatization program. The conservatives and the Central Bank demanded that a special exchange rate, even as low as R8 per U.S. dollar, be applied to foreign offers in order to protect the weaker Russian buyers and keep important sectors of the economy from being taken over by foreigners. Instead, the amended law directly regulated foreign participation by restricting some branches and regional economies from foreign purchases.[27]

Since early this year the government's privatization program is said to have been directed to restricting "nomenklatura" privatization that had been taking place under Gorbachev.[28] Yeltsin, himself had hinted against these forces when he set himself against those who would "sabotage" the reforms.[29] In February 1992, Chubais described the failed effort of a dozen former Central Committee members to found a joint stock company with capital of R1 billion in order to take over state property.[30] Still, in May Yeltsin

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[20] *ITAR-TASS*, 10 February 1992; *Financial Times*, 12 May 1992.

[21] See the case of Moscow in: Carla Thorson, "Moscow: The Politics of Reform in One City" RFE/RL Research Report 1:17 (24 April 1992), 51–57.

[22] 6 June 1992.

[23] *Finance East Europe*, 2:11, (4 June 1992).

[24] The World Bank, *Transition*, 3:4 (April 1992), 14; *Financial Times*, 6 April 1992.

[25] *Commonwealth Business News*, supplement to *Ekonomika i zhizn'*, 3; and *Financial and Business News* (Moscow), June 1–17, 1992, 6.

[26] For extensive background, see Philip Hanson and Elizabeth Teague, "The Industrialists and Russian Economic Reform", *RFE/RL Research Report*, 1:19 (8 May 1992), 1–7.

[27] *PlanEcon Business Report*, 2:4, 19 February 1992; and *Financial and Business News* (Moscow), No 24, June 29-July 5 and No. 26, July 13–19, 1992.

[28] *Financial Times*, 23 January 1992.

[29] *Financial Times*, 17 January 1992.

[30] *ITAR-TASS*, 28 February 1992 (cited in BBC/SWB-SU, 29 February 1992).

brought into his government as a deputy prime minister, Vladimir Shumeiko, considered to be an ally of the managers or "industrialists," as they are now called. In May these struggles intensified.[31] After Russia's formal membership in the IMF on June 1, they reached a climax in the Parliament's debates on the government's program, which had been proposed as a law amending the 1991 privatization law. The conservatives opposed the government's plan for vouchers and the restrictions on free or discount shares offered to members of the working collective. At the same time, they pushed for the right of leasing facilities to members of the working collectives, something prohibited a year earlier. Chubais characterized this effort as "the wish of one social group, and the political forces that represent its interests [he was referring to the managers and the old communists in Parliament] to grab part of the property from another social group. There is nothing more to it than that."[32]

The result of the debates was passage of the amended law as a compromise. The lease possibility was put in the amendment, but the government's plan for voucher privatization was also approved.[33] Chubais announced that the debating phase of privatization was now over and the work phase begun.[34]

The main features of the privatization program from the amended law are as follows:[35]

1) The effective "owners" of property pending privatization are Russian Federation State Committee for Management of State Property (Goskomimushchestvo) and the property committees at republican, regional and local levels, whose organization had been dealt with by President Yeltsin's decree of 29 January 1992 on accelerating privatization.[36]

2) Enterprises are divided into those whose privatization (a) is prohibited (natural resources, military installations, historical and cultural facilities, TV and radio broadcast facilities, etc.), (b) is carried out by either the federation or the republican governments (atomic machine-building enterprises, communication and information agencies, printing and publishing houses, health institutions, precious metals and stones processing facilities, etc.), (c) is carried out only by Goskomimushchestvo, with ministerial opinion (transport enterprises, enterprises with a dominant market position, large enterprises with more than 10,000 workers or R150m fixed

[31] Report on the early phases are found in: *Financial Times*, 12 May 1992; *Izvestiia*, 12 May 1992; and *Finance East Europe*, 2:11 (4 June 1992).

[32] Quote from Russia's Radio report, 5 June 1992, as translated in BBC, Survey of World Broadcasts—former Soviet Union, 9 June 1992, C4/1.

[33] The compromise included a government reshuffle in which Khizha of the Russian Unity Bloc spoke of "coalition" government, Shumeiko was given operational direction of the economy, and Gaidar said it was necessary to bring the industrial managers into power. Moscow TV, as reported in BBC, Survey of World Broadcasts—former Soviet Union, 16 June 1992, C2/1. A slightly shortened version of the document is published in *Kommersant*, 1992:24 (8-15June), 22-23.

[34] On Russian Television, as reported in BBC, "Survey of World Broadcasts—former Soviet Union," 9 June 1992, C3/1; 10 June 1992, C2/5; and 23 June 1992, C5/2. BBC, "Survey of World Broadcasts—former Soviet Union," 13 June 1992, C3/1.

[35] Decree Law 2980-1 of 11 Jun 1992 on the 1992 privatization program for state and municipal enterprises, published in Rossiyaskaya Gazeta, 9 Jul 1992 as translated in BBC, SWB/SU, 24 Jul 1992.

[36] For the text in English and commentary, see BBC/SWB-SU, 29 February and 6 March 1992.

capital, alcohol and tobacco plants, facilities for children's food, facilities for provision of petroleum products), (d) is allowed only in keeping with local privatization programs (urban transport, waste treatment, socio-cultural facilities, baths and laundries, etc.), and (e) is mandatory (wholesale and retail trade, public catering, construction materials and construction, processing of agricultural products, food and light industry, enterprises operating at a loss or behind on construction norms, etc.).

3) Formation of enterprises under certain conditions is prohibited or restricted.

4) When enterprises are transformed into open joint-stock companies at the suggestion of the work collective of each enterprise, one of the following variants can be used:

> Variant 1) All members of the work collective can be given 25 percent of the charter capital as non-voting shares and 10 percent of the charter capital as common shares at a 30 percent discount over nominal value (with 3 years to pay), while top managers can acquire up to 5 percent of the charter capital as non-discounted common shares. This variant was the main means of privatization in the 1991 law.
>
> Variant 2) All members of the work collective can acquire up to 51 percent of the charter capital as voting common shares, with no free or price-discounted shares.
>
> Variant 3) With consent of the general work collective, a group of workers, who take responsibility for fulfilling the privatization plan and for keeping the enterprise from going bankrupt, can be given a year to carry out the plan at which time they can acquire up to 20% of the charter capital as common shares; in this case, all workers can be sold 20% of the charter capital at a 30% discount over nominal value.

The election of Variant 2 or 3 requires a 2/3 vote of all workers. Otherwise, Variant 1 is applied.

In all variants, 10 percent of the proceeds from sale of an enterprise, other than the shares sold to members of the work collective, shall be transferred to the personal privatization accounts of workers of the same enterprise.

5) Other sales at auctions shall be open to all buyers, while commercial competition can be based on a restricted number of participants. Enterprises being liquidated shall have their property sold exclusively through auctions.

6) In cases of auction sales, a partnership consisting of no less than 1/3 of the workers of an enterprise can be granted a price-discount of 30 percent (with 3 years to pay).

7) Special provisions apply to property that was leased out before creation of the 1991 privatization law. Work collectives of subdivisions of enterprises operating on the basis of leased facilities can be converted to partnerships or joint stock companies under the present laws, with rights similar to those above concerning the acquisition of shares. Such partnerships shall also be granted a preferential right to conclude a long-term leasing contract, for a period of no less than 15 years.

8) In the law name-bearing privatization accounts (privatization checks or vouchers) were to be introduced no later than 1 November 1992, but the published reform program says merely by the end of 1992. [37] It has not yet been determined what nominal value these will have; figures of R5,000–R,6000 have been mentioned. [38] On the anniversary of the coup against Gorbachev, President Yeltsin said the issue would be on October 1 and would have a value of R10,000 for each citizen.

Every industrial enterprise to be privatized, whether of regional or federal affiliation, will be required to sell 35 percent of its shares for privatization vouchers. Investment companies and funds shall be created to provide for circulation and distribution of funds from name-bearing accounts. Sale of shares in (1) for checks at special auctions to begin in 1993. [39]

9) Enterprises with R50m of fixed capital as of 1 January 1992 will be transformed into open joint-stock companies by 1 September 1992. On July 1, President Yeltsin signed a decree, calling for this work to be completed in the next four months. [40]

10) The program also set targets by named republics, krays, oblasts, as well as Moscow and St. Petersburg cities for ten branches of the economy, ranging roughly from 60 percent to as low as 20–15 percent in a few cases.

11) Given the difficult financial prospects of many enterprises in Russia, it is particularly important that the mandatory categories for privatization include "enterprises operating at a loss", "mothballed facilities and those with incomplete construction for which construction norms have been exceeded", and "enterprises liquidated without established legal successors." On June 14, President Yeltsin signed a decree defining the conditions of bankruptcy and, after hard debate, this was accepted by Parliament on the last day of June. [41]

An enterprise can be considered insolvent (hence, become a possible candidate for mandatory privatization) if it fails to meet its business liabilities or its budgetary (tax) obligations within 3 months, or has liabilities of double the value of its assets. Decisions are referred to the relevant property management committee, with the right of appeal to a court of law.

If the enterprise is then privatized, the new owner(s) are obliged to repay debts, to preserve not less than 70 percent of the labor force, and to guarantee social protection for the staff.

Finally, the reform program published on 11 July called for targets of up to 1/3 of the total production capital by the end of 1993 and up to 1/2 by the end of 1994 to be privatized. Also, in order to accelerate privatization in 1993–1994 there will be a new series of privatization checks and extensive use of bankruptcy for privatization. [42]

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[37] Reform Program of the Russian government, published 11 Jul 1992 in *Rossiyskiye Vesti*, as translated in BBC, SWB/SU, 27 Jul 1992.

[38] *Financial and Business News* (Moscow), No. 24, June 29–July 5, 1992.

[39] Reform Program of the Russian government, published 11 Jul 1992 in *Rossiyskiye Vesti*, as translated in BBC, SWB/SU, 27 Jul 1992.

[40] Published in *Ekonomika i zhizn'*, no. 28, July 1992, 21–23.

[41] *EcoTass*, 29 June 1992 and *Financial & Business News* (Moscow), No. 26, 13–19 July 1992.

[42] *Rossiyskiye Vesti* (as translated in BBC, SWB/SU, 27 July 1992).

It is undetermined just how strong the law will need to be to control the industrial managers. Under the old laws, most conversions to joint-stock ownership resulted in so-called closed companies in which no shares were available to outsiders. [43] Thus, managers and other employees faced no outside dilution of their control. Now the amended law treats closed joint stock companies as state enterprises for purposes of applying privatization.

## OTHER CIS STATES

Less information is available for the other CIS states, partly because less is published and partly because of the accessibility of sources.

### *Ukraine*

According to a recent IMF report, 60 large state enterprises are to be transformed into joint-stock companies this year. The government hopes to privatize two-thirds of the state enterprises in the next 4 to 5 years. [44]

Privatization in Ukraine is based on four laws, recently reported in *Finance East Europe*. [45] They include a law on foreign investment, laws on small and large privatization, and a law on vouchers. Help in drafting them came from a Harvard University Project on Economic Reform in the Ukraine.

The foreign investment law allows foreigners to participate in privatization on the basis of payments in convertible currency, which will be subject to a special exchange rate. Ukrainians can use either savings or vouchers that will be issued free to all citizens (in a value equal to 40 percent of the estimated original costs of assets).

A problem with the vouchers, whose issue is envisaged to begin in the second half of 1992, is the present lack of resolution of a Ukrainian currency. Also there is a need to define the status of citizenship.

The laws give few special privileges to workers or managers (unlike the Russia case). Workers, but not managers, will receive some discount price only if 50 percent of them join in a buyers' association.

"Privatization commissions" are planned to draft a privatization plan for each enterprise. A commission will be made up of buyers, including rival bidders, state and local organs, financial authorities, and the buyers' association of employees, if one is formed. The commission is supposed to submit a unified plan to the State Property Fund, which is the final arbiter.

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[43] In the Maritime Krai, for example, there were reported to be 3600 closed joint-stock companies compared to only 320 open ones. BBC, "Survey of World Broadcasts—former Soviet Union", 23 June 1992, C5/2.

[44] IMF, *Economic Review Ukraine*, April 1992, 12-13. No figures on Ukrainian privatization have been found. Small private enterprises are reported to have increased in number by 4.5 times compared to last year and now employ some 300,000 persons, as reported in BBC, Survey of World Broadcasts—former Soviet Union, 9 June 1992, C3/7.

[45] 2:9 (8 May 1992) and 2:11 (4 June 1992).

*Kazakhstan*

Backgrounds of destatification and privatization in Kazakhstan are described in a recent RFE/RL Research Report. [46] A law that came into effect 1 August 1991, but which seems not to have been widely applied, offered ownership to Kazakh citizens through several forms: leasing, sale, concession, and sale to workers or to outside (domestic) bidders through auction or competitive bidding.

This early law seems to have been more liberal than a recent presidential decree, which is intended to accelerate changes. In any case, the legal status of privatization would appear to be in doubt. According to ITAR-TASS, the parliament on 1 July 1992 had just approved its ninth draft of a law on "defense and support of privatization", with a final approval expected within days. [47] Nothing is known about its contents.

The presidential decree provides for the establishment of economically accountable privatization bureaus, which are to be set up by the State Committee for State Property and to act as intermediaries between buyers and sellers. [48]

A privatization bureau is to begin its work when an enterprise registers an application. The bureau conducts an appraisal of the value of assets and other matters, and then prepares documents, including a recommended form of privatization. Once discussed and accepted by the working collective, the articles of incorporation and other documents are executed.

The decree calls for setting up open joint-stock companies that issue shares, as the basic form of state ownership. Members of a work collective can acquire shares in their own company in the form of free coupons, making up 25 percent of all shares. Shares are nominal and non-transferable. If a worker leaves an enterprise, the shares are not bought back until 5 years later.

The top leaders of enterprises are hired on contract. They, too, receive coupons, in fact 5 times the number given to an average worker.

Of the remaining 75 percent of shares, 5 percent can be purchased without discount by members of the work collective, 10 percent by other domestic enterprises and physical persons, and 10% by foreigners. The rest of the shares, a 50 percent controlling interest, will remain in the hands of a state body—the Ministry of Finance, special financial companies or others. Foreign ownership during the transition to a market system is not permitted.

*Kyrgyzstan*

The focus of interest in privatization in Kyrgyzstan seems to have been agricultural land, not industry. In spite of this, the republic seems to have adopted one of the more liberal privatization measures in the CIS in its laws of January 1992. [49]

The law permits state- and communally-owned enterprises to be converted into joint-stock companies or economic associations,

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[46] Bess Brown and John Tedstrom, "Kazahstan and Kyrgyzstan: Central Asia's Leaders," 1:17 (24 April 1992), 63.

[47] *ITAR-TASS*, 1 July 1992, in BBC/SWB-SU, 4 July 1992.

[48] *EcoTass*, 25 May 1992.

[49] See Brown and Tedstrom, 62–63.

which can be owned by labor collectives, peasants and herdsmen, or other family groups. They can be acquired as private property by citizens and foreign legal and physical persons. The law encourages demonopolization by reorganization, permits bankruptcy, and liquidation of state enterprises.

Payments for shares can be in cash or with vouchers. The latter are to be distributed to citizens on the basis of "contributions of labor," however that might be measured. Special funds can be made available for employee buy outs.

### REMAINING REPUBLICS

Belarus established a Committee for State Property, but as of early 1992 still had no privatization law. There has been some "spontaneous" privatization under lease and joint venture laws through so-called employee buy outs. [50]

Moldova has not made much progress in implementing or even finalizing its law. [51] The law has a novel feature, according to one report. Rather than issue vouchers, citizens who refuse to buy shares can be taxed up to 25 percent to 30 percent. [52] Perhaps this is aimed at the republic's large non-Romanian minorities, who might not otherwise be interested in buying shares.

Georgia's government on June 12, 1992, approved the privatization of trade and public catering through sales and leasing. Priority is given to former employees of these units. Little is known about the situation in remaining republics. [53]

### MAIN FEATURES OF LARGE SCALE PRIVATIZATION IN CENTRAL EUROPE [54]

Given its greater exposure to market economies, one would have expected Central Europe to have moved more quickly to implement privatization. After all, this region had before 1940 actually experienced being market economies, something never the case in most of the CIS area. Also, there were more Central Europeans who had worked in the West, some with the World Bank and other international institutions, who returned to help policy development and institutional change in their countries. Geographical proximity is also an important factor, although, as Albania's case testifies, it does not mean much if effective communication does not take place.

In spite of these expectations, it is probably fair to say that nearly everyone has been surprised by the difficulty of privatization and its slow progress, even in Central Europe. In fact there is yet no body of evidence to show that former state enterprises can, under any conditions, perform efficiently and start to increase

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[50] IMF, *Economic Review Belarus*, April 1992, 12.

[51] BBC, "Survey of World Broadcasts—former Soviet Union", 4 May 1992, B/10.

[52] BBC, "Survey of World Broadcasts—former Soviet Union", 11 June 1992, B/8.

[53] For brief notes, see BBC, "Survey of World Broadcasts—former Soviet Union", 13 June 1992, C3/6 and 19 June 1992, A/1.

[54] For more details and complete citations to sources, see Marvin Jackson, "Practical, Equity and Efficiency Issues in the Privatization of Large-Scale Enterprises", *Discussion Papers on the Economic Transformation: Policy, Institutions and Structure*, No. 1/1992, Leuven Institute for Central and East European Studies, Catholic University Leuven, Belgium. This paper may be obtained by writing to the Institute.

output and employment in the new conditions.[55] The initial expectations understated both the technical-legal and the political problems.

At least part of the initial problem might be attributed to the mistaken expectation that in Poland and Hungary the existing provisions for employee management would provide both a workable and politically acceptable means of company governance within a framework of widening market relations. What is surprising and also an important lesson for the Russians is that institutions of employee management have not responded well to the challenges of restructuring. In fact, they attract little support in Central Europe.

Perhaps on the part of workers, this was a lack of confidence or a fear that their enterprise might be a hopeless case, especially without outside assistance. On a broader political level, fears were raised that the old regime could use employee management to regenerate some form of the old socialist system.

While these issues were being aired, the more immediate problem of "spontaneous privatization" arose in Hungary and Poland. Although the immediate benefactors of this process were not always associated with the Communist bureaucracy, public concerns were quickly raised when the existing managers appeared to be walking off with wealth popularly seen as belonging to the people. The issue was not limited to fellow countrymen, but also was raised in the case of buy outs by foreigners. In fact, existing managers and Western companies often seen as having made a deal against the people.[56]

This was the setting for two responses. First, there was the immediate need for some kind of state oversight of the ownership transformation question. Second, there was the need to develop laws that defined, within a proper democratic forum, the basic principles, objectives and limits of the ownership transformation.

### THE PROPERTY AGENCIES

The Hungarian state property agency (SPA) and the Polish Ministry of Ownership Transformation were both set up in 1990 with the first purpose of controlling spontaneous privatization, a phenomenon dating back to at least 1988 in both countries. Both set out to do so with care and deliberation in an atmosphere of political distrust. In order to avoid the charges of undervaluing national wealth, the agencies sought the assistance of Western experts, usually the international accounting firms and investment bankers. Both focused their efforts to identify especially good candidates among the inventory of state enterprises, whose assets could be carefully valued for a public offering of share purchases.

In both countries case-by-case privatization continues, but it was soon recognized to be too expensive in terms of resources and time. In the first place, the effort strained the very small staffs and experience of the agencies. In the second place, the foreign experts ap-

[55] For evidence, however, of Poland's robust private sector, which consists mostly of newly organized, small and medium companies, see Jacek Rostowski, "Private Sector; Lever of Poland's Economy" a translation from *Gazeta Bankowa*, No. 26, 28 June–4 July 1992 in the *Polish Economic Report 1992*, No. 53, pp. 2-5.

[56] The issue is now raised in Russia. It was best illustrated by the initial success of Mr. Tyminski in the elections in Poland in 1990

peared to be obtaining unacceptably high fees (as much as 25 percent of the companies being transformed). In the final analysis public expectations concerning the net gain from such efforts seemed to be disappointed.

### THE COMPREHENSIVE PRIVATIZATION LAWS

A remarkable characteristic of the approach to privatization in Hungary is the domination of piecemeal approaches. The country has no comprehensive privatization law and its leaders seem disinterested in comprehensive statements of public philosophy concerning ownership transformation. One is tempted to see a certain consistency with the pragmatic approaches of Hungarian Communists under Janos Kadar. Both before and after 1989, the polity and the economy were decentralized, opened up to wider participation, without bothering with what might be called fundamental constitutional statements.

A major linkage between the two developments appears to be both the reduced role of the central economic apparatus and the much wider participation in enterprise decisionmaking, plus a sense that already some competitive and market processes, albeit highly imperfect, were guiding the process. There is also in both periods the absence of a serious consideration given to the role of worker management. One wonders where Hungarian managers seem to have found sources for their own legitimacy in the public eye. Are they seen as having more often earned this right?

In contrast to the Hungarian case, a high priority was given by the Solidarity government in Poland to a comprehensive privatization law. Passing such a law, however, was more complicated than proposing it and it took up much of the energy of the Polish Parliament in the spring of 1990. The result was a law that not only comprehensively attempted to regulate the process, but which also recognized both the rights of workers to approve of and participate in privatization, as well as the general public's rights to some form of ownership distribution. In the latter case, Poland then shared the experience with Czechoslovakia of finding that the implementation of a general ownership distribution scheme was not a simple matter.

### THE REHABILITATION OF SPONTANEOUS PRIVATIZATION

Ironically, by late 1990 both the Hungarian SPA and the Polish Ministry for Ownership Transformation had come under fire for blocking the very processes of privatization they were set up to control. That is, both foreign investors and managers claimed that bureaucratic obstacles were impeding cases of privatization. The response of the SPA was the initiation of its "investor initiated" program in January 1991. In the Polish case, provisions in the laws for privatization through liquidation proved the most workable way to achieve the same ends. A similar approach is now being taken for "fast track" privatization of enterprises with fewer than 500 employees.

In both countries and in Czechoslovakia, important evolutionary processes have been at work in both politics and economics. By 1991 and certainly in 1992 their people exhibit a greater willing-

ness to accept the necessity (perhaps as a necessary evil) of management- and investor-initiation in changing ownership of large enterprises. Several reasons can be suggested.

First, in 1990 and 1991 there have been dramatic developments in the evolution of business-oriented societies, especially in the major cities. This takes the form of changes in the media, public advertising, privatization of shops and offices, movement of business persons in and out of the countries, massive contacts, etc. There are far more local persons who look and talk like western business persons, even if this is still too often more on the surface of things—what is important is that it is not just acceptable behavior. It is the fashion. Whereas in the first months of 1990 there were few events to record in the specialized business reports on the region, now no one can keep up with the action. In fact, no one can keep up with the numbers of new business reports on the region. News is booming, even if the economies are not.

Second, in spite of the continuing restrictions on the privatization agencies, their accumulated experience plus the overall increase in attention and information has probably contributed to a general feeling that management- and investor-initiated privatization is less likely to be against the public interest.

Third, foreign investors have proved to be less interested than many in the region expected. Bargaining has been tougher, with less interest on the side of foreigners in minority deals. At the same time, the need for and advantages of foreign involvement have been re-appreciated.

Fourth, left on their own, workers have found themselves unable to find adequate means of self-help and have found themselves unable to agree on measures to restructure themselves. In the meanwhile, production has fallen and unemployment grown. This has squeezed out any early utopianism and left people ready to bargain.

### INSTANT MASS OWNERSHIP SCHEMES—COUPONS OR VOUCHERS

With important details still to be decided in the Polish approach to mass privatization, it may be premature to compare it to the approach in Czechoslovakia. Before doing that, it is useful to consider the evidence of why either turned to this approach. Was it because of a widespread demand of the people to share in the post-Communist spoils? Or was it done because it offers a fast track to privatize? Or was it done on grounds of efficiency, that it offers an effective way to create markets for management and capital?

The motives of the scheme's innovators in Czechoslovakia clearly did not include egalitarian concerns in the usual sense. They pushed forward with the scheme even after it got behind schedule and appeared likely to flop because of a lack of widespread interest on the part of the public. Initial interest in receiving property distributions died down even in Poland, where it originally had been motivated on equity grounds. There, declining interest followed clarification that the schemes were rather complicated and, in no case, would result in immediately spendable wealth. In fact, as more sober expectations were developed about the real value of assets involved and some evidence that governments might have

prior claims on proceeds, hopes of gaining something probably turned into suspicions that people were being fooled.

Ironically, in Czechoslovakia the last-minute surge of interest on the part of recipients of vouchers seems to have resulted from the creation of a lottery-mentality by the advertising of the investment funds. Not only did they engage in massive advertising, but they made offers quite reminiscent of the American savings and loan associations. But in the case of Czechoslovakia's they have little to lose because vouchers cost only a nominal registration fee.

Poland's government submitted a legislative program on 18 August 1992. It called for issuing a coupon to each citizen at a cost of about 10 percent of an average monthly wage. The certificates will be negotiable and can be invested in one of 20 national investment funds. The funds, in turn, will manage about 400 enterprises. Workers in these enterprises will also be given 10 percent of the total shares free of charge. [57]

## Some Parallels in Practical Experience

The first lesson one might learn from the Central European experience is that citizens in general are more interested in the equity aspects of large-scale privatization than in the efficiency aspects. The second lesson is that the major problem is simply getting a privatization program up and running.

In terms of practical privatization, one can see that Russia and Kyrgyzstan are functionally at the point where the three Central European countries were about two years ago. The basic laws are passed and the administrative apparatus is in place for privatization. But little privatization has been accomplished. The other republics have not reached that point, and must still create the minimum institutional framework.

What would one then predict about achieving actual privatization in the CIS region? If one assumes that Russia, for example, can move in the best case at about the same pace as was achieved in Central Europe, what could one expect in the next few years? First, it proved difficult to generate much privatization on the basis of careful case-by-case consideration of enterprises by the privatization authorities. Second, since it took Czechoslovakia two years to work out details of its voucher program and considering that Poland, although having the principles in law has done very little so far, one should expect the Russians to be still trying to get this program going in 1994. Third, the most important ways of privatization in Poland and Hungary were either through liquidation of companies, usually by selling their assets to employees, or sales to groups of managers, financial institutions, and foreign investors. This should prove also the most important means of privatization in Russia.

There is, of course, no reason to assume that Russia will be constrained or benefit by the same forces as in Central Europe. It is possible that both its policymakers and its advisers could learn from the Central European experience and, thus, move ahead faster. On this point there is little evidence either way. On the

[57] As reported the RFE/RL Daily Report, No. 158, 19 August 1992, p. 5.

other hand, it would seem that the conditions for privatization are far less promising.

Another essay would be necessary to thoroughly cover this issue. But one point stands out and needs to be considered. For many reasons, Russian managers, the "industrialists" mentioned so often now in the Western press, appear to have more power than their counterparts did in Central Europe. Part of their power seems to arise from their support or the support of their policy demands by the workers in their enterprises. Their common causes seem to be both more "employee buy outs" and more financial support from the state budget and banking system in order to avoid or postpone the widespread negative effects of market exposure. An interesting question is how long such an "anti-market" alliance might last. Will Russian managers succeed eventually in using employee buy outs as a stepping stone towards their own emergence as owners and the new capitalists of Russia? One will probably have to wait and see, while hoping that the effect of an "anti-market" alliance is not to return the former system in some nationalist disguise.

# MEASURING THE "PRIVATE SECTOR" IN RUSSIA

By Sandra Hughes and Scot Butler *

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## SUMMARY

Defining the "private sector" in Russia is problematic because neither the leaders nor the people have fully embraced the Western notion of private property ownership, and what the Russians mean by "private property" is often unclear. If we define private property to conform with Western concepts—that is, to cover only property that an owner can use and dispose of as he sees fit, subject only to the constraints of law—then the private sector in Russia is small, accounting for less than 4 percent of the value of fixed capital at the beginning of 1992. [1]

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[1] *Ekonomika i zhizn'*, no. 4, January 1992.



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In Russia, however, there exists a spectrum of ownership and organizational forms between full state ownership and control at one extreme and full private ownership along Western lines at the other. Enterprises that have adopted these quasi-private forms of ownership and organization, although subject to varying degrees of state control, often outperform their fully state-owned and operated counterparts by acting more responsively to market signals. When these quasi-private enterprises are included in our definition, the private business sector is fairly large and growing rapidly, employing over 15 percent of Russian workers in 1991, as compared with less than 10 percent in 1990 (see Figure 1).

This concept of a private business sector includes joint-stock companies, lease holdings, cooperatives, small private businesses, joint ventures and foreign-owned firms, and private farming. Defined in this way, the private business sector has considerable impact on the economy, accounting for about a third of trade volume and consumer services, a quarter of agricultural output and contract construction, and a fifth of industrial output. In the housing sector, which we deal with separately, a quarter of living space is privately owned.

The enterprises that comprise the private business sector can be former state enterprises (or parts thereof) that have been privatized, state enterprises undergoing privatization, or entirely new businesses. Although self-initiated privatization and some government-sponsored privatization experiments have been under way for several years, the first official privatization program was issued only in the closing days of 1991. Through May 1992, privatization conducted under the auspices of the official program consisted mainly of converting enterprises from quasi-private status to private status, usually through a worker buy out, and had therefore not yet enlarged the private business sector as a whole.

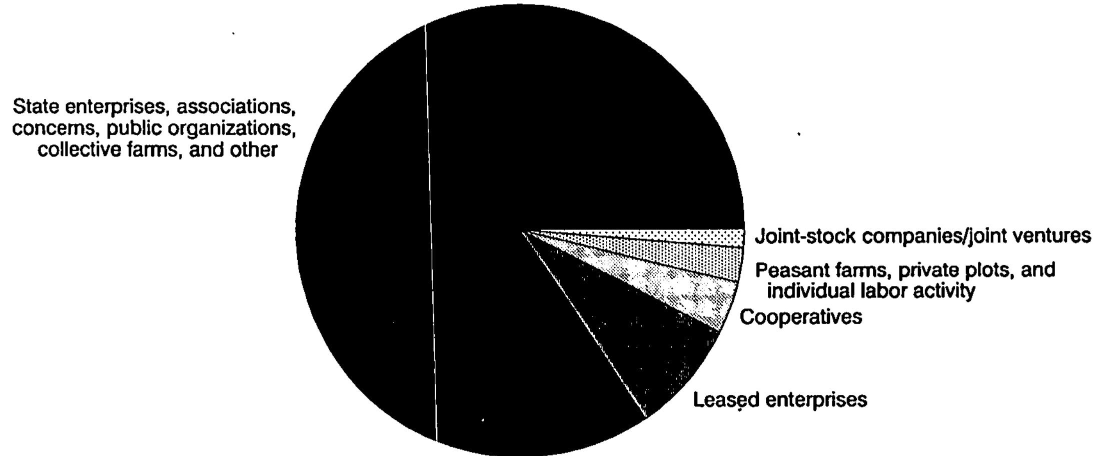
## Problems of Definition and Measurement

This paper attempts to establish a baseline as of early 1992 for measuring Russia's future progress toward a market-oriented economy. The sector we are calling private business is evolving in an experimental and uneven manner, and there are inconsistencies in how the Russians use the terms "private," "privatized," "destatized," and "nonstate" in referring to property. Also, in reporting the number of enterprises that have been privatized or organized as new private businesses, Russian sources sometimes stipulate whether they are operational or merely registered (i.e. "on paper"), but sometimes they do not. We have tried to differentiate between the two where possible because the difference tends to be significant in some categories, especially joint ventures, joint-stock companies, and peasant farms.

Such definitional and statistical problems can lead to discrepancies in the data. We present those data from official Russian sources that appear most reliable and relevant to our task. We have relied on our understanding of how the private sector is developing, based on an extensive reading of descriptive sources, to make some judgments about what given statistics on nonstate own-

Figure 1

## Employment in Russia, by Form of Organization, 1991




*Percent*

Note: Figures on employment in small private businesses are not available. During 1991, many cooperatives and individual labor activities registered as small private businesses. Because employment figures are averages for the year, many workers in small private businesses at yearend were probably still categorized elsewhere in the employment figures.

Source: 1991 CIS Economic Performance Report, *Ekonomika i zhizn,* No. 6, February 1992.

ership cover. We have measured the degree of private business activity in the economy on a sector-by-sector basis. [2]

## PRIVATE AND QUASI-PRIVATE FORMS OF OWNERSHIP

Beginning in 1985, the U.S.S.R. Government introduced various alternatives to full state ownership and management of enterprises in order to begin the transition to a more market-oriented economy. Of these variations, the following forms of ownership are included in our concept of the private business sector. [3]

### JOINT-STOCK COMPANIES

In 1990 the U.S.S.R. Government began to allow the formation of joint-stock companies as a means of promoting nonstate ownership of large businesses. [4] To form a joint-stock company, a business issues shares for its entire assessed value. Shareholders are liable only within the limits of their investment. As of the end of 1991, there were 8,900 joint-stock companies operating in Russia. [5]

Joint-stock status in Russia does not mean, as it does in the United States, that a company is privately owned. According to a survey by the Russian statistical administration published in early 1992, 85 percent of the shares in all joint-stock companies are held by state-owned enterprises or the government. [6]

Despite the authorities' professed intent of using this form of ownership to eventually privatize large state-owned businesses, only one-tenth of the joint-stock companies in Russia so far are former state enterprises. These enterprises are typically in the manufacturing and extractive sectors. Many were formed through worker buy outs, usually as the result of the lessees exercising the option to buy in their lease contract, and are known as "collective" enterprises. The other 90 percent of Russian joint-stock companies are new businesses, many of which provide financial and middleman services. [7]

### LEASE HOLDINGS

Under leasing, the state continues to own an enterprise but rents the plant and equipment to the workers on a long-term basis, usually five years or more. The lessees run the enterprise and control the profits, although the state can stipulate in the lease agreement that the enterprise continue to fulfill "state orders" for certain goods at a state-set price. Leasing was introduced on an experimental basis in 1985, and since the enactment of the U.S.S.R. Law on Leasing in January 1990, the number of leased enterprises has grown steadily to several thousand enterprises in each of the indus-

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[2] We do not attempt to include measures of Russia's still large black-market sector.

[3] Russian statistics have also reported on the number of the following "new" or "alternative" structures: state interbranch associations, concerns, consortiums, associations, and unions. We have not included these in the private business sector because of indications that they continue to function in the same way as the state enterprises from which they were formed.

[4] Related to joint-stock companies are partnerships (*tovarishchestvo*), whose exact place in the private business sector is not clear from the statistics. In the 1991 Russian economic performance report, 65,000 partnerships (not previously identified) were reported as registered. They may in part be small businesses or limited liability companies.

[5] *Ekonomika i zhizn'*, no. 4, January 1992.

[6] *Ekonomika i zhizn'*, no. 8, 1992.

[7] Ibid.

trial, trade, service, construction, and agricultural sectors. Leased enterprises tend to be among the top performers in the economy because workers are usually given profit-sharing incentives.

COOPERATIVES

Cooperatives are small businesses owned and operated by three or more partners who share the profits. Introduced on an experimental basis in early 1987 and legalized in 1988, cooperatives initially concentrated on the production of consumer goods and services. Public resentment of the high prices cooperatives charged and the high profits they earned, however, led to enactment of restrictive legislation and high taxes that made it difficult to stay in business as independent operators. As a result, the cooperatives changed, and roughly two-thirds of the 110,000 cooperatives in Russia as of the end of 1991 were sponsored by state enterprises. Ties to state enterprises give cooperatives access to supplies and equipment that are in short supply and also provide steady customers; about 90 percent of the goods and services provided by cooperatives is sold to their sponsoring state enterprises. [8] Despite their strong ties to state enterprises, cooperatives behave in many ways like independent businesses, offering salaries linked to productivity and seeking out new customers and avenues of enterprise.

SMALL PRIVATE BUSINESSES

In August 1990, the U.S.S.R. Government for the first time allowed individuals to own private businesses and to hire and fire workers. Prior to this decree, individuals could be self-employed under the status of "individual labor activity," but they could not hire help. Small businesses are limited in size by law to up to 200 workers in industry and construction, 100 workers in scientific services, 50 workers in other productive sectors, 25 workers in other service sectors, and 15 workers in retail trade. The state granted small businesses tax preferences that have made this form of ownership generally preferable to cooperative status. In early 1992 there were about 60,000 privately owned small businesses in Russia. [9]

JOINT VENTURES AND FOREIGN-OWNED FIRMS

Moscow began allowing foreign firms to enter into joint ventures with Soviet enterprises in 1987 and to establish fully foreign-owned businesses in 1990. Most of the Russian partners in joint ventures are state-owned enterprises. Because of political and economic uncertainties and restrictions on repatriating ruble profits, foreign investors have tended to capitalize their firms lightly. Despite these limitations, the number of operating joint ventures nearly doubled in 1991 from 620 to 1,200. [10] Many joint ventures and foreign firms serve the foreign community and charge hard currency for Western-standard products and services.

[8] *Delovoy mir,* 5 November 1991.
[9] *Rossiyskiye vesti,* no. 4, 24 April 1992.
[10] *Rossiyskaya gazeta,* 15 February 1992; *Ian,* 14 October 1991; *Kommercheskoye obozreniye,* no. 56, 6 March 1992.

### PRIVATE FARMING

In addition to the long-standing traditions of private plots and collective gardens, *perestroyka* introduced cooperatives as a form of private farming. A more recent innovation is the widespread introduction of peasant farms, formed when individuals or small groups apply to state and collective farms or local governments for parcels of land (about 40 hectares on average). Difficulties in obtaining credits, seed, feed, fuel, fertilizer, and machinery, however, remain major disincentives to farmers to strike out on their own.

## THE SIZE OF THE PRIVATE BUSINESS SECTOR

### INDUSTRY

Between 15 and 20 percent of industrial output in Russia is produced by enterprises operating under various quasi-private forms of ownership, (see Figure 2) but most of these enterprises are subject to a high degree of continued state control.

*How Many?*

Of the approximately 27,000 industrial enterprises in Russia, the number that the state leased to workers or sold grew steadily in 1991. [11] The number of industrial enterprises operating under leasing nearly doubled during 1991 to 3,000, employing 11 percent of industrial production personnel. [12] Far fewer industrial enterprises were transferred out of state ownership, although their number nearly doubled in the second half of 1991. The number of joint-stock companies increased from 80 to 162, of collective (worker-owned) enterprises from 154 to 272, and of small privately owned industrial enterprises (averaging 20 employees each) from 39 to 70. [13] About a quarter of these are in the food processing industry, [14] which, if taken together with light industry, is the only industrial sector targeted for substantial privatization in 1992.

In addition to the conversion of entire state-owned industrial enterprises to private and quasi-private forms of ownership, smaller manufacturing operations have been set up by cooperatives. Manufacturing cooperatives are rarely independent operators but consist mostly of individual workshops that split off from large factories, from which they rent their manufacturing machinery and to which they sell most of their output. By sponsoring cooperatives, state enterprises are able to evade state-set caps on wages and prices and other legal restrictions on their operations. At the start of 1991 about 22,000 cooperatives—20 percent of all cooperatives in Russia—were involved in the production of industrial goods. They

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[11] Russian statistics are inconsistent in their reporting of the total number of industrial enterprises as of a given date. For example, the 1990 official Russian statistical yearbook (*Narodnoye khozyaystvo RSFSR v 1990 g.*) reported that in 1990 there were 1,607 leased industrial enterprises, said to be nearly 8 percent of a total of 20,553 industrial enterprises. Elsewhere in the same volume, the total number of industrial enterprises is reported to be 26,900.

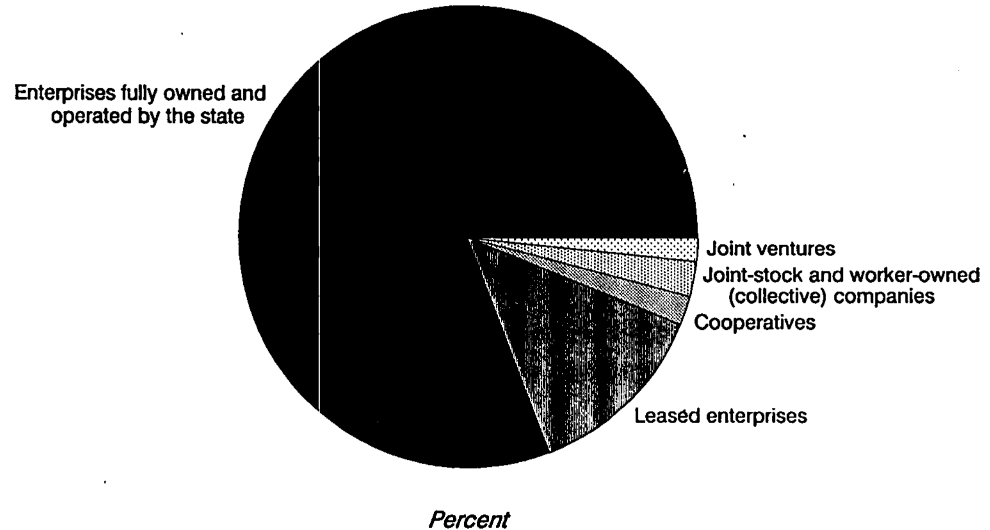
[12] *Ekonomika i zhizn'*, no. 6, February 1991; *Gosudarstvenniy komitet Rossiyskoy federatsii po statistike, Ekonomicheskoye polozheniye Rossiyskoy federatsii v yanvare-fevrale 1992 goda*, Moscow 1992, p. 175.

[13] *Rossiyskaya gazeta*, 30 July 1991; *Vash partner*, no. 49 (supplement to *Ekonomika i zhizn'*), 2 December 1991; *Gosudarstvenniy komitet Rossiyskoy federatsii po statistike, Ekonomicheskoye polozheniye Rossiyskoy federatsii v yanvare-fevrale 1992 goda*, Moscow 1992, p. 172.

[14] Interfax, 23 April 1992.

Figure 2

## Share of Industrial Output in Russia, by Form of Organization, 1991 (estimated)




Source: Russian Federation Goskomstat and other official Russian sources.

employed 706,000 workers, equivalent to about 3 percent of the total industrial employment of 21 million persons.[15] Another 210,000 individuals were engaged in cottage industries, mostly out of their homes.[16]

*How Much Do They Produce?*

In 1991 industrial enterprises leased from the state produced 13 percent of total industrial output, up from 6 percent in the previous year.[17] At the end of the first quarter of 1992, joint-stock companies (including collective enterprises) were contributing an estimated 2 to 3 percent of industrial output. Although joint ventures' contribution to overall industrial output in 1991 was small (less than 2 percent), they produced 10 percent of telephones, 7 percent of computers and computer parts, and 4 percent of clothes making equipment.[18] Manufacturing cooperatives apparently also accounted for about 2 percent of overall industrial production, but more—about 5 percent—of certain consumer goods such as furniture, footwear, and clothing.[19]

*Outlook*

Despite industry's importance to overall economic performance, widespread privatization is not scheduled to begin in this sector until 1993. The preferred method of privatization will involve converting industrial plants into joint-stock companies and then selling off their stock to private investors. Experience shows this method to be both legally complex and time consuming; the Russian plants that started down this road over the past several years have taken over a year on average to progress from the initiation of legal action to the first offering of shares. Moreover, polls indicate that the public is still apprehensive about switching huge plants that were portrayed as the pride of Soviet economic accomplishment to private control. According to the 1992 Russian privatization program, privatization of large industrial plants requires special authorization by the Russian Government, and the state may retain ownership of a controlling block of shares in large factories for up to three years.[20]

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[15] Goskomstat R.S.F.S.R., *Osnovniye pokazately deyatel'nosti kooperatov RSFSR za 1990 god,* Moscow 1991, p. 10.

[16] Goskomstat R.S.F.S.R., *Narodnoye khozyaystvo RSFSR v 1990 g.,* Moscow 1991 (hereafter *1990 RSFSR Narkhoz).*

[17] *Ekonomika i zhizn',* no. 6, February 1991; *Gosudarstvenniy komitet Rossiyskoy federatsii po statistike, Ekonomicheskoye polozheniye Rossiyskoy federatsii v yanvare-fevrale 1992 goda,* Moscow 1992, p. 175. Official Russian statistics report output by leased industrial enterprises as a percentage of total industrial output, but it is unclear from what baseline the percentage figure is tabulated. In the *1990 RSFSR Narkhoz,* for example, leased enterprises were reported to have produced 31.3 billion rubles of output in 1990, and claimed 6.2 percent of the total volume of industrial output. This would lead to a calculation of total industrial output worth 505 billion rubles, but, in the yearbook's entries on the industrial sector, total output is reported as 550 billion rubles.

[18] *Ekonomika i zhizn',* no. 17, April 1992, *Kommercheskoye obozreniye,* no. 56, 6 March 1992; *Ian,* 14 October 1991.

[19] *Delovoy mir,* 5 November 1991.

[20] All references to the Russian privatization program are taken from "Basic Provisions of the Program for the Privatization of State and Municipal Enterprises in the Russian Federation in 1992," *Rossiyskaya gazeta,* 10 January 1992.

## TRADE AND CONSUMER SERVICES

The trade and consumer services (*bytovoye obsluzhivaniye naseleniya*) sectors are the farthest along in moving away from state ownership and control, with over a third of retail trade turnover and almost a third of consumer services provided by worker-owned enterprises and cooperatives and by state enterprises operating under leasing.[21] By spring 1992, few trade and service outlets had been sold to individuals, however.

### *How Many?*

Leasing, often followed up by a worker buy out, has been the primary route for moving shops, stores, and restaurants out of the state sector (see Figure 3). Although there are many indications that leasing and the sale of leased enterprises to their workers increased significantly in 1991, the exact size of the increase is difficult to determine because of inconsistencies in the way the data have been reported over time. What is counted as a single enterprise in the overall trade sector statistics, for example, can in fact be a conglomerate of many outlets operating under a single trust (*torg*). As these trusts are leased or sold by the state, they may be disaggregated into several small businesses. Although the number of trade sector trusts reported to be operating under leasing at the start of 1991 represented less than one-half of 1 percent of the total number of trade enterprises, they employed 12 percent of the trade sector work force.[22]

By the end of 1991, the state had leased or sold in excess of 40,000 retail trade, public dining, and consumer service enterprises to labor collectives, out of a total of some 690,000 such state enterprises. It sold another 2,250 such properties in the first quarter of 1992 to collectives that exercised the right-to-buy option in their lease contract.[23]

At the end of 1991 individuals owned very few trade and consumer service outlets—only 109 retail trade shops, 38 public dining businesses, and 26 consumer service shops. Sales to individuals picked up somewhat in early 1992 with the introduction of auctions of small state properties. In January and February private individuals bought 153 stores and trading stalls, 58 public dining businesses, and 18 service shops from the state.[24]

Cooperatives are significant in the consumer services sector but are of little consequence in the trade sector. As of 1 January 1991, 13,500 cooperatives employing 204,800 persons, including "moonlighters," provided consumer services to the population. This was equivalent to almost 10 percent of the number of consumer service establishments in the state sector and 13 percent of their labor force. In comparison, cooperatives accounted for only about 1 percent of the number and labor force of state dining facilities and retail trade enterprises. Another 73,000 self-employed persons pro-

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[21] In Russian statistics, the trade sector consists of two parts: retail trade (stores, shops, kiosks, stalls) and public dining (restaurants, cafes, buffets, and snack bars).

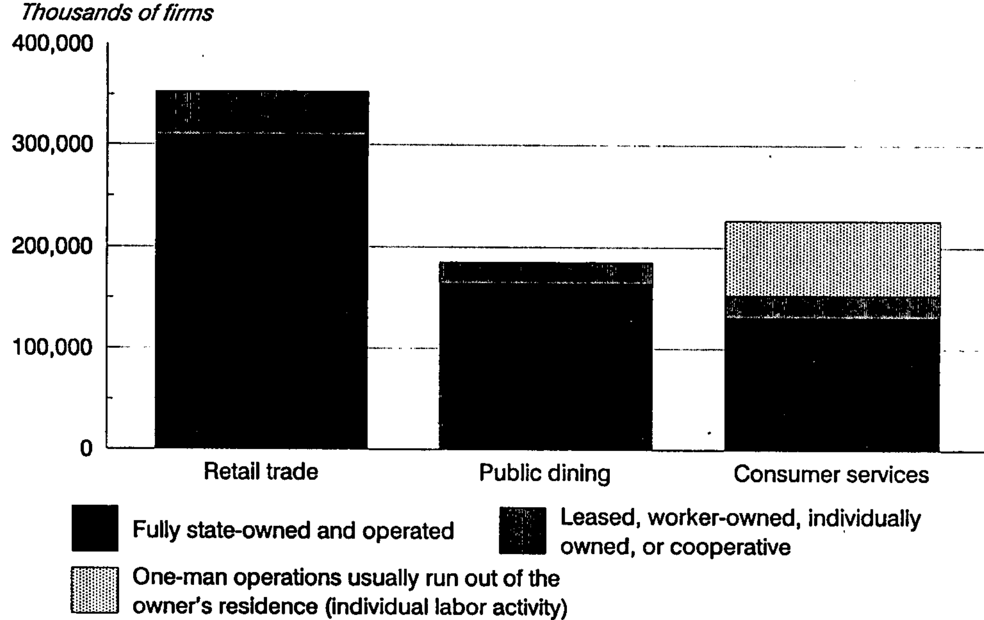
[22] *1990 RSFSR Narkhoz*, pg. 63.

[23] *1990 RSFSR Narkhoz*, p. 63, 70; *Torgovaya gazeta*, 29 June 1991, *Rossiyskaya gazeta*, 27 March 1992.

[24] *1990 RSFSR Narkhoz*, p. 70; Interfax, 23 April 1992; Russian Federation Goskomstat, *Press vypusk*, no. 52, 7 April 1992.

Figure 3

**Where a Consumer Could Go to Shop, Eat, or Have a Service Performed in Russia, 1991 (estimated)**




**Source: Various publications of the Russian Federation and USSR Goskomstats.**

vided consumer services while operating under the rubric of "individual labor activity." [25]

*How Much Do They Produce?*

The trade sector trusts that operated under leasing, while only 0.2 percent of the total number of retail trade firms in 1990, accounted for 18 percent of trade turnover that year. When small-scale leased components of enterprises began to be also counted in performance statistics, the contribution of lease holders to retail trade turnover increased significantly—to 34 percent in 1991. Sales by joint ventures made up an additional 1 percent of trade turnover, and the contribution from cooperatives was even less. [26]

In the consumer services sector, enterprises that fully operated under leasing provided 11 percent of the volume of services in 1990, and cooperatives provided about 18 percent. [27] In addition, self-employed individuals provided a significant, but unquantified, share of consumer services.

*Outlook.*

The Russian Government's privatization program calls for 60 percent of retail trade and consumer service establishments and 50 percent of public dining enterprises to be sold during 1992, 90 percent through public auction or competitive bids. The drafters of the program believe that small shops can be privatized easily and quickly because valuation is less difficult than for large enterprises and because polls indicate that the public has little opposition to small-scale private business. Nonetheless, as of March 1992, only about two dozen auctions handling a few properties each had been conducted throughout Russia. [28] Although the privatization plan's timetable is unrealistic, the program shows the Russian Government's intention to make trade and consumer services the showplace sectors that demonstrate the worth of privatization. Privatization of shops and stores will probably pick up steam with the issuance of privatization vouchers to the population, scheduled to begin in the fourth quarter of 1992. The vouchers, called personal privatization accounts, are to be distributed free of charge to all Russian residents and can be redeemed to buy state property subject to privatization.

## AGRICULTURE

The agricultural sector embraces a wide variety of organizational forms. Although large state and collective farms have 94 percent of agricultural land under their combined control, the private sector accounts for about a quarter of the value of overall agricultural

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[25] *1990 RSFSR Narkhoz,* pp. 60, 65, 71, 109, and 183. The cooperatives discussed in this paragraph are producer cooperatives in the consumer services sector and should not be confused with "consumer cooperatives," which are adjuncts to state enterprises and are included in our calculation of the size of the state trade sector. According to the *1990 RSFSR Narkhoz,* about half of the 367,400 retail trade enterprises and about 20 percent of the 182,000 public dining enterprises in the state sector at the end of 1990 were consumer cooperatives.

[26] *1990 RSFSR Narkhoz,* pp. 63, 71, 183; Russian Federation Goskomstat, *Press vypusk* no. 52, 7 April 1992.

[27] *Narodnoye Khozyaystvo SSSR v 1990 g.,* pp. 55, 60.

[28] *Rossiyskiye vesti,* 14 April 1992.

output, primarily because the traditional personal household plot holder concentrates on high-value products.

*How Many?*

The area worked by individuals and cooperatives roughly tripled between the beginning of 1991 and the first quarter of 1992 but still amounted to only about 5.5 percent of total agricultural land (see Table 1). [29]

TABLE 1. Private Agricultural Activity

| Type of Activity | January 1991 | | Early 1992 | |
|---|---|---|---|---|
| | Units (Thousands) | Hectares (Millions) | Units (Thousands) | Hectares (Millions) |
| Peasant farms | 4.4 | 0.2 | 95 | 3.9 |
| Farming cooperatives | 5.0 | 0.2 | 6.5 | 2.6 |
| Personal household plots | 16,000 | 2.9 | 18,600 | 3.8 |
| Collective orchards and gardens | 13,620 | 1.0 | 25,500 | 1.8 |

Source: Russian Federation Goskomstat.

Peasant farming is the focal point of current privatization efforts and is by far the fastest growing area of private agricultural activity. Private agricultural cooperatives, although introduced several years ago, employed only 0.6 percent of the approximately 10 million agricultural workers as of mid-1991. [30] Household plots have existed since the earliest days of collectivization and were originally intended to supplement food supplies and money incomes of collective farm workers. In more recent years, they have been encouraged as a way to spur the initiative of private citizens in agriculture. Those who tend personal household plots still consume over half of what they produce and can operate with a limited infrastructure and marketing network. The collective orchards and vegetable gardens are generally operated by families in urban areas to produce fruits and vegetables for their own consumption and public sale. They have been compared to the neighborhood "victory gardens" fostered in the United States during World War II. In number and area, they nearly doubled between January 1991 and spring 1992.

The land reform decree of 29 December 1991 requires state and collective farms to privatize by adopting alternative forms of organization and management in 1992. In the first quarter of 1992, 3,600 of the 26,000 state and collective farms reregistered their

[29] Within the traditional structure of state and collective farms, lease holding is widespread. At the beginning of 1991, 16,200 state and collective farms (63 percent of the total number) had introduced leasing operations in some phase of their work; 2,300 of them (9 percent) operated fully under leasing. One-fourth of the workers employed on collective and state farms and one-fourth of the fixed capital of these farms fell under leasing arrangements. We have not included these operations in our definition of private agricultural activity because they reportedly depend almost completely on state and collective farms for inputs and must sell most of their output to the "parent" farm. Therefore, they have less operational independence than leased enterprises in other sectors.

[30] *Delovoy mir*, 5 November 1991.

legal status, including 390 as associations of peasant farmers, over 2,000 as joint-stock companies, and over 65 as cooperatives.[31]

*How Much Do They Produce?*

Peasant farms, while portrayed as potential competitors of the state and collective farms, are not yet able to contribute significantly to the food supply, accounting in 1991 for less than 1 percent of agricultural output. In 1990 and the first half of 1991, cooperatives also provided less than 1 percent of agricultural output.[32] Meanwhile, personal household plots produced almost one-quarter of Russia's agricultural output in 1990—28 percent of livestock production and 18 percent of crop production. In 1991, output from these plots grew by 5 percent while total agricultural output in Russia declined. Collective gardens and orchards yield significant quantities of fruits and vegetables relative to the amounts of land allocated to them—20 percent of fruits and berries, 10 percent of potatoes, and 9 percent of vegetables produced in 1990. In 1991 personal household plots and collective gardens combined accounted for 72 percent of total production of potatoes and 47 percent of vegetable production.[33]

*Outlook*

The government should meet its stated goal of establishing 150,000 peasant farms by the end of 1992, when they are expected to provide over 3 percent of farm output. Peasant farmers will continue to be hampered, however, by the lack of private supply and marketing networks. Private plots and collective gardens, meanwhile, will probably continue to increase in number, but perhaps at a lower rate following a slowing trend in the first quarter of 1992. Most state and collective farms are likely to move toward privatization slowly, hoping for a continuation of government support while they try to determine the most advantageous of the new organizational options.

## CONSTRUCTION

Private and quasi-private building contractors perform about a quarter of contract construction work in Russia.[34] Overall contract construction has been declining since 1989, in part because of difficulties contractors have had acquiring construction materials.

*How Many?*

Private construction activity is conducted mostly by construction cooperatives, many of which are offshoots of large state construction trusts. Construction cooperatives make up about 40 percent of the total number of all cooperatives in Russia, making them the largest sector group of cooperatives. As in industry, most construc-

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[31] Russian TV, 7 March 1992; Interfax, 20 March 1992.

[32] *Argumenty i fakti* no. 4, 1992; *Delovoy mir,* 5 November 1991.

[33] *1990 RSFSR Narkhoz,* p. 452; *Ekonomika i zhizn',* no. 4, January 1992.

[34] Contract construction represents the output of the construction industry. It consists of the work performed by contract construction organizations (generally trusts and their components) on the basis of contracts formalized with clients. About 84 percent of all construction work (exclusive of housing construction) in Russia is contract construction, the balance being carried out by enterprises and organizations using their own "in-house" construction departments.

tion cooperatives are affiliated with state enterprises and ministries. The number of construction cooperatives grew swiftly at the end of the last decade (from 2,200 in 1988 to some 48,000 in 1990), but the number dropped during 1991 to 43,000. Out of these, only about one-quarter were actually performing contract construction. They accounted for roughly 8 percent of the total number of workers in contract construction organizations of all forms of ownership.[35]

Of 1,886 construction trusts in 1990 220 operated fully under leasing and employed 448,000 workers, or 7 percent of the construction sector work force. By early 1992 5,000 leasehold contracting businesses were reported to be operating in construction, but this figure apparently includes many organizations smaller in size than trusts.[36]

### *How Much Do They Produce?*

In 1990 leased construction trusts provided 9 percent of contract construction, and construction cooperatives provided 16 percent.[37] The output of construction cooperatives apparently declined in 1991, and their proportion of contract construction dropped to 9.5 percent at mid-year, along with an overall decline in contract construction. Yet the slack in their performance was apparently made up by lease holdings, joint ventures, and joint-stock companies because state organizations contributed only 70 percent of contract construction in the first quarter of 1992.[38]

### *Outlook*

Construction enterprises, construction materials, and unfinished construction projects are all major targets of the privatization program. Twenty percent of unfinished construction projects are to be sold in the first phase of privatization (defined in the program as the first three quarters of 1992). Seventy percent of construction enterprises and half of those in the construction materials industry are to be sold in the second phase (defined as starting in the second half of 1992). Small enterprises are to be auctioned off and large organizations converted into joint-stock companies.

## FINANCIAL AND COMMERCIAL SERVICES

Commercial banks and commodity exchanges are among the most dynamic of the newly emerging market institutions and have started to provide services that are key to facilitating entrepreneurship in other sectors.

### *How Many?*

The transformation of Russian banking from a single state-run banking system to a two-tiered system began in 1988, and by early 1992 there were 1,600 banks with 2,000 branches within the commercial banking system—all banks except for the Central Bank of

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[35] Goskomstat RSFSR, *Osnovniye pokazately deyatel'nosti kooperatov RSFSR za 1990 god,* Moscow 1991; *Delovoy mir,* 5 November 1991; *1990 RSFSR Narkhoz,* pp. 527, 529.

[36] *1990 RSFSR Narkhoz,* pp. 63, 527; *Razvitye* no. 10, 1992.

[37] *1990 RSFSR Narkhoz,* pp. 63, 527, 529.

[38] *Delovoy mir,* 5 November 1991; *Kommercheskoye obozreniye* no. 56, 6 March 92; *Ekonomika i zhizn',* no. 17, April 1992.

Russia. About two-thirds were created from the breakup of the specialized former state banks, with the remaining being sectorial banks created to service specific industries or banks that represent various interest groups and private entities.[39] Ownership remains largely in the hands of state institutions, including state enterprises.

The first exchange was founded in May 1990 in Moscow, and exchanges became a relevant part of the business community in 1991 as a nonstate source of supplies, not only for private and quasi-private businesses, but also for state enterprises that were finding that state suppliers had become unreliable business partners. Most were founded through a cooperative effort by the local government, a government ministry, several large state enterprises, a commercial bank, and cooperatives that put up thousands of rubles for individual shareholdings. As of early 1992, about 200 commodity and stock exchanges had registered, and another several hundred self-proclaimed exchanges were operating as local bazaars. Over 23,000 brokerages participate in goods and securities trading.[40] Most exchanges and commercial banks are organized as joint-stock companies.

*How Much Business Do They Handle?*

About 2 percent of enterprise output moved through commodity exchanges in 1991.[41] Most exchanges are sites where multifaceted barter deals are concluded for immediate delivery rather than markets for large-scale trading of standardized commodities.

Commercial banks have rapidly expanded their operations to serve not only the emerging private sector but also state enterprises that are trying to adapt to a market environment. In addition to traditional bank functions such as deposit taking, extension of credit, and payment transfers, many banks now offer businesses wide-ranging financial services such as direct investment, foreign currency conversion, credit cards, overdraft protection, and equipment leasing. Because clients tend to be major stockholders in the banks, however, the objectivity of bank activity has been questionable, and many commercial banks are reportedly fiscally unsound due to the large number of bad loans they inherited from the former system.

*Outlook*

Efforts by the Russian Government to make financial and commercial services more compatible with a market system will probably lead to a shakedown in the sector. The tight monetary policy and increased reserve requirements for commercial banks introduced by the Russian Government in early 1992 brought many banks to the verge of insolvency and demonstrated the precarious foundations on which the commercial banking system rests. Once prices were generally freed in Russia, exchanges were no longer the only alternative for trading at market prices. As a result of price reform and the registration requirements in the Law on Com-

[39] *Den'gi i kredit,* no. 12, December 1991.
[40] *Rossiyskiye vesti,* no. 4, 1992; Russian Federation Goskomstat, *Press vypusk,* no. 3, 1992.
[41] *Ekonomika i zhizn',* no. 4, January 1992.

modity Exchanges, smaller exchanges will probably be downgraded to trading houses, and the number of true exchanges will probably be brought to a more practical level.

## The Private Housing Sector

The housing stock of Russia consists of so-called socialized housing (owned by state enterprises and ministries, municipalities, collective farms, trade unions, and housing construction cooperatives) and privately owned housing (see Figure 4). As of 1 January 1991 the Russian housing stock totaled 2,425 million square meters of living area, 26 percent of which was privately owned by individual citizens, mostly in rural areas. Almost all privately owned housing was built by citizens with savings or with credits obtained from the state bank or from housing construction cooperatives and has never been part of the socialized housing stock. Almost 15 percent of all housing commissioned in 1991 was private housing. [42]

The state has started to privatize the socialized housing stock to encourage labor mobility, promote more efficient allocation of existing housing, rid itself of subsidization, and encourage more efficient use of investment resources. According to the July 1991 Law on Housing Privatization, citizens can gain title to the apartment they occupy. Each person receives a minimum of 18 square meters free of charge, and a family unit receives an additional nine square meters free. The family must pay for any additional living space, as well as pay a premium if the quality of its apartment exceeds the local standard. [43] Of approximately 32,800,000 apartments in the socialist housing stock of Russia, over 325,000, or less than 1 percent, have been sold or given away to residents since the beginning of 1989, and more than half of these since the enactment of the housing privatization law. [44]

Although privatization is voluntary, the Russian Government anticipated that the offer of a marketable asset at low cost would be incentive enough to encourage widespread participation. Payment for apartments that exceed the specifications for free transfer can amount to several thousand rubles, however, and citizens have proved reluctant to invest their savings in order to purchase and maintain housing that they now receive at a nominal rent. Judging from the experience in Lithuania, the issuance of privatization vouchers will provide a boost to housing privatization.

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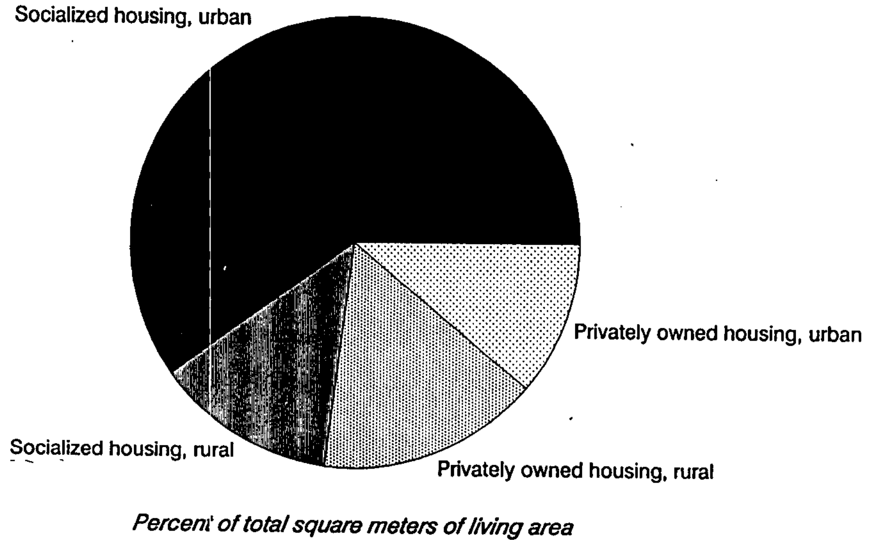
[42] *1990 RSFSR Narkhoz*, pp. 211; *Ekonomika i zhizn'*, no. 4, January 1992.

[43] *Sovetskaya Rossiya*, 26 July 1991.

[44] *Zhilishchnyye usloviya naseleniya SSSR*, Moscow 1990, pp. 33-34, 65, 137; *1990 RSFSR Narkhoz*, p. 210; Russian Federation Goskomstat, *Press vypusk*, no. 2, 1992, p. 44; *Ekonomika i zhizn'*, no. 17, April 1992.

Figure 4

## Socialized Versus Privately Owned Housing Stock in Russia, Early 1992




Source: Various publications of the Russian Federation Goskomstat.

# THE POLITICAL ECONOMY OF UNEMPLOYMENT BENEFITS AND INDEXATION IN THE RUSSIAN FEDERATION

by Philip Hanson and Elizabeth Teague *

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## SUMMARY

This paper [1] assesses the income protection policies in the Russian economic reform program by considering their content and the background to their development in comparison with earlier Soviet reform policies on social safety nets. It finds that, while mass joblessness has not yet hit Russia, the Yeltsin leadership is walking a tightrope between the requirements of financial stabilization and the need to maintain political stability. The government has run into strong opposition from domestic constituencies opposed to reform. As a result, Russia's leaders have not yet adopted the hardheaded approach to employment and minimum income protection that will be necessary to ensure the success of their economic reform program.

At the beginning of 1992 the Russian government embarked on a bold program of market-oriented economic reforms. Price liberalization and macroeconomic stabilization have already led to a fall

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[1] An earlier version of this paper was presented at a workshop organized by the European Association for Comparative Economic Studies in Trento on 5–6 March 1992; it was revised in June 1992. A longer paper, addressing some additional issues but overlapping with this paper, is due to be published in the proceedings of the workshop. The authors are indebted to Keith Bush, Alberto Chilosi, Alastair McAuley, Sheila Marnie, and Ben Slay for comments on the first draft.

in average living standards and, if Russia is to make a successful transition to a market economy, unemployment also threatens many workers. This paper attempts to assess the income protection elements in the Russian reform program by considering their content and the background to their development in comparison with earlier Soviet reform policies on social safety nets.

The paper is organized as follows. There is first a review of the employment protection arrangements currently in place in Russia and an assessment of their general effectiveness and financing. A brief review of the scope and financing of income indexation and the setting of minimum wages and pensions follows. The paper then reviews the debate among Soviet/Russian economists and policymakers over the best approach to the provision of social safety nets during the transition.

Finally, some conclusions are set out. Briefly, these are that the Yeltsin leadership has found itself walking a tightrope between the requirements of financial stabilization and the urgent necessity of maintaining social and political stability, and that it has run into strong opposition from powerful domestic constituencies opposed to reform. As a result, the Russian government has not yet adopted the hardheaded approach to employment and minimum income protection that is necessary to ensure the success of its economic reform plans.

## Importance of Social Safety Nets

Social safety nets play a crucial role in a period of economic transition. Without them, it is hard for a reforming government to maintain popular support as it implements policies that lead to rising prices and increasing unemployment and that threaten, in the short term at least, to lower the standard of living of almost all members of society. Unless measures are taken to soften the blow for ordinary people, the population may become alienated from the reform program and reject the government's austerity measures. The danger then is that social unrest and political instability will destroy the reforms altogether.

The present situation in Russia is one in which social safety nets play an especially important role. In general, the leadership of Boris Yeltsin took Poland's "shock therapy" as its model, but the circumstances in which the Russian price liberalization of 2 January 1992 was undertaken were in some respects even worse than those in which the Balcerowicz program had been launched two years earlier. Total output in Russia fell by 17 percent between 1990 and 1991 (Goskomstat 1992), and was predicted in 1992 to be of the order of 30 percent below the 1989 level; inflation was accelerating rapidly even though many prices were still nominally controlled; and both domestic and international confidence in the political and economic situation was low.

Moreover, though there had been limited privatization in Russia there had been virtually no breakup of monopolies; the money supply was shared with other Soviet successor-states over whose policies the Russian government had no direct control; and it was extremely doubtful whether the means were available to control the budget deficit and the money supply. In these circumstances,

there was an especially urgent need to preserve the population's acceptance of the radical changes that were under way. Social safety nets in general, and unemployment benefits in particular, were seen as being of critical importance.

In the macroeconomic stabilization that is normally [2] an element in the transition process there is an inherent conflict between two competing policy objectives. At the risk of oversimplification, these may be depicted as a clash between economic and political imperatives.

On the one hand there is the economic dimension—the government's need to minimize inflationary pressure. Inflation must be curbed if the population is to learn to adapt to a market environment and if market institutions are to have a chance to take root and flourish. The government must avoid or at least reduce budget deficits in order to reduce inflationary demand and restrict the money supply.[3] This requires the introduction of tight controls on budgetary expenditure.

On the other hand there is the political dimension—the government's need to maintain popular support for policies that, in the short term at least, threaten the living standards of ordinary people. After all, the population is unlikely to support economic reforms if it is going to be worse off as a result. In Poland, for example, the Balcerowicz program slashed inflation but, after a time-lag of some 18 months, led to rising unemployment and provoked fierce opposition from striking workers. There is therefore strong pressure on a reforming government to increase state spending in certain areas, such as making generous provision to minimize real-income losses and to protect the living standards of those who form the main topic of the present paper—those rendered unemployed as a direct result of the move to the market.

## Mass Joblessness—An Unaccustomed Threat

The fact that market reform would bring widescale open unemployment in its wake presented what was then still the Soviet Union with a challenge that was not only social and economic but also political. Joblessness was officially declared to have been eradicated in the U.S.S.R. in 1930. Throughout most of its history, therefore, the country made no provision for unemployment. The U.S.S.R. and, with it, Russia (then still known as the R.S.F.S.R.) introduced such a system only in 1991.

While the Soviet authorities had always tacitly admitted the existence of frictional unemployment, it was not until 1989 that they acknowledged, for the first time since the 1920s, that open unemployment (*bezrabotitsa*) might also be found in the U.S.S.R. (Heleniak 1991). The total, officially estimated in 1990 as 2 million, was said to represent the number of Soviet citizens who could be considered to be unemployed "according to the methodology of the Inter-

[2] "Normally" because those who do not accept fully the shortage economy story would maintain that a centrally administered economy might embark on the transformation process without the initial handicap of strong inflationary pressure, requiring stabilization. Czechoslovakia is sometimes cited as an example.

[3] Because the traditional system has no means of financing anything beyond a very small budget deficit except by monetizing it.

national Labor Organization" (i.e., "those who are without work, are looking for work, and are available to start work immediately").

Soviet specialists said, however, that the figure of 2 million failed to take account of large numbers of unemployed people in rural areas of Central Asia and Transcaucasia. When asked how the figure was reached, officials readily admitted that it was only a "guesstimate" since the U.S.S.R. had until 1991 no system of recording unemployment. Even now, the Soviet successor-states do not have the means to conduct the complex household labor surveys required for the application of the ILO definition (which includes people looking for work as well as those eligible for benefits),[4] and unofficial estimates of unemployment in the Soviet successor-states continue to diverge widely from the official numbers (e.g., Supyan 1992).[5]

In January 1991, after the leadership of Soviet President Mikhail Gorbachev had announced its intention of transforming the U.S.S.R.'s centrally planned economy into a "regulated socialist market economy," the Soviet parliament adopted legislation laying down the principles of the employment policy of the Soviet state (*"Osnovy zakondatel'stva Soyuza SSR i respublik po zanyatosti naseleniya"*). The law provided, for the first time in the U.S.S.R., a mechanism for registering unemployed citizens and providing those who qualified with unemployment benefits. One of the law's most innovative features was its recognition of "the voluntary nature of work." Both the Stalin constitution of 1936 and the Brezhnev constitution of 1977 guaranteed the right of Soviet citizens to work, but neither acknowledged the corresponding right to choose not to work. The constitutionally guaranteed "right to work" was therefore not a right but a legal obligation, and any able-bodied Soviet citizen of working age who did not hold a job in the official economy and who was found to be living on "unearned income" was liable to criminal prosecution under the notorious parasite laws.[6]

By legalizing the status of those Soviet citizens who, whether deliberately or through no fault of their own, were without a job, the U.S.S.R. employment law of 1991 cleared the way for the elaboration of policies to address the problem of unemployment. It called for the creation of a Union-wide State Employment Service that would be responsible for registering the unemployed, maintaining a bank of job vacancies and helping those seeking work to find suitable employment, administering training and retraining programs, organizing public works programs for those out of work, and coordinating the payment of unemployment benefits. The State Employment Service was to be financed by a special State Employment Assistance Fund made up of mandatory contributions (equivalent to 1 percent of payroll) by state-run and private enterprises, factories, cooperatives, and joint ventures.

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[4] Many of the world's advanced states also do not conduct such surveys, but a lot of them do maintain an extensive network of employment bureaus that collect information on the basis of which statisticians are able to compile roughly comparable data.

[5] An authoritative account of the limitations of Russian/Soviet unemployment statistics is contained in Manykina, 1991.

[6] In practice, women were seldom if ever prosecuted under the parasite laws.

The program was an ambitious one patterned on Western and east-central European experience. Indeed, many experts believed it to be too ambitious, predicting that the state would be unable to fulfill its obligations because of inadequate finance, a shortage of employment bureaus outside the big cities at which people could register, and the fact that the concept of joblessness was such a new one for Soviet citizens that it still carries social stigma. As a result, experts warned, many unemployed Soviet citizens would fall through the net and find themselves without adequate protection (Standing 1991b).

### U.S.S.R. and Russian Employment Laws Compared

The U.S.S.R. employment law called for the adoption of further legislation by each of the Soviet republics. Laws on employment were accordingly enacted in the course of 1991 in the Baltic States, Ukraine, Kazakhstan, Belarus, Georgia, Armenia and Kyrgyzstan; the Russian Federation adopted its law on employment in April 1991 (*"Zakon RSFSR o zanyatosti . . ."*). The Russian legislation bears a strong resemblance to its Soviet parent and, though the U.S.S.R. legislation is now as inoperative as the Soviet Union itself, the Russian law was still in force at the time the present article was completed (June 1992).

Since these two pieces of legislation were adopted, however, circumstances have changed dramatically. The design of social safety-net arrangements, instead of being a largely theoretical exercise, is beginning to be put to the test in a radical reform process embarked on by a popularly elected leader with an initial "credit" with the population that could easily run out.

In view of the enormous changes that occurred during the course of 1991, it might perhaps have been expected that, with respect to employment protection policies, there would be appreciable differences between the approaches adopted in the original U.S.S.R. framework law of January 1991, the R.S.F.S.R. law of April 1991, and, finally, the approach adopted by the Yeltsin government after it embarked on its reform program in January 1992.

As was the case with the U.S.S.R. legislation, the section of the Russian law detailing the payment of unemployment benefits came into effect on 1 July 1991. On that date, unemployment became legal throughout the U.S.S.R. for the first time since the 1920s. In Russia, as in those other republics where appropriate legislation had been adopted and employment bureaus set up, official registers of the unemployed began to be kept and citizens became eligible to apply for unemployment benefits. Outside the big cities, however, the network of employment bureaus was not extensive and everywhere strict conditions governed eligibility to receive benefits.

The U.S.S.R. Bases of Legislation of January 1991 and the R.S.F.S.R. Employment Law of April 1991 are not easily compared since each contains elements that are not readily aggregated. Moreover, each is plagued by drafting obscurities. The summary comparison in Table 1 focuses on the level and duration of benefits and the conditions for eligibility. (Other important elements, not detailed in Table 1, include provision for dependents, training arrangements, workfare schemes and the powers of the employment

service.) The working assumption here is that levels and duration of benefits, plus eligibility criteria, are the main determinants of the "generosity" and of the cost of the legislative provision.

TABLE 1. Unemployment Benefits, U.S.S.R. and R.S.F.S.R. 1991 Laws.

| | U.S.S.R. | | | R.S.F.S.R. | | |
|---|---|---|---|---|---|---|
| | Duration (Months) | Level | Average Level | Duration (Months) | Level | Average Level |
| D1 | ≥9 | 1 PE –0.5 BW | 0.38 PE | 12 | 1 PE –0.45 PE | 0.713 PE |
| D2A | 3 | 0.75 MW | 0.183 MW | 12 | 1 MW | 1 MW |
| D2B | 6 | 0.75 MW | 0.363 MW | | | |

Sources: *"Osnovy zakondatel'stva Soyuza SSR i respublik po zanyatosti naseleniya"* 1991; *"Zakon RSFSR o zanyatosti"* 1991.
Notes:
D1 = deserving unemployed category 1 (see text).
D2A, D2B = deserving unemployed categories 2A and 2B (see text).
Level = rate or range of rates per month, as a proportion of earnings/wage levels.
Average level = ditto averaged over 12 months of unemployment.
PE = previous average earnings.
BW = (previous) basic wage rate.
MW = statutory minimum wage.

The two laws treat different categories of the unemployed differently. This differentiation is not clearly spelled out, but the following four categories may be distinguished and, in the spirit of the legislation, may be labeled as follows:

—"Deserving unemployed class 1," i.e., the worker sacked from an existing job as part of a collective redundancy (the classic reform casualty).
—"Deserving unemployed class 2A," i.e., new entrants to the labor market.
—"Deserving unemployed class 2B," i.e., persons reentering the labor market after a substantial period in which they were neither employed nor seeking work.
—"Undeserving unemployed," i.e., persons who are unemployed as a result of a voluntary quit or of being sacked for breach of labor discipline.

Under the Russian law of April 1991 (which is still in force at the time of writing) a worker who is laid off in the Russian Federation is entitled to 3 months' severance pay (paid by the employer, though the state will foot the bill if the employer cannot) at the level of the average earnings the worker was formerly receiving. An unemployed person must register at an employment center within 11 days of losing his or her job and becomes eligible for unemployment benefits only after the 3-month period has expired and if the employment center has in the meantime been unable to find him or her a suitable job.

A person is not entitled to receive the standard rate of unemployment benefit applicable to workers made redundant if he has never worked before or if he has worked less than 12 weeks in the

preceding 12 months; and a worker loses this entitlement to benefits if he rejects two suitable job vacancies proposed to him by the employment center.[7] In some circumstances a lower rate of unemployment benefit is payable. Specifically, an unemployed person is not, in the wording of the law, guaranteed benefits if he left his previous job of his own volition or if he was sacked for a disciplinary violation. It appears, however, that local offices exercise discretion on this point, as on numerous others where the wording of the law is vague.

Table 1 sets out in schematic form selected provisions of the U.S.S.R. and R.S.F.S.R. legislation of 1991. Both laws were quite "hard" in two respects: there was, as has already been noted with respect to the U.S.S.R. law, strong conditionality attached to eligibility for benefit; and there was no mention of any further, long-term income guarantee after the period of eligibility for unemployment benefit ran out.

In general, the R.S.F.S.R. law was the "softer" of the two. For the classic reform casualty—people unemployed as a result of collective redundancies (identified as D1 in the table)—both laws called for the ratio of benefit to previous earnings to decline over time, but the period of benefit was longer under the R.S.F.S.R. law, and the stepped decline in the ratio was less steep. Hence the higher ratio of benefits to previous earnings over a 12-month period of unemployment. Broadly the same applies to the other "deserving unemployed" categories (identified as D2A and D2B in Table 1)—new labor market entrants and those returning to the labor market, respectively. (Marnie 1992 provides a thorough analysis of the main provisions of both laws.)

The differences in treatment of the D1 and D2 categories are also significant. In the early stages of reform, soft-budget constraint enterprises tend to let output fall without matching redundancies, and the declaration of group lay-offs remains rare. Thus the R.S.F.S.R. legislation was in effect front-loading the financial burden of unemployment benefits by making more generous provision for people leaving school (i.e., new entrants into the job market). Under the Russian law, that is, the state would find itself assuming a larger financial burden sooner than under the U.S.S.R. legislation. However, both the U.S.S.R. and the R.S.F.S.R. laws entailed relatively light budgetary burdens in the early stages of reform because they excluded or might be interpreted as excluding the commonest categories of all amongst the existing unemployed population—those who were in that population through voluntary quits or through sackings for lack of discipline (the "undeserving unemployed").

[7] The law gives little guidance as to what constitutes "suitable," and the press is full of letters from unemployed people complaining that they have been denied benefits after refusing two totally inappropriate vacancies. According to commentaries on the legislation, a suitable job is supposed to be one that makes use of the unemployed person's qualifications and where the new workplace is accessible from the unemployed person's place of residence (*Sotsialistichesky trud* 1991 no.12, p. 108).

## FINANCING SAFETY NETS

Mass joblessness has not yet hit Russia but that in itself is nothing surprising: in post-communist Poland unemployment did not reach double digits until shock therapy had been under way for about 18 months, and there seems no reason to suppose that Russia's timetable will be radically different in this respect.

There were more recorded job vacancies (840,000) in Russia in January 1992 than there were registered unemployed (60,000). What registered unemployment there was, though it was growing, was still largely white collar (whereas 770,000 of January's 840,000 vacancies were for blue collar workers). The ILO has predicted that Russia's unemployed may reach as many as 11 million by the end of 1992, that is, about 15 percent of a republican labor force of 73 million; the ILO's prediction for the 11 members of the Commonwealth of Independent States plus Georgia is 15 million by the end of the year, or about 12 percent unemployment. This prediction of rapid growth in unemployment is out of line with east-central European experience. Russian government specialists are predicting a maximum of only about 4 million (i.e., around 5 percent of the work force) by the end of 1992 (*Komsomol'skaya pravda,* 9 June 1992). If the development of open unemployment over time follows a path similar to that in Poland and Hungary, the Russian government projection will be nearer the mark.

If Russia is to make a successful transfer to a market economy, however, there must come a point at which overmanned industries start to shed workers in substantial numbers. When that happens, the financial difficulties that the authorities in some areas say they are already having in funding unemployment benefits and retraining are likely to become acute. Then the Yeltsin leadership will have to find the political courage to toughen up the "soft" provisions of the Russian employment law of 1991.

Officials from both Russia and other former Soviet republics are already complaining about the high cost of financing the programs adopted under the influence of the U.S.S.R. framework law. Indeed, some former Soviet republics have not yet introduced such legislation, saying they cannot afford to pay for the training and unemployment benefits required by the U.S.S.R. law. Among them are several of the republics of Central Asia and the Transcaucasus where unemployment is believed already to be heavy. The chairman of the Russian government's State Committee for Employment, Fedor Prokopov, has announced that Russia has sufficient resources to pay unemployment benefits to a maximum of 3.5 million claimants; it certainly cannot, Prokopov asserts, afford the substantial amounts of money required to retrain all those expected to apply.

But retraining is only half of the story. Prokopov told a Moscow press conference on 8 June 1992 that, as of 1 May 1992, the number of those officially registered as unemployed in Russia was only 151,000 but, he went on, that number was artificially low. For example, he said, it did not include the thousands of factory workers who were idle but listed as employed because Russia still lacks a

bankruptcy law to force nonprofitable companies out of business.[8] Prokopov predicted that those leaving school and those demobilized from the former Soviet army would swell the number of Russia's unemployed to 1 million by autumn 1992 and to 4 million by the end of the year (*Komsomol'skaya pravda,* 9 June 1992).

Prokopov's assessment was that these 4 million unemployed would require expenditure by the state of 30 billion rubles a year in unemployment benefits. This implies a rate of benefit averaging 625 rubles a month, or just under 70 percent of the present minimum wage (which corresponds with the estimates in Table 1). According to Prokopov, the state can afford no more than 20 billion rubles—by which he evidently means that it would exhaust the unemployment assistance fund as this is at present organized (on this, see below). The figure that Prokopov had earlier given as the maximum number of unemployed that could be so supported was 3.5 million.[9] Before that point is reached, therefore, the Russian government will have to either abandon its reform program or adopt a tougher approach than that presently enshrined in Russia's 1991 employment law. This point was stressed by the architect of Russia's economic reforms, Egor Gaidar, who stated in April 1992 that Russia must "transform" its system of social protection. The country, Gaidar said, could not long afford to continue its present level of social spending since that would require punitive rates of taxation (*The Economist,* 25 April 1992).

### Adopting a Tougher Approach

As early as December 1991, Prokopov told a conference in Moscow that the Russian employment law had "many problems" and needed substantial alteration. The implication was that it had already been decided that financial prudence was to be given greater weight in 1992 than it had been in early 1991.

Since Prokopov spoke, Russian and Western media reports have indicated that the Russian government was giving serious thought to toughening up the 1991 law. The first such indication appeared in the memorandum drawn up by the Russian government in February for the International Monetary Fund (*Izvestiya,* 29 February 1992).

As detailed above, the Russian legislation of 1991, like the U.S.S.R. framework law on which it was based, sets two rates of benefit: one for the "core reform" casualty—previously employed, now made redundant—and the other for a second category of "deserving unemployed" without a recent work record—labor market entrants and reentrants. Under the Russian law currently in effect, the former are eligible for benefits related to previous earnings: 100 percent as severance pay for the first three months; 75 percent

[8] The presidential edict requiring the compulsory selling-off of insolvent state enterprises apparently drafted and signed in haste in mid-June 1992 before Yeltsin's visit to Washington (*Financial Times,* 16 June 1992) is probably an inadequate substitute.

[9] One possible solution, apart from the use of the general budget for funding at least part of unemployment support, would be the devolution of responsibility for unemployment provision to the local level. The city of Moscow is setting an example in this respect: in an effort to collect revenue to finance its extensive network of employment bureaus, Moscow on 1 January 1992 began to levy a new tax of 1 percent of basic salary on each of its residents in paid employment. Other cities may follow suit.

as unemployment benefit proper over the next three months; and an average of 71.3 percent over a whole year. The latter receive 100 percent of the minimum wage.

Under the measures proposed in the government's February 1992 memorandum to the IMF, the former rate would be altered to 90 percent of previous earnings (for what period was not made clear), while the latter would drop to 75 percent of the minimum wage. The ambiguity about the eligibility of the "undeserving unemployed" (those who quit their previous jobs voluntarily or were sacked for breaches of discipline) remained, and other details were also lacking. At first glance, however, it looked as if those made redundant might find themselves better off under the new arrangement than under the 1991 Russian law. At the same time, it looked as if the purpose of the change might be to reduce the cost of providing unemployment benefit to those categories likely in the short run to be more numerous than the redundant, i.e., labor market entrants and reentrants and—at local discretion, if at all—the "undeserving" unemployed.

It can easily be seen that, even with these more modest benefit rules, a scheme financed from a small percentage of total wage-bills in the country will soon run out of funds and come to rely on general budgetary revenue. The following simplified arithmetical example will illustrate the point.

Assume that nominal wages are constant over time (which in itself would denote a victory for the stabilization effort), that the scheme runs for one year with zero unemployment, that the levy (L) to finance the scheme is 2 percent of the total wage-bill, that the benefit rate is 80 percent of the average wage, that there are no new entrants to the labor market, that the benefit fund earns interest (r) at 10 percent a year on the total in the fund at the end of the year, and that unemployment emerges at the start of the second year of the scheme and remains at a given level throughout that year. Assume, finally, that "funding unemployment protection" means funding unemployment benefits, and that the cost of running the employment service itself is financed from other sources.

If the total wage-bill in year 1 was 100, then when unemployment begins, the fund will be (1+r) L, which in this case will be 2.2 (accumulated levy with 10 percent interest). What happens in the second year then depends on the rate of unemployment, which sets both the outflow of benefits and the rate of inflow from the wage-bill levy.

In general, at the end of the second year, the balance in the fund will be

$$(1+r)^2 L1 + (1+r)L2 - B2,$$

where L1 denotes the levy in year 1, L2 the levy in year 2, and B denotes total benefits paid. L2 falls and B2 rises as unemployment rises, so that, for example, if unemployment in year 2 is 2 percent, the end-year balance in the fund will be

$$2.42 + 2.156 - 1.6 = 2.976$$

If the unemployment rate is 5 percent, the fund balance at the end of the second year is 0.51. If unemployment is above about 5.5 percent, the fund runs out of money by the end of the second year. For example, if unemployment were at 10 percent during the second year, the end-year balance would be –3.6.

Clearly, Russian policymakers must anticipate unemployment rates approaching 10 percent at some point within the period up to the end of 1993. They must also, realistically, expect nominal wage rates to go on rising, pulling up the burden of benefits relative to the yields of the levy in earlier periods. They must also be concerned with the financing of the staffing and facilities of the employment service, together with any retraining arrangements. In general, they must anticipate that the employment protection scheme will require to be topped up from general budgetary revenue fairly soon, despite its nominally self-financing character. This could be avoided only if the rates of levy on wage-bills were substantially increased. But there is already concern about the high incidence of taxes on enterprises.

The time-path of redundancies following radical reform in east-central Europe, however, suggests that through 1992 group redundancies will not be the main source of the inflow into the stock of unemployed persons in Russia, so cutting the lower rate while raising that applicable to those unemployed as a result of redundancies will delay the budgetary impact of rising unemployment benefit payments, tilting it forward in time. It may be—and this is more speculative—that the increased generosity toward the relatively rare category of declared redundancies is consciously designed to make this prudent adjustment look softer than it really is. The director of the Moscow employment service, Viktor Zaslavksy, has indicated that the Polish experience is being looked upon as a guide to the time-path of unemployment in Russia; this reinforces that interpretation.

There have also in recent months been proposals to weaken or remove the linkage of the rate of unemployment benefits for those made redundant to their previous earnings. One proposal is to abolish the initial severance pay and to introduce two rates of benefit: three-quarters of the minimum wage for first-time job seekers, and 25 percent above the minimum wage for those made redundant (*The Guardian,* 18 April 1992). A scheme with somewhat similar effects was at one time reported to be going to be introduced from 1 June 1992: those made redundant would receive 90 percent of the current average wage for six months and then the rate applicable to new labor market entrants: 75 percent of the minimum wage (*Trud,* 10 April 1992). In either scheme, presumably, benefit would still stop altogether after 12 months; at the time of writing, however, neither program had been introduced.

Prokopov is on record as saying that the Russian employment law must be reformed not only in order to save the state's money but also to ensure that unemployment benefit does not become "a permanent source of income." That is, the state must ensure that unemployment benefits are low enough that people will not want to remain on them longer than strictly necessary and will engage in a serious search for work (*Rossiiskaya gazeta,* 21 February 1992).

## INDEXATION OF WAGES, AND WAGE MINIMUMS, IN RUSSIA

Another contentious element in the social safety-net issue is indexation of incomes and the adjustment of minimum wages and pensions to compensate wholly or in part for inflation. Here again there is a clear trade-off between financial stabilization and the avoidance of political destabilization.

Russia's official trade unions (the FNPR in their Russian acronym) have been in the forefront of those demanding that, so far from toughening its approach, the Yeltsin government should create wider safety nets for those members of the population likely to be hit by market reform. Indeed, the FNPR has called on the Russian government to provide 100 percent indexation of all money incomes (*Izvestiya,* 11 January 1992). This is something that a government intent on curbing inflation would certainly resist. (In fact, Russia already has legislation providing for some indexation [*"Ob indeksatsii denezhnykh dokhodor i sberezhenii grazhdan v RSFSR"* 1991] but how precisely it is implemented is, like so much else, a source of contention.)

Some calculations can be made to illustrate the potential cost of wage indexation with high coefficients in Russia in 1991-1992. "Cost" here means simply the first-round inflationary effect—the initial monetary injection involved—on the assumption that the funding of indexation comes directly or indirectly from the state budget.

It is assumed here, to simplify the argument, that indexation is an independent influence on the rate of inflation. Thus it is assumed that the fiscal and monetary regime would be restrictive in all other respects, and that the adoption of a high indexation ratio would breach that regime. Conversely, a low indexation ratio is assumed to be good for controlling inflation, though of course a low indexation ratio, without an accompanying regime of financial stringency, would not by itself guarantee stabilization. In what follows, also, indexation of wage incomes only is considered, and indexation of savings is omitted.

In 1991, the funding of 100 percent indexation of money wages, on the basis of the year-on-year increase of officially-recorded consumer price levels in 1991, would have required an estimated 189 billion rubles.[10] This is probably somewhat larger than the actual increase that occurred in total money wages between 1990 and 1991: perhaps by around 50 billion rubles, or 4.6 percent of nominal Russian GNP in 1991.[11]

In 1992, Russian government projections of budgetary expenditure for the year as a whole, and the implicit associated projections

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[10] Recorded employment in the Russian Federation was 74.4 mn. in 1990 and 73.1 mn. in 1991 (averages of monthly reports; *Ekonomichesky obzor,* no. 12, 1992, p. 21). The average money wage in the Russian Federation in 1990 was 233.2 rubles per month (*Narkhoz 90*), or 2,798.4 rubles per year. Therefore, the total 1991 wage bill at 1990 wage levels would have been 204.6 billion rubles. Estimated 1991 consumer price level in the Russian Federation (goods + services, 1990 = 100) is estimated at 192.3 (Russian Federation Goskomstat, *Kratkii statistichesky byulleten' za 1991,* Moscow, 1992, pp. 48, 49, 52). So the total wage bill in 1991, if 100 percent indexed, would have been 1.923 x 204.6 = 393.4 billion rubles.

[11] Average money-wage levels in the Russia in 1991 do not seem to have been reported. The Russian Federation Goskomstat gives the increase between 1990 and 1991 in "means allocated to consumption" at 70 percent. If that increase is assumed to hold for money wages, the total wage-bill would have been 1.7 x 204.6 = 347.8 billion rubles.

of nominal GNP and the GNP deflator (ITAR-TASS, 6 March 1992) allow some projections to be made of the cost of 100 percent indexing of wages in 1992 if inflation turns out as (implicitly) projected.[12] The estimated cost, on plausible assumptions, would be more than 2 trillion rubles, or almost equal to total projected budgetary expenditure for the year, and not far short of a third of projected nominal GNP.

Indexation with lower coefficients, of course, produces pro rata lower funding costs. But clearly even 25 percent indexation in 1992 would be highly expensive and potentially destabilizing—though what is not yet known is how much indexation is already built into the Russian government's forward estimates of public spending and nominal GNP. Nor do we know to what extent, if any, second- and third-round effects of wage responses to inflation have been incorporated in the projections. It has been reported that the Russian government is aiming to introduce a "progressive" tax on wage increases above a certain ceiling level (*Financial Times,* 3 March 1992), probably similar to the Polish popiwek. If this is so, anything more than a very low indexation coefficient (or indexation restricted to a narrow slice of low-income recipients) is presumably being excluded.

Table 2 summarizes the main elements in the June 1991 U.S.S.R. and the October 1991 R.S.F.S.R. legislation on income indexation. Associated arrangements for the indexation of savings are omitted. In both cases, the intention was that enterprises would, where possible, fund the wage increases of their employees prescribed by indexation rules. The increases in pensions and other social benefits were to come from the relevant off-budget funds, i.e., from the public purse, though not from the budget narrowly defined. One category of workers was, under both pieces of legislation, to have their indexation funded directly from the budget. These were the employees of so-called "budget institutions", i.e., those workplaces funded by budget allocations, and which were mostly engaged in the provision of public goods, at least as defined in Soviet/Russian practice (teachers, health care workers, public transport employees, and so on).

The further category of workers in enterprises selling output at controlled prices was the main problem for the budget in 1991. In 1992, with most prices decontrolled, the possibility of enterprise funding of indexation without budget subsidies greatly increased. This was not necessarily an improvement from the point of view of controlling inflation, but it has reduced the role of the budget in

[12] The reported Russian government projections include: total budgetary expenditure 2104 billion rubles, projected deficit 242 billion rubles, said to be 3.6 percent of GNP. The latter implies a projected 1992 GNP of 6,772 billion rubles. The reported nominal GNP of the Commonwealth of Independent States in 1991 was 1800 billion rubles. If Russian GNP in 1991 was 60 percent of that, or 1080 billion rubles, and the reported 1991/January 1990 fall in real "national income" of 11 percent (*Izvestiya,* 14 February 1992, p. 2) is extrapolated to GNP and to the whole year, the 1992 projected Russian Federation GNP in 1991 prices would be 961 billion rubles and the implicit GNP deflator, projected 1992/estimated 1991, would be 6722/911 = 6.996, or an increase of 600 percent in the GNP deflator. This would be not obviously out of line with various statements by Egor Gaidar about the gradual slowdown of inflation from March 1992 onwards and the reported January 1992 increases in the price level. The order of magnitude of this estimated outcome is not very sensitive to moderate error in the assumption about the level of Russian Federation nominal GNP in 1991. If, instead of 60 percent of Soviet GNP, it is assumed to be 55 or 65 percent, the implicit projected 1992/estimated 1991 GNP deflators produce percentage increases of 667 and 551, respectively.

funding indexation in Russia. In any case, as Table 2 illustrates, the Russian legislation was more restrictive than the U.S.S.R. legislation with respect to threshholds and indexation coefficients.

TABLE 2. Indexation of Incomes, U.S.S.R. and Russian Legislation

| Date of Law | Coverage | Source of Finance | Frequency | Threshhold (percent per year) | Coefficient |
|---|---|---|---|---|---|
| | | U.S.S.R. | | | |
| 25 June 1991 | All non-business incomes | Budget(s); state pension, etc. funds; enterprises | 4x/yr | 21.6 | 1.0 |
| | | R.S.F.S.R./Russian Federation | | | |
| 24 Oct 1991 | B workers FP workers social benefits | Budget; state pension, etc. funds. | 4x/yr | 26 | 1.0 for y ≥ 1.5 MW; 0.5 for y ≥ 3.0 MW − 1.5 MW |

Sources: *"Osnovy zakonodatel 'stva Soyuza SSR i respublik po indeksatsii dokhodov"; "Ob indeksatsii denezhnykh dokhodov i sberezhenii grazhdan v RSFSR.'*

Notes:

Coverage: The U.S.S.R. Bases of Legislation cover all income recipients, excluding incomes from entrepreneurship and rentier incomes; the R.S.F.S.R. law covers workers in budget-financed institutions (B) and in enterprises with controlled product prices (FP); it makes no provision for other employees.

Threshhold: The annual infation rate given is the annualized amount of the trigger rate of increase between quarters specifed in the legislation.

MW = minimum wage, as in Table 1.

The rules for determining the legislative prescription of minimum wages and minimum pensions are an important part of the social safety net, both in their own right and because of the role these rules play in the setting of rates of unemployment benefit and procedures for indexation. Table 3 is a compilation of some data on these minimums in 1991–1992.

The estimation of a minimum level of living (*prozhitochnyi minimum*) was initially supposed, both in the latter days of the U.S.S.R. and in the R.S.F.S.R./Russian Federation, to guide changes in these minimums. U.S.S.R. Goskomstat compiled data on a "minimum" consumer basket for this purpose. The estimates were a constant source of debate among politicians, officials, union representatives and specialists, and the poor quality of the available price data made the debate more inconclusive than it might otherwise have been. An attempt was made, in most calculations, to cover services as well as goods, and unofficial as well as official prices. "Minimum" in all cases referred to the cost of a conventional minimum consumer basket per household member.

Table 3 shows the legislatively established minimum wages and pensions lagging behind the official estimates of the minimum living income. Until March 1992, however, this was a lag in implementation only. A real break came that month when the Russian

TABLE 3. Minimum Wages and Pensions and the "Minimum Living Income", U.S.S.R. 1991 and Russia 1992 (rubles/month)

| Date | Estimated Minimum Living Income | Minimum Pension | Minimum Wage |
|---|---|---|---|
| Early 1991 | 97 [a] | 70 [a] | |
| April 1991 | 166 [a] | 135 [a] | |
| May 1991 | 227 [b] | | |
| 1 Jan 1992 | | 342 | 342 |
| 31 Jan 1992 | 1,500 [c] | 342 | 342 |
| April–June 1992 [d] | | 650 [d]/550 [e] | 750 [e] |

[a] L. Pronina, "Pensioner i rynok," *Ekonomika i zhizn',* no. 41, 1991, p. 8.
[b] *Izvestiya,* 23 May 1991, p. 1.
[c] Interfax, 18 March 1992.
[d] Ibid. Increases staggered over three months.
[e] Russian Television, "*Vesti,*" 18 March 1992.

government publicly broke with the principle of the link between the *prozhitochnyi minimum* and the prescribed minimum incomes. Introducing the new minimums for spring 1992, Aleksandr Shokhin (Russia's deputy prime minister in charge of social policy) said they were based on the minimum expenditure required for physical survival, not on the conventional minimum represented by the *prozhitochnyi minimum* (Russian Television, "*Vesti,*" 18 March 1992).

Thus, in all three areas discussed here—unemployment benefits, income indexation, and minimum wages and pensions—policymaking in Moscow since the beginning of 1991 has gone or is going through three stages: U.S.S.R. legislation, initial R.S.F.S.R. legislation, and subsequent revision under the auspices of the Russian Federation's reform team led by Egor Gaidar. In the first two stages, the approach was relatively "soft," favoring political stability at the expense of financial stabilization. The third stage saw a distinct hardening of the approach, as inflation accelerated, IMF and G-7 negotiations got under way, and the urgency of stabilization became more apparent. The contours of a possible fourth stage will be discussed below.

The absence of a marked difference, in this respect, between U.S.S.R. and early R.S.F.S.R. legislation is probably not very significant. In the case of indexation, for example, it was stated by a then R.S.F.S.R. Deputy Finance Minister, Mikhail Aleshin, that the law on indexation adopted on 24 October 1991 ("*Ob indeksatsii* . . ." 1991) was in fact drafted before the April 1991 price increases introduced by the Union government, and on the assumption that inflation would be of the order of 5–7 percent a year. Aleshin was, in effect, disowning the legislation even before it was passed (*Rossiiskaya gazeta,* 17 October 1991). Before he joined the government Gaidar argued on similar lines, calling the R.S.F.S.R. indexation law a recipe for hyperinflation (*Trud,* 28 October 1991). If Aleshin's views are any guide, however, Gaidar already had allies in the pre-shock-therapy Russian government. In other words, the conflict between parliament and government over the balance between stabi-

lization and the maintenance of political support predates the launching of the Yeltsin-Gaidar reform.

## THE SUPPORT-STABILIZATION TRADE-OFF

The scale of the unemployment problem in the transition process has not been discussed with much precision in Russia and the former Soviet Union. When some sort of provision for employment protection came on to the Soviet policy agenda in 1986, many projections of large job-losses were made. Figures of the order of 20 million were bandied about. Clearly, what was envisaged was that there were a great many existing jobs that would not survive marketization, both because the product-mix would change drastically and because there was wasteful use of labor in a given line of production. The meaning of these numbers, however, usually seemed to be quite different in the minds of Soviet authors from their interpretation by Western commentators.

Earlier Soviet discussion of labor productivity campaigns assumed easy absorption of displaced workers, often in the same enterprise within which they had been removed from an existing post (Rutland 1986). The assumption of an environment of excess labor demand seems to have remained the norm, so that the Soviet authors who referred to these large numbers were usually talking of a flow on to the labor market over a period of time, not a stock of unemployed people on that market at a point of time. They were in effect talking about the scale of restructuring, not the scale of the unemployment problem. That meaning is sometimes still to be inferred in Russian statements, but less commonly. Until recently, nonetheless, the issue had been seen as manageable, even when frighteningly large numbers of job-losses were being referred to.

Another characteristic of the Soviet/Russian debate has been that enforced job-losses (redundancies) have been seen as following quickly on the advent of marketization. In this respect, the debate in Moscow has resembled earlier debates in Budapest and Warsaw, where reformers were constantly announcing the advent of large-scale job-losses and advocating appropriate provision, only for actual redundancies to remain small. Thus in December 1990 the number of registered job-seekers in Hungary was still only 1.7 percent of the labor force, and by May 1992 it was just under 10 percent—still not especially high by most current Western standards. In Poland, large-scale layoffs remained rare until the late summer of 1991, when shock therapy was in its second year of application; only then, too, did the reported rate of unemployment reach double figures and did blue collar workers first begin to outnumber white collar ones among the registered unemployed. Thus output in east-central European countries had typically fallen by 25 percent while employment had fallen by much less than half that proportion (United Nations Economic Commission for Europe 1992, chapter 3).[13]

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[13] The reliability of these estimates is, admittedly, low. The decline in reported employment commonly exceeds the rise in reported unemployment, and this is not generally explicable in purely demographic terms. Thus the reported labor force of the former Soviet Union has been declining since 1987, though the population of working age continued to grow (see *Demografichesky ezhegodnik SSSR 1990*). In what degree unreported employment in the new independent sector, or unreported unemployment, accounts for the disparity cannot be determined.

It is now more widely understood that price liberalization, even when accompanied by the liberalization of import controls and by some start being made on privatization, does not quickly alter enterprise behavior in transition economies. Even when, as in Poland, a degree of financial austerity is established, state enterprise managers behave as though they still expect to be bailed out of any financial difficulty by a higher authority. Since they very often are bailed out, either by the state directly or by a soft financial system with unregulated, embryonic commercial banks, these expectations are not quickly falsified.

Thus the enterprise continues to carry out one of its traditional roles—that of acting as a mini-welfare state vis-à-vis its work collective. Following Russia's January 1992 price rises, an official at the "Bolshevik" bakery in Moscow told a Western correspondent that her firm was halving its output of cakes because fivefold price increases had put pastry beyond the reach of most consumers. Lowering prices, she said, "would only cut profits and make it harder to keep staff" (Reuters, 17 January 1992); clearly she thought it more important to keep her staff than to make a profit. With or without worker-management buy-outs, the enterprise continues to operate as a mutual protection society for its collective. One factor that makes this possible is that competitive market structures have not replaced—or at best have only very partially replaced—the monopolistic structure that Newberry has argued is a fundamental characteristic of the inherited system (Newberry 1991).

Nonetheless, there is a trade-off between macroeconomic stabilization and the maintenance of political support, even if it is one that may not present the policymakers with an acute dilemma for some time. For the reasons given at the beginning of this paper, there are limits to what can be disbursed to protect workers from the effects of unemployment if inflationary pressure is to be squeezed out of the system.

Adjustments to the unemployment legislation in Russia can be interpreted (tentatively) in this light. The number of people registered as unemployed job-seekers in Russia in July 1991, when registration first began, was only 16,000, and by February 1992 it had grown only to a modest 69,000 people, while the number officially eligible to receive unemployment benefits in February 1992 was a minuscule 12,000 (ITAR-TASS, 19 February 1992). Therefore the fiscal burden of unemployment benefit is at present minimal. However, deputy premier Aleksandr Shokhin announced in December 1991 that, while Russia's Labor Ministry was projecting a total of 6 million Russian redundancies in the course of 1992, they predicted that 4 million of these would relatively quickly find new work and that the numbers eligible to claim unemployment benefit would rise only to 2 million. On this basis, the costs of unemployment alleviation in 1992 would still be modest. If the Russian government does make the changes in the rules originally promised for June 1992, the costs would become more modest still, while giving an impression of increased generosity.

The following rough calculations illustrate the point. Assume that the average number registered as eligible for unemployment benefit during 1992 is 1 million. The minimum wage was raised to 342 rubles a month with effect from the start of the year. Benefits

at that rate to all of the unemployed would cost 4.1 billion rubles. Benefits at only 75 percent of that rate would cost 3.1 billion rubles. The average wage at the end of 1991 was about 900 rubles a month. On the previous basis, benefits to 1 million people, on average, through the year would have cost something of the order of 6.0–6.5 billion rubles. (The fact that most recipients most of the time would be in the early, higher-rate phases of benefit receipt would tilt the total up somewhat from a straight calculation based on 0.575 times 900 rubles a month.) If the announced increase to 90 percent of previous earnings relates to the first three months only, and the subsequent reduction of the coefficient is pro rata with the old scheme, the cost would be 7.0–7.5 billion rubles over the year.

Concern about the financing of unemployment benefits expressed by members of the Russian government seems to arise from a different source: the attempt to make unemployment protection a self-contained program based on revenue from a levy on all enterprise wage bills. At present the levy is 1 percent of wage-bills; there are proposals to raise this to 2 or even 3 percent (*The Guardian,* 18 April 1992).

## Conclusions

It has been argued above that the Yeltsin leadership will, at some point before the middle of 1992, find itself under strong pressure to shift toward a tougher approach toward the provision of unemployment benefits. Otherwise it will be unable to reduce the budget deficit or get inflation under control. The memorandum drawn up by the Russian government for the IMF in February 1992 indicates that the leadership understands what its choices are. In the words of Andrei Kortunov, an academic on the staff of Moscow's Institute for the Study of the USA and Canada, "Either we will have mass unemployment or we will have hyperinflation. But if we try to compromise, we will have both" (*The Washington Post,* 6 June 1992).

After January 1992, Yeltsin's government made a lot of noise about its intention to change the 1991 Russian law, rendering it less attractive for people to be "jobless by profession" and forcing them instead to search seriously for work. Promises to this effect were included in the government's February 1992 memorandum to the IMF. And yet the 1 June 1992 deadline contained in the IMF memorandum came and went and the government has not yet changed the law.

One reason may be that the trade-off between political stability and financial stabilization is not at present a salient one. The total cost of the unemployment service is small in comparison with other items in the Russian Federation budget. The ruble amounts estimated above refer only to the benefits themselves. Even doubling them to allow for the additional cost of administration and of retraining would yield totals between 6 and 15 billion rubles, while Russian budget expenditure for the first quarter of the year alone is projected at 509.8 billion rubles (*Rossiiskaya gazeta,* 31 December 1991). The figure of 3.5 million recipients of unemployment benefits has been mentioned as the highest financially sustainable level; on the figures suggested here, the cost even at that level would still be

modest: up to 50 billion rubles in an annual state expenditure that would be above 2 trillion rubles at first-quarter 1992 volume and price levels.

The scale of unemployment provision seems to be a source of concern among policymakers as much for the uncertainties surrounding it, and the emotive nature of the subject, as for any immediate threat that it poses to macroeconomic stabilization. Probably the costs of providing an adequate network of offices outside the main cities are perceived to be high while the chances of getting the system to work properly may be seen as low. Other elements of the social safety net in the Russian government's program, notably the income indexation scheme announced in October 1991 (*"Ob indeksatsii ..."* 1991), may themselves be strongly inflationary. All of this, plus a fear of many millions becoming unemployed at costs well above 50 billion rubles a year, would explain the attention paid to apparently modest savings.

This explanation seems less likely in view of the events of April to June 1992, which found the Yeltsin government making a series of concessions aimed at beating off hardline criticism from a number of domestic constituencies opposed to reform.

Most powerful among these is, perhaps, the industrialists' lobby. We have described elsewhere this lobby and its attempts to soften, and in effect to undermine, the reforms (Hanson and Teague 1992). An ominous sign was the introduction into the Gaidar team in June 1992 of two new ministers (Vladimir Shumeiko and Georgii Khizha) associated with the industrialists.

Also influential are the leaders of organized labor. In the absence so far of substantial privatization, and in light of the associated continuation of soft-budget constraint behavior by Russian enterprises, labor and management have tended to join together against the reformers. Yeltsin's "social partnership" program, including the establishment of a tripartite commission of government, management, and labor representatives, may have helped to assuage some labor discontentment while making concessions to workers that were smaller than they might otherwise have been (Teague 1992a). But an alliance between the managers of large state enterprises and their hitherto dependent work forces could be a major obstacle to the imposition of financial austerity.

Nothing the Yeltsin government has done thus far (as opposed to said) indicates that it intends to allow high unemployment, even if that means continuing high inflation and an increased budget deficit. It is in any case likely, as some junior members of the government have already indicated and as our discussion of the funding of unemployment benefits has shown, that even a moderate level of unemployment of the order that is likely in late 1992 or early 1993 will require unemployment assistance to be supported from general budgetary resources, as well as from the inadequate payroll levy originally intended to fund unemployment benefits.

The conclusion, then, is that the Russian government, which at the beginning of 1992 acted so resolutely in launching its economic reform program, has not yet adopted a hardheaded approach to employment and minimum income protection. In this particular case, the Yeltsin leadership has found itself confronted with powerful opposition within the Russian political and industrial elite. The

industrial lobby has used potential worker discontent as a threat and has, for a time at least, slowed the progress of financial stabilization. Worker opposition in the usual sense, expressed directly through effective trade unions and/or widespread strikes, has not so far been the main problem. Nonetheless, the balance between political support and financial stability is an exceedingly delicate one. Aleksandr Shokhin provided an insight into the perceptions of Russia's present leaders when he told an interviewer in June 1992 that it was essential to relax the reform program, because otherwise "a social disaster" would ensue (*The Independent on Sunday,* 14 June 1992).

## REFERENCES


Braithwaite, Jeanine D., "The Social Safety Net in the U.S.S.R. in the (?Sovereign) Republics," paper presented at the 1991 AAASS National Convention, Miami, 25 November 1991.

Chilosi, Alberto, "The Impact on Employment of Institutional Transformation in Eastern Europe and the Tasks of Social Policy: the Polish Case," paper presented at the second EACES Workshop, Trento, 5–6 March 1992.

*Demografichesky ezhegodnik SSSR 1990,* Moscow: U.S.S.R. Goskomstat, 1990.

Filtzer, Donald A., "The Contradictions of the Marketless Market: Self-Financing in the Soviet Industrial Enterprise, 1986–1990," *Soviet Studies,* no. 6, 1991, pp. 989–1009.

Goskomstat, (*Obzor Goskomstata po dannym statisticheskikh sluzhb SNG*), *"Ekonomika stran-chlenov Sodruzhestva nezavisimykh gosudarstv v 1991 godu," Ekonomichesky obzor,* no. 12, 1992.

Hanson, Philip and Elizabeth Teague, "The Industrialists and Russian Economic Reform," *RFE/RL Research Report,* no. 19, 1992.

Heleniak, Timothy, "Unemployment in the U.S.S.R.: A Growing Problem for Market Transition," paper presented at the 1991 AAASS National Convention, Miami, 25 November 1991.

Lane, David (ed.), *Labour and Employment in the USSR,* Brighton: Wheatsheaf, 1986.

Manykina, Irina, "An assessment of Soviet labour statistics," in Standing, 1991, pp. 401–421.

Marnie, Sheila, "Redundancies in the Labour Markets of the ex-Soviet Union: Incentives and Constraints," Paper prepared for the second EACES Workshop, Trento, 5–6 March 1992.

Newberry, David, "Sequencing the Transition," London: Centre for Economic Policy Research, August 1991.

*"Ob indeksatsii denezhnykh dokhodov i sberezhenii grazhdan v RSFSR,"* (R.S.F.S.R. law on indexation of incomes and savings, passed 24 October 1991), *Ekonomika i zhizn',* no. 47, 1991.

*"Osnovy zakonodatel'stva Soyuza SSR i respublik po indeksatsii dokhodov,"* (passed 25 June 1991), *Izvestiya,* 9 July 1991a, p.2.

*"Osnovy zakonodatel'stva Soyuza SSR i respublik po zanyatosti naseleniya,"* (passed 15 January, w.e.f. 1 July 1991), *Izvestiya,* 25 January 1991b, pp. 3–4.

Rutland, Peter, "Productivity Campaigns in Soviet Industry," in Lane 1986, pp. 191–209.

Standing, Guy (ed.), *In Search of Flexibility. The New Soviet Labour Market,* Geneva: ILO, 1991 (Standing 1991a).

Standing, Guy, "Towards economic democracy and labour fexibility? An era of experimentation," in Standing, 1991a, pp. 363–401.

Standing, Guy, "New Soviet law begins to recognise the harsh reality of unemployment," *The Guardian,* 29 July 1991 (Standing 1991b).

Supyan, Viktor, "Predupredit' bazar na rynke truda," *Izvestiya,* 3 January 1992, p. 2.

Teague, Elizabeth, "Tackling the Problem of Unemployment," *Report on the USSR,* 8 November 1991.

Teague, Elizabeth, et al. "Unemployment Provision in the Former Communist Countries," *RFE/RL Research Report,* no. 2, 1992.

Teague, Elizabeth, "Russian Government Seeks 'Social Partnership'," *RFE/RL Research Report,* no. 25, 1992 (Teague 1992a).

United Nations Economic Commission for Europe, *Economic Survey of Europe in 1991–1992,* New York: United Nations, 1992.

*"Zakon RSFSR o zanyatosti,"* (passed 19 April 1991, w.e.f. 1 July 1991), Ekonomika i zhizn', no. 22, 1991, pp. 18–20.

# SOCIAL SECURITY IN TRANSITION IN THE SOVIET UNION (1985–1991) AND IN THE RUSSIAN FEDERATION (1992)

By Lillian Liu *

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## SUMMARY

A dynamic process of social security reforms took place during the economic transition in the Soviet Union from 1985 through 1991, and in the Russian Federation during the first two quarters of 1992. It began with Soviet leader Mikhail Gorbachev's legislative reform of the social security system that brought about both incremental and systemic changes to achieve the following objectives: (1) guarantee a minimum level of income security for all; (2) define a new social contract that would revitalize the Soviet work force; (3) adopt a social insurance model of financing that characterizes social security in market-based economies; and (4) encourage plu-

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ralistic approaches to complement the state-operated income security system. Despite administrative and financial difficulties during implementation of the new Soviet pension law in 1991, and notwithstanding the final demise of the Soviet Union, these four objectives have been incorporated (with modest revisions) into the pension legislation of most of the former Soviet republics, including the 1990 Russian Republic pension law.

At mid-year 1992, it appears that the Russian Federation is considering a new proposal for social security reform. Some of President Boris Yeltsin's advisors who favor a further deepening of economic reforms now recommend the partial privatization of social security. They believe that the availability of a private pension plan could help to generate the much needed investment capital for economic development, and have proposed the establishment of non-government pension insurance as an optional pension plan. This proposal signals a new objective of income security programs—that of furthering economic development. Thus, the Gorbachev social security reform that was initiated for the purpose of strengthening the state-operated social security system and its ability to provide economic security for the most vulnerable portion of the population may be evolving into an effort to generate investment capital. The future of this proposal depends on the course and pace of economic reforms, development of the insurance industry and financial market in Russia, the relative competitiveness between private pension plans and state-operated pension programs and, last but not least, the government's ability to protect the income security of pensioners not only from inflation but also from potential business and market failures of pension funds.

## Introduction

Transforming a centrally-planned economic system into one based on market forces calls for the restructuring of economic institutions, the privatization of a vast number of state enterprises, and the decontrol of prices and wages. Such changes have exacerbated the difficulties faced by former Communist countries, the Soviet Union included, in meeting social needs in a market-based economy. Social programs under centrally planned economies typically promised full employment, free education, and free or low-cost housing and health care, while wages were low and the quality of social services poor. There were ordinarily no programs to protect unemployed citizens or to cope with inflation, and there was little encouragement to citizens to be partially responsible for their own economic security. Also, the central government monopolized social policies and programs, and allowed little, if any, local or non-government initiative to supplement the state efforts.

Under the pre-Gorbachev Soviet system, especially vulnerable to inflation were beneficiaries of social security who depended on fixed income—cash benefit programs for (1) old age, disability, and survivors; (2) work-related disability and death; and (3) allowances for families with children. [1] As of January 1991, there were 61.2

[1] This definition of social security is much broader than the current U.S. usage of the term. In the United States, "Social Security" refers only to cash benefits for old-age, disability, and survi-

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million pensioners in the Soviet Union, and 33.8 million in the Russian Federation under the first and second of the programs specified above. Approximately three-fourths of these pensioners relied on pension benefits as their main source of income. According to 1989 census data, about 61 percent of 73 million families in the Soviet Union have at least one child; in the Russian Federation, 58 percent of a total of 40 million families have one or more children aged under 18. [2] By 1990, cash allowances were made available to all families with one or more children.

This paper examines the transition of the social security system in the Soviet Union during the Gorbachev years (1985–1991) and in the Russian Federation during the first half of 1992. The discussion is presented in five parts—first, the Soviet social security system prior to 1985 on the eve of Gorbachev's reforms; second, a summary analysis of social security reforms during 1985–1990 and the four objectives of these reforms; third, the implementation of new social security programs under political and economic restructuring during 1991; fourth, the impact of the collapse of Union government on social security; and fifth, social security developments under radical economic reform in the Russian Federation during the first part of 1992.

## THE PRE-GORBACHEV SOCIAL SECURITY SYSTEM

Before 1990, pension programs in the Soviet Union were governed by two laws. The 1956 U.S.S.R. Law on State Pensions covered workers and employees of state institutions, enterprises, and farms. The 1964 Law on Pensions and Benefits for Collective Farmers covered members of collective farms and their families. In addition, the 1977 Constitution (Article 53) of the Soviet Union incorporated existent family benefit programs, and stipulated the award of flat-rate monthly grants to families with many children and disadvantaged children (single-parent families, unmarried mothers, people disabled since childhood, or people suffering from other deprivations). [3]

The pre-Gorbachev system shared many of the features that characterize social security systems in Western market-based economies. The Soviet pension benefits were wage related, just as those in most Western economies. The Soviet social security system had separate benefit formulas for urban and agricultural labor forces—a policy that is also applied in other countries (e.g., Aus-

vor programs. In contrast, social security as defined by the International Labor Organization for comparative studies also includes unemployment insurance and health care. These last two items are not included in this paper because they are discussed elsewhere in the volume.

[2] In January 1991, population in the Soviet Union and the Russian Federation totaled 290 million and 148.5 million, respectively. *Narodnoe khoziaistvo SSSR v 1990 g.* Moscow, Finansy i statistika, 1991, pp. 68, and 76; "O chisle i sostave semei v SSSR," *Press-Vypusk*, no. 156 (23 May 1991), p. 3.

[3] Bernice Madison, "Social Security—Soviet Style," unpublished monograph, chaps. 3 and 9, circa 1989. The Constitution also provided one-time birth grants, with rates rising according to the number of children born into the same family. To a family with four or more children, the family became eligible for monthly benefits for children aged one to five. According to Madison, a life-long student of the Soviet social security system, the 1956 and 1964 laws were breakthroughs that paved the way to establish a "modern system of social provision" in a country where struggles with massive economic, political, and social problems had relegated income security programs to low priority. Ibid. Chap. 3, pp. 69–70.

tria, France, and Germany).[4] Pension program financing was based on the so-called "pay-as-you-go" method, whereby current obligations to beneficiaries were funded entirely by the current generation of workers. Such programs may be funded by employer and/or employee contributions (as in France and the United States), government budget allocations (as in Australia and New Zealand), or a combination thereof (as in Germany, Netherlands, Sweden, and the Soviet Union itself).[5]

On the other hand, there were significant differences between the pre-Gorbachev Soviet social security system and the prototypical Western system. The combination of relatively low retirement age, short service tenure required for eligibility for pensions, and an ineffective reward structure for longer service under the Soviet system was generally regarded as a disincentive for productive and prolonged labor. The Soviet retirement ages for men (age 60) and women (age 55) were low by Western standards.[6] The minimum years of service was 25 years for men and 20 years for women. Supplementary benefits for longer service required either a minimum of 10 years over the required minimum years of service or at least 15 years of uninterrupted service in the same enterprise.[7] Also, the Soviet benefit formula allowed for benefit computation based on wages during the last 12 months before retirement. As a result, retirement income relied not so much on the beneficiary's life-long earnings records (a function of productive labor) as his ability to negotiate a higher wage during the last year preceding retirement.[8]

Since there were no regular cost-of-living adjustments, recipients of fixed benefits from family allowances and pensions saw their income deteriorate in value. Even though the government controlled the prices of goods and services, wages had risen over the decades. Current wage earners and new pensioners could afford a living standard that proved elusive to many recipients of pensions and grants who had begun receiving benefits years earlier.

Moreover, the pre-Gorbachev Soviet social security system was notable for its low level of public assistance to those who never worked or were unable to work due to child rearing or disability

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[4] According to Bernice Madison, the 1964 Pension Law for Collective Farmers and subsequent ad hoc benefit enhancements for these rural pensioners helped to gradually bridge the gap between income security for state employees and collective farmers until the two systems were unified into one. By 1981, collective farmers earned 70.8 percent of the average earnings of state employees. Op cit, Chap. 3, pp. 68–69.

Unless otherwise specified, for references to non-Soviet social security programs, see *Social Security Programs Throughout the World, 1989*, Washington, D.C., U.S. Government Printing Office, 1990.

[5] Before the 1990 U.S.S.R. State Pension Law, employer contributions and general revenues financed pension programs in the Soviet Union. Employees did not contribute.

[6] Statutory retirement age for full pension is 65 for both men and women in Canada, the Netherlands, and the United States; age 65 for men and 60 for women in Austria, France, and Germany. In contrast, retirement age at 60 for men and 55 for women is common among other transition economies; for example, China, Bulgaria, Czech and Slovak Federal Republic, Hungary, and Romania.

[7] By 1985, a supplementary benefit of 20 percent of pension was awarded to those who had accumulated 10 years work beyond the qualifying 20–25 years under covered employment and 25 uninterrupted years in the same enterprise. Those who had 10 years of work beyond the qualifying 20–25 years or only 15 years of uninterrupted employment received 10 percent of pension. *Social Security Programs Throughout the World, 1983*, pp. 262–263.

[8] As an alternative, the pensioners could choose to compute their benefits from their earnings during the best five consecutive years within last ten years of their employment before retiring.

since childhood. [9] This state of affairs had contributed much to the poverty of pensioners and some other family benefits recipients. In contrast, some Western economies (such as those in the Netherlands, Sweden, and the United Kingdom) provide a floor of subsistence benefits for all residents or citizens, while others (such as the United States) offer means-tested income for the poor. Most guarantee a routine benefit adjustment according to price and/or wage indices so that benefits and allowances usually rise with the overall standard of living.

Characteristic of a centrally planned economic system, the Soviet social security system was financed primarily from general revenues. No contributions were required from the employees themselves. State-sector employers (enterprises, institutions) paid an average of 9 percent of payroll (ranging from 4 to 14.4 percent, varying across industries), a rate far below that of Western economies. [10]

Finally, unlike most Western social security systems that co-exist with private pension plans and local and nongovernment programs, the Union-based social security system was the only income security program available for the average citizen. There were very limited (if any) republic or locally initiated complementary cash benefits programs or charity available to populations suffering from economic hardship.

## THE FIRST PHASE OF TRANSITION: SOCIAL SECURITY LEGISLATIVE REFORM, 1985–1990

The impetus for social security reform had been brewing throughout the 1970s and early 1980s before Mikhail Gorbchev took the position of General Secretary of the U.S.S.R. Communist Party. [11] By the mid-1980s, researchers claimed that hidden inflation had impoverished many pensioners, single-parent households, and families with two or more children. Soviet government data showed that over 80 percent of the 43 million who lived in poverty (with income under 75 rubles a month) were pensioners. Of the rural pensioners, 90 percent were living in poverty. [12] (See also Appendix A, "Pension and Wage Comparisons.")

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[9] Public assistance for the aged and the disabled who did not qualify for a pension was meager at best. Until 1985, eligible residents in cities received an average of 11.8 rubles a month. Only eight republics provided public assistance to needy adults in rural communities not affiliated with collective farms. Those republics paid 10 rubles a month, an amount far below the poverty level of 50 rubles a month that was set in 1967. As of November 1, 1985, these payments were raised to 30 rubles a month. Madison, op cit, Chaps. 3 and 9.

[10] The Soviet employer contribution of an average of 9 percent of payroll also included contributions to cash benefits for sickness and maternity. In comparison, 1989 payroll contributions (from employers and employees) for comparable programs (old-age, disability and survivor insurance, cash sickness and maternity benefits, work-related disability and survivor program, and family allowances) were 18.92 percent in the United States, 21.95 percent in Japan, 41.16 percent in France, and 31.88 percent in the Federal Republic of Germany. The notable exceptions in Western economies are Australia and New Zealand, where general revenues finance most of the social security programs. See, *Social Security Programs Throughout the World, 1989.*

[11] See, for example, Madison, op cit, chaps. 3 and 16.

[12] *A Study of the Soviet Economy*, vol. 2, pp. 141–2; Aaron Trehub, "The Congress of People's Deputies on Poverty," *Report on the USSR*, 1:24 (1989) pp. 5–8; D. J. Peterson, "Supreme Soviet Adopts Emergency Pension Measures," ibid., 1:33 (1989) pp. 7–9; William Moskoff, "The Aged in the USSR," ibid., 1:37 (1989) pp. 7–9; Margot Jacobs, "Soviet Pensioners Finally Get a Boost," ibid., 2:32 (1990) pp. 2–5; Jeanine D. Braithwaite, "Income Distribution and Poverty in the Soviet Republics," *Journal of Soviet Nationalities*, 1:3 (1990) pp. 158–73; and Alastair McAuley, "Pover-

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## INCREMENTAL SOCIAL SECURITY REVISIONS: 1985–1989

Since the promulgation of the 1956 and 1964 laws, decrees and resolutions have appeared from time to time raising pension benefits and extending coverage to the disadvantaged. Ad hoc incremental changes accelerated from 1985 through 1990; all were attempts to ameliorate some of the perceived shortcomings in the social security system. Among these measures were one-time increases of minimum old-age benefits (and corresponding adjustments for disability and survivor pensions) for collective farmers and state employees (1985 and 1989, respectively); improvements in cash grants to children in poor families (1986–1987); and newly introduced grants to disabled children and single pensioners who were not eligible for pensions (1985).[13]

To partially offset the erosion in value of fixed pension benefits over time, a 1985 decree introduced a mechanism by which pensions awarded more than 10 years earlier were adjusted upward. Pension benefits of this category were recalculated, adding one percent of the wage base for each year that had elapsed since the pension was first awarded. In 1987, minimum pensions for collective farmers awarded more than ten years earlier were to be raised by 10 rubles from 40 rubles a month.

In 1985, the Soviet authorities appealed to central ministries other than social security to offer in-kind subsidies, and proposed that local governments offer added cash or in-kind subsidies from local budgets to aid the impoverished population groups. They also enlisted the Red Cross, Red Crescent, Young Pioneers, and Communist Youth League, as potential partners in projects to help alleviate poverty. In an unprecedented move in 1987, the government introduced a voluntary complementary pension program to supplement social security income. Before reaching retirement age, workers (men aged 35–60 and women aged 30–55) could choose to pay monthly premiums through their employers as part of a group insurance "contract" with the State Insurance Administration. Depending on the number of years under contract, the size of the premium and the age of the participant, the worker could receive 10 to 50 rubles per month in addition to his monthly pension from the state-operated social security system.[14]

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ty and Underprivileged Groups in the USSR," paper prepared for the Conference on Political Elites and Classes under *Perestroika*, held at Emmanual College, Cambridge, September 28–29, 1991.

[13] In May 1985, the Central Committee of the Communist Party, the Council of Ministers and the All-Union Central Committee of Trade Unions (AUCCTU) jointly issued a decree "Concerning the Most Important Measures for Improving the Material Well-Being of Poor Pensioners and Families, and Strengthening Care of Solitary Citizens." A. Solovev, the deputy chief of the Social Security Administration of the U.S.S.R. State Committee on Labor and Social Issues (Goskomtrud), described it as a broad program for improving the living standards of the most vulnerable segments of the population. See A. Solovev, "New Steps to Improve Pension Security," *Sotsialisticheskaia zakonnost'* No. 10 (October) 1985, pp. 53–55 (translated in *JPRS-UHR-86-002*, 23 January 1986, pp. 36–41). For references to incremental changes decreed during 1985–1989, see Madison, op cit, chaps. 3, 9, and 16; D. J. Peterson, "Supreme Soviet Adopts Emergency Pension Measures," *Report on the USSR* 1:33 (1989) pp. 7–9.

[14] Madison, op. cit., chaps. 3 and 16; Robert J. Myers, "The New Voluntary Annuity Program in the Soviet Union," *Society of Actuaries Transactions, 1989*, pp. 189–198.

## 1990 RESOLUTIONS FOR FAMILY ALLOWANCES

In 1990, two resolutions (in April and in August) detailed the government's policy for alleviating poverty among families with children and for making these allowances inflation-proof. In the April resolution on "Immediate Measures for the Improvement of the Status of Women, Maternity and Children, and the Strengthening of the Family," family allowances became linked to the minimum wage (to be indexed to price increases) for the first time. A monthly family allowance equal to the minimum wage would be granted to working mothers (with more than one year in covered employment) until the child is 18 months old. The same amount also applied to mothers under age 18 who had not participated in covered employment, and to single mothers (including widows and widowers). A family allowance of 50 percent of the minimum wage would be awarded to unemployed mothers, and to working mothers whose tenure of service fell short of one year.

The August resolution made a number of changes. For instance, it raised the universal, one-time birth grant to three times the monthly minimum wage for each child, replacing the birth grant with differentiated rates (higher rates for families with more children). It also improved the monthly grant (at 50 percent of minimum wage) to single mothers for each child from age 18 months through age 16 years; and established cash grants for children (aged 18 months through 6 years) in poor families at the rate of 50 percent of the minimum wage. [15]

## THE 1990 U.S.S.R. STATE PENSION LAW

It was not until the promulgation of a new unified U.S.S.R. State Pension Law in 1990, however, that the Soviet government initiated a systematic overhaul of the country's pension program. The first signal of the government's determination to revamp the antiquated 1956 and 1964 pension laws came in 1986, when the Politburo of the U.S.S.R. Communist Party's Central Committee approved the preparation of a major pension reform law. [16]

The 1986 decision and the subsequent deliberative process to provide pension security to the country's work force coincided with two underlying developments in the late 1980s. First, the Gorbachev government was designing a new, market-oriented "social contract," namely, a new prescription of social values and material rewards to revitalize the work force and economy while ensuring public support and political legitimacy. [17] Second, as the policy of

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[15] The April "Resolution of the U.S.S.R. Supreme Soviet on Immediate Measures for the Improvement of the Status of Women, Maternity and Children, and the Strengthening of the Family," was translated in *JPRS-UPA-90-022*, 30 April 1990, pp. 92-94; the August "Resolution on Additional Measures for the Social Protection of Families with Children in Connection with the Transition to a Regulated Market Economy," was translated in *FBIS-SOV-90-159*, 16 August 1990, pp. 45-46.

[16] *Pravda*, 12 September 1986. On the complex and often contradictory laws and regulations governing the Soviet pension program until the 1990 new pension law, see Madison, unpublished monograph, chap. 4. For the text of the 1990 pension laws, see *Trud*, 30 May 1990, pp. 1-4; an English translation of the law appeared in *FBIS-SOV-90-121*, pp. 33-54.

[17] For discussions of the new "social contract," see Elizabeth Teague, "Gorbachev's 'Human Factor' Policies," in *Gorbachev's Economic Plans*, vol. 2, pp. 224-39; and Peter Hauslohner's "Commentary," ibid, pp. 344-52; Peter Hauslohner, "Gorbachev's Social Contract," *Soviet Economy* 3,1, 1987, pp. 54-89; and Linda Cook, "Brezhnev's 'Social Contract' and Gorbachev's Reform," *Soviet Studies*, 44:1 (1992) pp. 37-8.

restructuring the centrally planned economic system gradually took hold throughout the late 1980s, the 1990 pension law became an integral part of a "social safety net in transition economy." [18] There was an apparent inclination to bring the Soviet system closer to the prototypical Western model of social insurance, complete with a pluralistic approach to income security programs.

Generally speaking, the systemic changes in the new 1990 law were guided by four objectives: a minimum level of income security for all, a new social contract for the work force, a modern social insurance system that was deemed compatible with and would facilitate the transition to a market-based economy, and a pluralistic approach to income security in anticipation of a decentralized and open economic and political system.

*Minimum Income Security for All*

The new legislation addressed the shortcomings of the existing system in providing income security to Soviet pensioners, children, and the nonpensioned elderly and disabled. It also prepared for the need to protect these population groups from price and wage decontrol under the forthcoming economic reforms. It unified pension benefits for urban workers and collective farmers, thus raising rural pension benefits to the level of urban pensioners. To help alleviate poverty among the aged and the disabled, it created a "social pension" for those who did not qualify for a pension because they did not have the required number of years of work. More important, the new law stipulated that the minimum pension would be linked to the minimum wage, which in turn would be adjusted periodically to compensate partially for wage and price increases. [19]

*A New Social Contract*

Government reformers also took several decisive steps away from socialist welfare state provisions. The 1990 pension law adopted provisions that followed the prevailing policy guidelines to revitalize the labor force. It granted higher benefits for longer service by adding 1 percent of assessed wage to each year of covered employment beyond the minimum number of years of service required for benefit eligibility; and it raised the maximum benefit from 2.5 to 5.2 times the minimum pension in order to better reward productive labor. The old-age benefits were no longer computed according to the last 12 months' earnings before retirement. Instead, the benefits would be computed from the highest average earnings of 5 consecutive years within the last 15 years of continuing service. Pensioners would be permitted to work for remuneration without causing a reduction in their benefit amounts.

*The Social Insurance Model*

With the new pension law, the Gorbachev government embraced the social insurance model for income security that is favored by

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[18] "Goskomtrud Draft Proposal for Market Transition Safety Net," *Izvestiia*, 9 August 1990, pp. 1-2; translated in *JPRS-UEA-90-033*, 13 September 1990, p. 59.

[19] For references to provisions of the 1990 U.S.S.R. State Pension Law, see *Trud*, 30 May 1990, pp. 1-4; translated in *FBIS-SOV-90-121*, 22 June 1990, pp. 33-54.

most market-based economies. Specifically, the Union government budget would minimize its subsidies to pension benefits and allowances. Instead, social security for employed persons would be financed mostly by payroll contributions from employers (at 26 percent of payroll, effective January 1, 1991) and partly by employee contributions (at 1 percent of earnings). The Union budget would cover all expenditures for the "social pension" (the public assistance component of the pension law) and part of the costs for family allowances.[20] While pension program financing was based on the so-called "pay-as-you-go" method as before (whereby current obligations to beneficiaries are paid for entirely by the present generation of workers), the management of the pension funds was removed from the state budget accounts and made independent of the State Bank and the Ministry of Finance.[21]

Three months after the 1990 pension law was promulgated, an August 1990 decree introduced a major restructuring in pension funding. An independent U.S.S.R. Pension Fund was decreed. With the establishment of counterpart republic and local government pension funds, the Pension Fund system was designated to collect contributions, appropriate funds for benefit payments, and manage fund reserves (if any).[22]

*Pluralistic Approach to Income Security*

The new law kept the 1987 provision that allowed employees to enter into contract with the State Insurance Administration and join a voluntary supplementary pension program to augment their retirement or disability pension income.[23] An unprecedented feature of the new U.S.S.R. pension law was the provision that allowed republic and local authorities, and employers to offer supplementary benefits as they deemed appropriate, so long as the costs were paid by their respective budgets. The state pension law was designed as basic legislation for application in all republics. This move to encourage complementary local government contributions to social security benefits dovetailed with local government reforms that gave republic and local governments more control over their financial resources.[24]

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[20] For a list of family allowances and their respective sources of funding, see Appendix B.

[21] The Goskomtrud introduced the employee contribution rate at 1 percent of earnings, and set employer contribution rates at 26 percent of payroll for 1991 and 37 percent starting January 1992. The employer and employee contributions included funding for old age, disability, and survivor pensions, work-related disability and death, family allowances, and also for cash sickness and maternity benefits. The contribution rates were expected to rise because of anticipated increases in expenditures. The demographic trend in the next century indicated a decline in the working-age population and an increase in the aged. The ratio of working-age population to aged population was 4.1 to 1 in 1990, and projected at 3.5 to 1 in 2005, and 2.8 to 1 by the year 2020. (Derived from population projections in *A Study of Soviet Economy*, Vol. 1, p. 350.)

[22] The Pension Fund would also pay for some of the allowances to families with children. See "Sources for Funding" under Appendix B below.

[23] It should be noted that the voluntary complementary pension scheme did not appeal to many workers since its inauguration in 1988. According to one U.S.S.R. Goskomtrud official during an interview with the author in 1990, many workers took a wait-and-see approach, expecting that the forthcoming new pension law would greatly improve the pension benefits anyway.

[24] Donna Bahry, "The Union Republics and Contradictions in Gorbachev's Economic Reform," *Soviet Economy*, 7:3 (1991) pp. 215–55; Gertrude E. Schroeder, "*Perestroika* in the Aftermath of 1990," ibid, 7:1 (1991), pp. 3–13; and *The Economy of the Former U.S.S.R. in 1991*, Washington, D.C.: International Monetary Fund, 1992, p. 11.

## The Second Phase of Transition: Implementing Social Security Changes, 1991

January and December 1991 marked the beginning and the end of the second, or implementation, phase of the Gorbachev social security reforms. This was the period when financing for the newly designed social programs would be dependent upon the smooth operation of the newly established funding mechanism; when the fruits of the improved benefit formula would be felt by pensioners and children if an efficient administrative mechanism could implement the revised provisions.

Given the centrifugal forces already at play within the Soviet Union by mid-1990, the U.S.S.R. Pension Fund was not able to collect pension contributions from its republic counterparts. Republic governments had become more assertive over their control of fiscal and budgetary policies by 1990. [25] On the political front, by the end of August 1990, 3 of the 15 constituent republics of the Soviet Union had declared independence from the Union (Lithuania, Latvia, and Armenia) and 10 had proclaimed sovereignty within the Union. The remaining two republics (Kazakhstan and Kyrgyzstan) followed with their own declaration of sovereignty by the end of October 1990. [26] The rush among republic governments to assert political and financial control within their respective jurisdictions and the Union government's continuing control over state enterprises and resources created rather confusing circumstances that caused much uncertainty in the Union government's tax revenues.

The collection of payroll contributions for social security was no exception. During 1990 and 1991, even the more independent-minded republic governments adopted the 1990 U.S.S.R. State Pension Law (some with modest revisions) for their respective social security programs, and established the republic pension funds. However, at least 6 of the 15 republics (including the 3 Baltic republics, Moldova, Georgia, and Russia) never forwarded the collected payroll contributions to the U.S.S.R. Pension Fund. Some enterprises claimed to be under the direct jurisdiction of the Union government and refused to pay their share to republic or local collectors. [27] As of May 1991, the U.S.S.R. Pension Fund collected only about 30 percent of the projected receipts. [28] Contribution collection could hardly improve in the second half of the year, given the rapidly disintegrating Union authority following the failed August coup attempt.

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[25] Ibid.

[26] Ann Sheehy, "Fact Sheet on Declarations of Sovereignty," *Report on the USSR*, 9 November 1990, pp. 23–5, on p. 24; and her "The State of the Multinational Union," ibid., 4 January 1991, pp. 16–9. G. Schroeder, op. cit., attributes the declaration of republic sovereignty to the conflicts between the Union government and the republics over control of the latter's economic affairs and individual enterprises. She observes "a growing regional autarky" in the second half of 1990. She then recounts Gorbachev's efforts to forge a coordination of price, wage, and social policies with the republics, together with an agreement in budgetary matters. Unfortunately, he failed to induce some republics (including Russia) to remit agreed-upon funds to the Union budget.

[27] Braithwaite, 1991, p. 4; also my interview of a Goskomtrud official in February 1991. See also note 10 above. For full text of the Russian Republic pension law, promulgated in November 1990, see "R.S.F.S.R. State Pension Law Published," *Sovetskaia Rossiia*, 7 December 1990, pp. 3–5; translated in *JPRS-UEA-91-004*, pp. 15–30.

[28]. Braithwaite, 1991, p. 4, citing report in *Izvestiia*, 2 May 1991.

Meanwhile, benefit obligations rose beyond expectations in 1991 because of the introduction of price liberalization that began in April and continued through 1991. The new U.S.S.R. pension law already promised periodic adjustments of the minimum retirement pension, which would become the basis for computation of all other benefits in the pension law. On the eve of the scheduled price decontrol of April 2, the Gorbachev government issued a resolution establishing the policy of concurrent adjustments for wages, pensions, and family allowances, and detailing these increases (see Appendixes A and B). Despite a shortfall in receipts from enterprise and employee contributions, and notwithstanding financial and administrative mishaps that led to delays in some payments, social security benefits were paid out with the help of loans from the State Bank.

## Impact of the Soviet Demise on Social Security

As the political structure of the Soviet Union disintegrated in late 1991, the Union-based social security system devolved into republic systems with rather limited impact. Throughout the deliberation of the 1990 U.S.S.R. State Pension Law, the U.S.S.R. Goskomtrud served in many ways as the mastermind behind the market-oriented legislation in the last years of the Gorbachev reforms. Since December 1991, while the central social policy making authority has shifted from the U.S.S.R. Goskomtrud to republic ministries of labor, the 1990 U.S.S.R. State Pension Law has remained the model for legislation initiated by the various republics outside the three Baltic States. Some republics have set their own minimum wages, pensions, and allowances, but they have kept intact key elements of the U.S.S.R. pension law designed to foster the transition to a market-based economy. The social insurance model remains in place. Also unchanged are the benefit indexing provisions, the social pension for the indigent, the system of an independent Pension Fund, and the pluralistic approach to income security.[29]

Since program administration of the U.S.S.R. pension law had always been under the authority of the republics rather than the Union (no Union ministry of social security was ever established), operations of pension programs have continued as before in all republics under ministries of social security, disrupted only by financial and administrative difficulties of their own.

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[29] Most republics had completed their respective pension laws during 1990 and 1991, before the collapse of the Union government. This may be one reason for the limited variations among the republic pension laws from the U.S.S.R. model. See, for example, "Zakon Latviiskoi Respubliki o gosudarstvennykh pensiiakh," 29 November 1990 (published in *Arods, gazeta profsoiuzov Latvii*, 19 January 1991, pp. 2–4); "Zakon Estonskoi respubliki: o pensiiakh," 15 April 1991; "Zakon Kazakhskoi Sovetskoi Sotsialisticheskoi Respubliki o pensionnom obespechenii grazhdan v Kazakhskoi SSR," (published in *Kazakhstanskaia pravda*, 6 August 1991, pp. 1–4); "O gosudarstvennom pensionnomobespechenii v SSR Moldova," 27 December 1990; and "Zakon o pensionnom obespechenii grazhdan v Turkmenskoi SSR," 25 March 1991. I am indebted to Mr. Nikolai Shinkov, International Labor Office, who made available to me the texts of these laws.

## Social Security Transition in the Russian Federation, 1992

### RADICAL ECONOMIC REFORM AND SOCIAL SECURITY

Since January 1992, President Boris Yeltsin and his advisers have embarked on a "shock therapy" program of economic reform characterized by immediate comprehensive price decontrol, tight monetary policy, deficit reduction, and enterprise privatization. The first two quarters of 1992 have witnessed steep price rises at an estimated annual rate of 1,000 to 1,800 percent, and a drop in production, reported to be at least 15 percent below the 1991 Gross Domestic Product.

These policies and resultant economic conditions challenge the newly configured social security system in all four of its objectives as the following sections explain.

*Minimum Income Security for All*

To protect the most vulnerable groups of the population, the Ministry of Labor and Employment has assumed the role of setting social policy, the minimum wage, the minimum level of subsistence, and pension amounts. Minimum wage and social security benefit indexing has become a powerful dynamic mechanism that affects the income security of a majority of the population.

Before the collapse of the Soviet Union, the Russian Republic had promulgated its own pension legislation in November 1990 (effective March 1991).[30] While this republican version followed the 1990 U.S.S.R. model in many respects, as described above, it contained two notable revisions. First, it raised the level of guaranteed minimum pension income for old age from 70 rubles a month under the U.S.S.R. program to 100 rubles a month. There were also the corresponding increases for minimum benefits for disability, orphans, and social benefits under old age, disability, and survivor pensions. Second, these pensions were linked to an established "minimum subsistence" established by the Russian Republic Supreme Soviet, not to the minimum wage established by the Union government.[31]

However, with the rapid increases in prices from January onward, Yeltsin's government has shifted back to indexing the minimum pension to the minimum wage, which is established below the level of subsistence minimum. For cash benefit programs, the minimum pension has risen from 342 rubles a month in January 1992 to 542 rubles in February and March, 642 rubles in April, and 900 rubles from May 1 through July. Family allowances have also increased rapidly during the first half of 1992 (Appendix B). The Supreme Soviet's Committee on Social Policy, trade union groups, and pensioners themselves have argued that the cost of

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[30] For full text of the R.S.F.S.R. State Pension Law, see *Sovetskaia Rossiia*, 7 December 1990, pp. 3–5; translated in *JPRS-UEA-91-004*, 23 January 1991, pp. 15–31.

[31] For comments on improved benefits under the R.S.F.S.R. pension law by M. Zakharov, Chairman of the Council of Republics Commission on Social Policy and subsequently the chairman of Commission on Social Policy of the Russian Republic Supreme Soviet, See V. Romanenko, "Privileges for Everyone," *Argumenty i fakty*, December 1990, pp. 2–3; translated in *JPRS-UEA-91-003*, 18 January 1991, pp. 28–30.

living since January has far outpaced the scheduled benefit adjustments.[32]

Given the declining production and availability of goods, at issue is the extent to which rising wages and pensions would contribute toward further price rises and lead to an inflation spiral. The Ministry of Labor and Employment insists that benefit indexing should offset no more than 60–70 percent of the price increases to avoid fueling inflation. It sets the level of minimum wage according to an estimated "physiological subsistence minimum" (PSM), which takes into consideration the cost of essential food and non food items and services.[33]

Pensioners who depended on social security benefits for their daily sustenance could face further hardship because of prolonged delays in payments of the adjusted amount or nonpayments of pensions altogether. A host of administrative and funding problems have contributed to these mishaps in some locales. The major changes in benefit formula in the 1990 pension law and subsequent benefit adjustments (two in 1991 and five during the first six months in 1992) require recomputation of benefits that are time-consuming and labor-intensive. Some social security offices have difficulty retaining their experienced staff because of low wages. In addition, the tight fiscal policy in Spring 1992 brought about a credit crunch and cash shortage, so that pension and wage payments in some regions reportedly were delayed for more than a month.[34]

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[32] The Ministry of Labor has closely aligned social policy with the government's radical economic reforms, instead of with labor interests. These labor interests are represented by the present-day splintered trade unions that are merely shadows of the powerful Communist Party controlled All-Union Central Committee of Trade Unions under the Soviet regime. Critics of the government policy often claim that the income of 90 percent of Russia's population have fallen below subsistence level. For example, see "Local Soviet Deputies Mark Reform's Progress," *ITAR-TASS*, 29 June 1992; translated in *FBIS-SOV-92-126*, 30 June 1992, p. 25.

[33] During an interview in Spring 1992, the former Minister of Labor and Employment, A. Shokhin, explained that the PSM was not equivalent to the minimum consumer budget, which included the consumption of more than 200 items of goods and services and was used in conditions of economic stability as the lower limit for normal life. He then suggested that only 15–20 percent of the population in Russia lived below the PSM, which was estimated to be only 550 rubles a month at the end of January. See "A. Shokhin: We Will Support Those Having a Tough Time. How to Get Through the Difficult Transitional Period to the Market," *Trud*, 4 April 1992, p. 3; translated in *FBIS-SOV-92-067*, 7 April 1992, pp. 28–30.

Shokhin also explained that the minimum wage since January was developed according to an estimated PSM at 650 rubles by the end of February and 811 rubles for March. See "Shokhin Fields Questions on Unemployment," *Moscow Russian Television Network*, 2 June 1992 (translated in *FBIS-SOV-92-109*, 5 June 1992, p. 42. Unfortunately, given rapidly changing conditions and the necessary time lag in developing the PSM, the Ministry has had to revise its estimates from time to time. According to more recent computations attributed to the Ministry of Labor, PSM for January, April, June and July was much higher than previously estimated. According to these newly developed computations, the minimum pension benefits during the first six months were no more than 40 percent of PSMs. Pension benefits have fallen further behind the monthly PSM for pensioners—estimated to be, respectively, 900 rubles, 1,335 rubles, 2,256 rubles, and 2,481 rubles for January, April, June, and July 1992. In other words, the minimum pension was 38 percent of PSM in January 1992, rose to 40 percent of PSM in June, and fell to 36 percent of PSM by July. For women pensioners, the physiological subsistence minimum was an estimated 1,231 rubles for April, 2,079 rubles for June, and 2,287 rubles for July. See Olga Plakhotnikova: "Living Standard; Time of Wildly Increasing Prices," *Rossiiskaia gazeta*, 8 July 1992, p. 3; translated in *FBIS-USR-92-092*, 22 July 1992, pp. 25–26.

[34] For example, "What Is Going on with Pensions?" *Svobodnyi Sakhalin*, 7 March 1992, p. 4 (translated in *FBIS-USR-92-050*, 1 May 1992, pp. 68–70); "Commission on Social-Labor Relations Meets," *Interfax*, 8 May 1992 (reported in *FBIS-SOV-92-091* 11 May 1992, p. 37); "Chelyabinsk-Russian Budget Crisis," *RFE/RL Daily Report*, No. 84 (4 May 1992), p. 2. These and many other anecdotal accounts do not provide a systematic analysis of the scale of the problems cited here, e.g., the proportion of pensioners and recipients of family allowances affected, and how severely. A. Zinchenko, director of a main administration of Russia's Central Bank, cited a total of 39

Continued

*A New Social Contract*

The second notable modification in the 1990 Russian pension law relates to the "incentive" structure in the U.S.S.R. benefit formula designed to encourage productive labor. In a counter move, the Russian law lowered the maximum pension benefit to 3 times the minimum pension, from the 5.2 times under the 1990 U.S.S.R. law. While computing benefits for his retirement pension, the beneficiary could choose to have benefits computed from the average wage during the last 24 months before retirement, or from any 60 successive months of work during the entire working life before application for the pension. [35]

During the first four months of 1992, the problem of pension leveling occurred. Because past wages used for computing benefits were not indexed while the minimum pension was rapidly rising, a great majority of pensioners were entitled to the same minimum pension amount. To counter this problem, the Supreme Soviet developed a series of coefficients for indexing wages in April, effective May 1, 1992. [36]

*The Social Insurance Model*

On the program funding side, the centrifugal forces that plagued the Gorbachev government at the Union level are undermining the Russian Federation's ability to collect tax revenues from its constituent republics and regions. Some local governments have decided not to pass on tax revenues (presumably including social security contributions) in retaliation for the central government's failure to provide them with payments of wages and pensions. [37] Should this development continue to spread, one may see the fragmentation of the country's social security system into small, local operations. This could increase administrative costs and jeopardize the important social insurance principle of risk sharing.

*Pluralistic Developments in Income Security*

A number of government and nongovernmental bodies have instituted measures to help meet the many needs left unfilled by the Russian state-operated social security system. The Supreme Soviet,

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billion rubles in shortfall of payments for wages, pensions, and allowances in March 1992, as compared with 19 billion rubles in shortfall in January 1992. He did not provide an amount for pensions and allowances separate from wage nonpayments. "Bank Official on Current Cash Shortage Implications," *Trud*, 11 April 1992, p.2 (translated in *FBIS-USR-92-045*, 22 April 1992, pp.37-38). According to Russia's State Committee for Statistics (Goskomtrud), in the first quarter of 1992 (i.e., before the cash and credit crunch), the payments of pensions and allowances were delayed at one in every four enterprises in industry, and one in every three enterprises in construction and agriculture. "The Socioeconomic Situation of the Russian Federation in the First Quarter of 1992," *Ekonomika i zhizn*, no. 17, April 1992, pp. 14-15; translated in *FBIS-USR-92-055*, 8 May 1992, p. 19.

[35] See articles 18 and 102 of the R.S.F.S.R. State Pension Law, "On State Pensions in RSFSR," *Sovetskaia Rossiia*, 7 December 1990, pp. 3-5; translated in *JPRS-UEA-91-004*, 23 January 1991, pp. 15-30.

[36] See "Law of the Russian Federation on the Early Introduction of the RSFSR Law 'On State Pensions in the RSFSR,'" *Rossiiskaia gazeta*, 20 April 1992, p. 2; translated in *FBIS-SOV-92-080*, 24 April 1992, pp. 26-27. For an account by a Ministry of Social Protection official about the problems created by some faulty design of these wage coefficients that had been developed by the Supreme Soviet, see V. Raskin, "News on Pensions in Russia," *Selskaia zhizn*, 7 March 1992, p. 4; translated in *FBIS-USR-92-042*, 15 April 1992, pp. 29-30.

[37] *RFE/RL Daily Report*, 4 May 1992, p. 2; "Gaydar Addresses Deputies on Budget," *Moscow Russian Television Network*, 16 July 1992 (translated in *FBIS-SOV-92-138*, 17 July 1992, pp. 44-46).

for example, has set up its own "Social Protection Fund" for regions experiencing special hardship.[38]

Some regional (krai), provincial (oblast), district (raion) and city governments have set up programs to assist the most vulnerable population groups with cash or in-kind payments. In Moscow, payments were provided through a "Fund for Social Protection" (FSP), set up as a public organization to receive subsidies from the city and donations from nongovernment sources. The Moscow FSP also subsidizes free or low-cost dining halls, meals for elementary school students, free transportation for pensioners and the disabled, and discounted transportation for students. Enterprises are purchasing or bartering their products for food supplies and other necessities for their workers and pensioners. Private voluntary organizations, including some affiliated with churches, have appeared to provide meals and services to the needy.[39]

At present, a systematic study of the contributions of these non-state operated programs to the economic security of the needy is not yet possible. It is significant that press reports about social welfare activities organized by local government and nongovernment agencies seem to suggest that these activities are not rarities. To be sure, there have been allegations of mismanagement and/or fraud in the use of social protection funds at all levels, ranging from the Supreme Soviet social protection fund to city and raion nongovernment groups' distribution of foreign aid packages.[40] The extent of proven mismanagement remains unknown. Nevertheless, the fledgling non-government organizations still have to face the test of time to answer questions about how stable their programs are and how effective they can be in serving as supplementary sources of income security for the most vulnerable.

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[38] "Resolutions on Social Security for (the) Underprivileged," *Rossiiskaia gazeta*, 31 December 1991, p. 3 (translated in *FBIS-USR-92-014*, 13 February 1992, pp. 85–86); and "Khasbulatov Issues Orders on 'Social Defense' of Krays, Oblasts," *Rossiiskaia gazeta*, 2 April 1992, p. 2 (translated in *FBIS-USR-92-043*, pp. 59–61).

[39] For example, "Local Prices May Cause 'More Social Unrest,'" *TASS*, 13 January 1992 (reported in *FBIS-SOV-92-008*, 13 January 1992, p. 44); "All for the Moskovites," *Vercherniaia Moskva*, 6 February 1992, p.1 (translated in *FBIS Report: Central Eurasia*, 18 March 1992, pp. 46–7); "Proceeds of Foreign Aid to Moscow Eyed," *Rossiiskaia gazeta*, 21 April 1992, p. 2 (translated in *FBIS-SOV-92-080*, p. 34); "New Organization Seeks to Improve Social Conditions," *Izvestiia* 11 November 1991, p. 2 (translated in *JPRS-UPA-91-047*, 10 December 1991, p. 67); "Khabarovsk 'Kray' Fund for Social Assistance Established," *Rossiiskaia gazeta*, 29 January 1992, p. 3 (translated in *FBIS-USR-92-012*, p. 113); "Ispolkom Official on Socioeconomic Situation in Nalchik," *Kabardino-Balkarskaia*, 5 March 1992, pp. 1–2(translated in *FBIS-USR-92-058*, 15 May 1992, pp. 62–65); Oxana Antic, "Charitable Activities of Churches in the USSR," *Report on the USSR*, 22 September 1989, pp. 7–9; and V. Tereshchenko, "Who Will Defend the Poor: The Capital's Authorities Are Doing What They Can," *Moskovskii Komsomolets*, 19 June 1992, p. 1 (translated in *FBIS-UWR-92-089*, 17 July 1992). The Moscow City Fund for Social Protection reportedly receives subsidies from government and nongovernment sources, including the proceeds from auctions of foreign aid food packages. The auctions are held for enterprises to make wholesale purchases of food supplies for their workers and former workers now on pensions. "Food Auctioning of Humanitarian Aid Begins," *Moscow Radio Rossii Network*, 16 April 1992 (translated in *FBIS-SOV-92-075*, 17 April 1992, p. 27).

[40] For example, "Khasbulatov Accused of 'Embezzlement,' Abuses," *ITAR-TASS* 25 May 1992 (reported in *FBIS-SOV-92-101*, 26 May 1992, pp. 27–28); O. Plakhotnikova, "Scandal: He Who Dares Gets the Food," *Rossiiskaia gazeta*, 21 April 1992, p. 2 (translated in *FBIS-SOV-92-080*, 24 April 1992, p. 34); "Allegations of Sale of Charitable Aid Denied," *Rossiskaia gazeta*, 11 June 92, p. 8 (translated in *FBIS-SOV-92-117*, 17 June 1992, p. 29); and "Problems in Aid Distribution Noted," *Polianaia pravda*, 9 April 1992, p. 2 (translated in *FBIS-USR-92-072*, 15 June 1992, p. 61).

A NEW PENSION PROPOSAL—BEYOND SOCIAL INSURANCE?

At mid-year 1992, the Russian Federation is at a crossroads. At issue is the decision of whether to press ahead with the radical economic reform agenda or to heed warnings of "social explosion" by relaxing credits, slowing down privatization, and improving the living standard of the needy. According to Yeltsin's new economic proposal for deepening economic reforms by 1995–1996 (published in summary form in July), the government in Russia envisions a social security system that will protect the most vulnerable portion of the population, offer social insurance to the labor force, and generate investment capital for economic development as well. [41]

The proposed income security system consists of three tiers—a "social pension," a labor (insurance) pension, and a private pension. It will keep the existing "social pension" as the first tier to provide a minimum level of subsistence to all citizens who cannot work (or whose work tenure falls short of the required minimum for eligibility for the second-tier labor pension), and will continue to be financed through general revenues. The second tier, the labor (insurance) pension, will cover the great majority of the labor force through either the government social security (pension) fund or independent insurance companies. The third (supplementary) level is the private pension tier offered by nongovernment pension funds. The independent insurance companies and nongovernment pension funds will provide the instruments for generating investment capital.

No details were given in the summary proposal regarding government regulation of these insurance companies or non-government pension funds. Moreover, there was no indication of whether the third-tier private pension program would be compulsory or voluntary. At present, both the second and third tiers are state-operated programs. The Ministry of Social Protection administers the compulsory social security program, which covers the working population, and the State Insurance Administration manages voluntary supplementary pensions through employers.

Whether or not the Russian government will press ahead its economic reform, the new pension proposal faces formidable obstacles. The lack of an insurance industry and a stable financial market in Russia does not augur well for private pension investments. A crucial question is the extent to which these private pension plans can guarantee benefit indexing to protect the beneficiaries from the highly inflationary economy in Russia. Western experience with private pensions does not provide optimism regarding inflation protection, however. [42] Pension plans that cannot compete with state-

[41] "Program for Deepening Economic Reforms (up to 1995–1996): Brief Summary; Prepared by the Government of Russia, Taken under Advisement by the Parliament," *Rossiiskie vesti*, 11 July 1992, pp. 3-16; translated in *FBIS-USR-92-093*, 24 July 1992, pp. 26–54. See especially pp. 35–36 and p. 54.

[42] Robert L. Clark, "Inflation Protection of Retiree Benefits," in *Pension Policy: An International Perspective*, eds. J. A. Turner and L. M. Dailey (Washington,D.C.: U.S. Government Printing Office, 1991), pp. 53-58; David W. Conklin, "Pension Policy Reforms in Canada," ibid, pp. 91–93; Kees Zweekhorst, "Developments in Private Pensions in the Netherlands," ibid, pp. 179–181; and William Birmingham, "Occupational and Personal Pension Provision in the United Kingdom," ibid, pp. 225-227.

operated social security in benefit adjustment would understandably have difficulties attracting enrollees should these programs be voluntary; and the government would be hard pressed to justify making these plans compulsory, forcing the population to risk the erosion of their safety net for the purpose of generating investment capital. Pension plans that are able to generate investment capital would best require safeguards against business or market failures so as not to jeopardize the income security of the pensioners.

## Conclusion

Social security in the Soviet Union and in the Russian Federation takes on a multidimensional significance during economic transition. On the one hand, the Gorbachev social security reforms were intended to (1) alleviate apprehension about economic reforms by providing protection from hardship and inflation during the transition period; (2) revitalize the Soviet work force by introducing social security incentives for longer service; (3) instill in employees a sense of responsibility for their own economic security by adopting the Western market-based social insurance model for social security financing, and offering voluntary supplementary pension plans; and (4) foster a pluralistic approach to economic security by allowing local government add-ons to the Union-based benefits.

On the other hand, under conditions of radical and comprehensive price and wage decontrol, the 1990 legislative commitments to social security benefit indexing and other benefit enhancement provisions became entangled in the inflation spiral that confounds the reformist government in the Russian Federation. The incentive benefit structure to promote productive labor has since been partially modified by the 1990 R.S.F.S.R. pension law and suffered a temporary set back due to pension leveling (at the rate of minimum pension) under high inflation. Meanwhile, concurrent system restructuring in the political and economic spheres since 1990 has undermined the administrative and financial viability of the income security programs in the Soviet Union (1991) and the Russian Federation (1992). Some government and nongovernment programs have since appeared to supplement, albeit haphazardly, the state-operated income security system.

As President Boris Yeltsin considers whether or not to press for a further deepening of the radical economic reform plan at mid-year 1992, his decision may very well depend on the extent to which continuing reform may bring further hardship for the population, and the extent to which the state-operated social security and other government and nongovernment programs are prepared to help quiet popular discontent. Regardless of Yeltsin's decision on the course of social security reform, income security issues will continue to be a crucial ingredient in the government's economic and political agenda.

## APPENDIX A. Pension and Wage Comparisons

(In Rubles)

| Item | USSR 1989 | USSR/RSFSR 1/1/1991 | USSR/RSFSR 4/2/1991 | RUS.FED. 1/2/1992 | RUS.FED. 6/1/1992 |
|---|---|---|---|---|---|
| Average Pension, (All Pensioners) [a]. | 80.4 | 109.2/114.7 | 117/N.A. | N.A. | N.A. |
| Average Wage (All Sectors) [b]. | 240.4 | 274.6/296.8 | N.A. | 1,470 | 4,400 |
| Minimum Old-Age Pension [c]. | 70 | 70/100–120 [e] | 135/165 | 342 | 900 |
| Minimum Wage (RSFSR: Subsistence Minimum) [d]. | 70 | 70/100 [e] | 135/165 | 342 | 900 |

Sources: *Soiuznye respubliki osnovnye ekonomicheskie i sotsial'nye pokazateli*, Moskva: Goskomstat, 1991, pp. 68–70.; M. Jacobs, "Pensioners Finally Get a Boost," *Report on the USSR*, 10 August 1990, p. 3; *Narodnoe khoziaistvo SSSR v 1990g.* Moscow: Finansy i statistika, 1991, p. 38; "Privileges of Everyone," *Argumenty i fakty*, December 1990, pp. 2–3; translated in *JPRS-UEA-91003*, 18 January 1991, pp. 28–30; "How Much Has the Cost of Living Increased?" *Argumenty i fakty*, no. 16, April 1991, p. 5; translated in *JPRS-UEA-91-024*, 17 May 1991, pp. 76–78; E. Gontmakher, "What the State Can Give the Poor: Social Protection as a Part of Radical Economic Reform," *Nezavisimaia gazeta*, 17 April 1992, p. 4; translated in *FBIS-USR-92-050*, 1 May 1992, pp. 42–44; A. Struvev, "The Pension is Repayment of a Debt," *Torgovaia gazeta*, 1 January 1992, p. 1; translated in *FBIS-USR-92-005*, 16 January 1992, pp. 27–28; Ivan Zhagel, "Restrained Optimism in Face of Production Slump. Economic Situation in Russia in First Half," *Izvestiia*, 21 July 1992, p. 2; translated in *FBIS-SOV-92-141*, 22 July 1992, pp. 30–31; V. Golovachev, "A View of the Situation: Wages and Prices," *Trud* 2 June 1992, p. 1; translated in *FBIS-USR-92-075*, 19 June 1992, pp. 38–39; and "On Raising the Minimum Wage," *Rossiiskaia gazeta*, 1 May 1992, p. 1; translated in *FBIS-SOV-92-087*, 5 May 1992, pp. 38–39.

[a] Except collective farmers.

[b] All workers and employees, excluding collective farmers.

[c] 1990 data.

[d] Average monthly wage for April 1992.

[e] Minimum old-age pension and subsistence minimum in the Russian Republic, effective 1 March 1991.

N.A.—Data not available.

# APPENDIX B. Family Allowances [a]

(In Rubles)

| Type of Benefit | USSR 1989 | USSR 10/1/1990 (mw=mp=R70) [b] | USSR/RSFSR 4/2/1991 (mw=mp=R165) | Rus. Fed. 1/1/1992 (mw=mp=R342) | Rus. Fed. 6/1/1992 (m2=mp=R900) |
|---|---|---|---|---|---|
| **Children's Benefits by Age Group [c]** | | | | | |
| Birth of child | 50–250 | 3 x mw | 250 | 3 x mw | 2,700 |
| Up to 18 months | 35–50 | mw | 110 | 60% x mw | 500 |
| Up to 18 months old | N.A. | 50% x mw | 80 | 45% x mw | 400 |
| Age 18 months to 6 yrs. | 12 | 50% x mw | 80 | 45% x mw | 400 |
| Up to age 6 | 4–20 | 50% x mw | 80 | 45% x mw | 400 |
| Up to age 16 | N.A. | N.A. | 40 | 25% x mw | 200 |
| Age 6–16 (or 18) | N.A. | 50% x mw | 90 | 50% x mw | 450 |
| Up to Age 16 | N.A. | N.A. | 110 | 60% x mw | 500 |
| Age 6–18 | N.A. | 50% x mw | 90 | 50% x mw | 450 |
| **Compensation for Costs of Children's Goods** | | | | | |
| Up to Age 6 | N.A. | N.A. | 200 | 30% x mw | 250 |
| Age 6–13 | N.A. | N.A. | 240 | 35% x mw | 300 |
| Age 13–18 | N.A. | N.A. | 280 | 40% x mw | 350 |

Sources: *Social Security Programs Throughout the World, 1989*, pp. 268–269; "Resolution on Status of Women, Children," *Pravda*, 14 April 1990, pp. 1–2; translated in *JPRS-UPA-90-022*, pp. 92–94; "Decree Aids Families with Children," *Selskaia zhizn*, 5 August 1990, p. 2; "On the Reform of Retail Prices and the Social Protection of the Population," *Pravda*, 21 March 1991, pp. 1–2; translated in *FBIS-SOV-91-056*, 22 March 1991, pp.35–36; "Ukase of the President of the Russian Soviet Federated Socialist Republic on Increasing Compensation Payments in 1991-1992 and the Procedure for Indexing Personal Monetary Income in 1992," *Rossiiskaia gazeta*, 24 December 1991, p. 2, translated in *FBIS-USR-92-005*, 16 January 1992, pp. 23–24; "On Increasing the Amounts of Social Subsidies and Compensation Payments in 1992," *Rossiiskaia gazeta*, translated in *FBIS-USR-92-067* 5 June 1992, pp. 42–3; "On the Reform of Retail Prices and the Social Protection of the Population," *Pravda*, 21 March 1991, pp. 1–2; translated in *FBIS-SOV-91-056*, 22 March 1991, p. 36.

[a] Allowances funding—Birth of child, from the Social Insurance Fund (cash maternity benefit; birth to age 18 years, from the Pension Fund; all other funding (i.e., up to age 18 years and compensation for costs of children's goods) from republic budgets.

[b] mp—minimum pension; mw—minimum wage.

[c] Children's benefits are monthly benefits in rubles for each child, unless otherwise specified (For USSR—established, for the first time, the principle of determining family allowance amounts according to a fixed proportion of the minimum wage; for USSR-RSFSR—the payment of family allowances as percent of the prescribed minimum wage notwithstanding, these allowance amounts were announced pending the approval of a new level of minimum wage). Birth of child—one-time subsidy for the birth of each child (USSR 1989—lump sum of 50 rubles on birth of first child, 100 for second and third child, rising progressively to 250 rubles for 11th and each additional child). Birth to 18 months (row 2)—to mother caring for children up to 18 months of age. Mother either has at least one-year employment (regardless of length of employment if mother under age 18), or pursuing education taking leave from employment (USSR 1989—for maternity leave until child is 1 year old, depending on number of children). Birth to 18 months (row 3)—to working mother with less than one-year covered employment. Age 18 months to 6 years—income-tested (USSR 1989—for children aged 1 year to 8 years, income-tested; USSR 1990—new benefit, if family per capita income is under two times the minimum wage; USSR-RSFSR—limited to children whose parents' income is under four times the minimum wage; Russian Federatoin—not income-tested). To age 6—to single mother or unmarried mother caring for child under age 6; to children whose parents are evading support (USSR 1989—child aged 1 to 5 years old. To residents with 4 or more children: 4 rubles a month for 4th child, rising progressively to 15 rubles for 11th and each additional child, with rank based on all living children rather than those under age 5. Unmarried mothers receive 20 rubles per child). To age 16—for children not receiving subsidies under social security; for students not receiving stipend, until completion of educational institution. Ages 6–16—to single or unmarried mothers (up to age 18 if child is student not receiving stipend). To age 16—for children infected with human immunodeficiency virus (HIV) or having AIDS. (Russian Federation—extended to age 18). Age 6–18—parents evading support.

Compensation for costs of children's goods is quarterly compensation in rubles for each child. For all ages this compensation also goes to an unemployed able-bodied person caring for a person with total disability requiring constant attendance, or aged 80 or over, or for a disabled child under age 16; to mother (or other relatives providing care for the child) who is taking maternity leave until child reaches age 3.

N.A.—Not applicable.

# THE CULTURAL DIMENSION: IS THERE A BASIS FOR FREE ENTERPRISE?

by Lawrence E. Modisett *

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## SUMMARY

The question of entrepreneurship is frequently raised in connection with the prospects for Russia and the other former Soviet republics making a successful transition from a state-owned, command economy to a privatized, market economy. Skeptics argue that there is little historical basis for entrepreneurial activity, and that what existed prior to 1917 has been virtually extinguished by 70 years of Communist rule. They also cite contemporary evidence, largely anecdotal, in contending that Russian society will not support entrepreneurial activity on a scale sufficient to achieve and maintain a market economy.

This paper takes an opposing view. A review of Russian economic history demonstrates that entrepreneurial activity has deep roots extending to all social classes. Trends in Soviet society over the past thirty years—the same trends that led to the overthrow of the old political order—also favor the expansion of entrepreneurship. And a survey of contemporary economic activity offers abundant evidence that it is indeed spreading rapidly and is taking an increasing variety of forms.

Some caveats are in order. The prospects for entrepreneurial activity vary by region and republic, and for the next several years entrepreneurs will face a number of obstacles. These include an undeveloped legal and financial framework and continuing opposition to privatization from advocates of the old order. The demands of labor organizations and environmentalists will also pose chal-

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lenges, but these movements will also have incentives to work in partnership with new enterprises. An additional challenge for entrepreneurs will be to meet the rising expectations of consumers.

The threat of political instability is a particularly daunting prospect for entrepreneurs, but the experience of recent years offers some grounds for reassurance. The former Soviet Union has weathered epic change without the widespread disorder that many foreign and domestic observers had feared. The violence that has occurred has been localized and mostly sporadic. The principal leaders of the various republics have taken a pragmatic line, and no politician has attracted broad support by appealing to ethnic animosity. The vast majority of ethnic groups continue to coexist peacefully, and the public has displayed remarkable forbearance in the face of hardship. Economic ties are likely to transcend further political change, including boundary changes, and over time the impact of successful entrepreneurial activity will itself contribute to stability.

Foreign investment can play a significant but not decisive role in determining the prospects for entrepreneurial activity. Foreign investors can provide badly needed capital, technology and expertise, but they will encounter a mixed reception, including opposition from enterprises fearful of foreign competition and from a public traditionally suspicious of foreign exploitation. The critical variables in determining the outlook for entrepreneurial activity lie within the former Soviet Union. The conclusion of this paper is that there exists a solid basis for success.

## INTRODUCTION: THE ISSUE OF ENTREPRENEURSHIP

A question frequently raised in assessing the prospects for successful privatization in the former Soviet republics is about entrepreneurship: Are sufficient numbers of Russians and other former Soviet citizens prepared to establish and maintain enterprises whose survival depends upon profits, or have 70 years of Communist ideology, superimposed upon a long tradition of egalitarianism, eliminated the cultural basis for entrepreneurial activity?

Much attention has been focused upon displays of resentment toward private enterprise and those who get ahead, even if they do so by providing goods and services otherwise unavailable. Geoffrey Hosking has warned that a strain of "sullen egalitarianism" that is particularly prominent in the Russian republic could render private enterprise less successful there than in other regions of the former USSR. [1] Hedrick Smith calls the phenomenon the "culture of envy" and cites a number of Russian observers, including Mikhail Gorbachev, who consider it a serious obstacle to reform. [2] Accounts of threats and vandalism against privately run farms and cooperatives have appeared in the press.

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[1] Geoffrey Hosking, *The Awakening of the Soviet Union* (Cambridge, Massachusetts: Harvard University Press, 1990), p. 132.

[2] Hedrick Smith, *The New Russians* (New York: Avon Books, 1990), pp. 200–205.

## The Historical Role of the Entrepreneur in Russia

Popular resentment over the achievements of others is not a recent phenomenon, as evidenced by Russian folklore. In one oft-told tale, a peasant prays not to acquire a cow of his own, but that his neighbor's cow may die. In another, a fisherman, told that he may have anything he desires but that his neighbor will receive twice as much, reflects a moment, then asks to lose one eye.

Anecdotal evidence of this sort has heightened doubts about the prospects for privatization and economic reform in the former Soviet Union, particularly Russia, but such evidence represents only part of the picture. An examination of Russian history, social trends, and recent economic activity reveals a firm basis for entrepreneurship and suggests that it can become a significant force for economic change.

Many of the doubts raised about the prospects for entrepreneurial activity rest upon historical arguments. Frequently cited is the influence on peasant culture of the communes, as they developed from the Middle Ages through the nineteenth century. Within these institutions, common ownership of land, periodically redistributed among families according to changing needs, and common responsibility for taxes imbued the peasantry with a strong sense of egalitarianism. At times, peasants chose to relinquish holdings because the tax structure made it less profitable to farm a larger plot than a smaller one. [3] A popular saying came to be, "The tallest blade of grass is the first to feel the scythe." The British historian B. H. Sumner wrote that after emancipation, the commune and the family household "continued to be regarded as immemorial Slav institutions safeguarding peasant Russia from the cut-throat competition of Western individualism." [4]

Another historical argument sometimes invoked is the absence in Russia of a native capitalist tradition. Theodore Dan, likening the development of heavy industry in 19th-century Russia to that of colonial and semi-colonial countries, described it as "a massive edifice . . . largely built on foreign models, and erected on a foundation of extreme socio-economic and cultural backwardness and on the extreme poverty and the primitive economy of its peasant masses." [5] James H. Billington observed that from the time of Peter the Great the propensity of the merchant class to adopt the Old Belief prevented it from exercising in Russia the kind of modernizing influence its counterparts wielded in Western society and that no bourgeoisie analogous to that of the West survived the reforms of Alexis and Peter. Billington also contended that by the end of the nineteenth century, Russian entrepreneurs preferred government support to independence and that the growing role of Jews, Germans, Armenians and foreign investors "made laissez-faire liberalism seem synonymous with turning Russia over to for-

[3] Discussions of the evolution of the commune and the historiographical debate over its origins are contained in the classic studies by Jerome Blum, *Lord and Peasant in Russia from the Ninth to the Nineteenth Century* (Princeton, New Jersey: Princeton University Press, 1961), pp. 24-28, 504-536; and Geroid Tanquary Robinson, *Rural Russia Under the Old Regime* (Berkeley: University of California Press, 1969), pp. 10-12, 35-36, 117-126.

[4] B. H. Sumner, *A Short History of Russia* (New York: Harcourt, Brace and Company, 1943), pp. 128-129.

[5] Theodore Dan, *The Origins of Bolshevism* (New York: Schocken Books, 1970), pp. 15-21.

eign masters." [6] The implication of such interpretations is that independent entrepreneurial activity lacks sufficient roots in Russia to provide the basis for economic growth.

In fact, entrepreneurial activity has been prominent through most of Russian history, and it has existed at all levels of society. The Russian state had its origins in commerce, arising from communities established by Khazar traders and Scandinavian merchant-warriors. Even before the establishment of the state, the native Slavs assimilated the foreigners' commercial ways and began participating in trade with the East. [7] By the eleventh century, Kievan Rus was trading with Byzantium, the trans-Caspian regions, and Central and Western Europe, and this trade gave strong impetus to internal commerce and the development of a market economy. [8] Over the next two centuries, the Mongol occupation and other conflicts had a devastating impact on economic life, but by the end of the fourteenth century signs of recovery were in evidence. Manufacturing and trade revived under the leadership of landowners, especially monasteries, who benefited from special commercial privileges. [9] During the sixteenth century, territorial expansion and population increases stimulated commercial and industrial activity in both villages and cities. [10] By the early eighteenth century, the spread of the Old Belief was spurring commercial activity much as Calvinism did in Western Europe, with proponents insisting on the need for hard work to demonstrate election as one of God's chosen. [11]

Jerome Blum has observed that in contrast to Western Europe, where trade was predominantly a middle-class occupation, all levels of Russian society engaged in commerce—peasants, clergy, merchant families, aristocracy, and Tsars. [12] This belies the notion that entrepreneurial activity was somehow alien to traditional Russian culture. The extent of peasant involvement is particularly noteworthy. Blum notes that during the expansion of manufacturing from the mid-eighteenth to the mid-nineteenth century, a substantial number of peasants became entrepreneurs, with a few establishing firms employing thousands of workers. When handicrafts are taken into account, the importance of peasants to manufacturing far outweighed that of merchants and nobility. [13] Sumner makes a similar point, and attributes the success of peasant industries to their comparative cheapness, flexibility, and "close touch with their market." [14] Sergei Pushkarev has chron-

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[6] James H. Billington, *The Icon and the Axe: An Interpretive History of Russian Culture* (New York: Alfred A. Knopf, 1970), pp. 195, 447–448. Billington did note that there was a strain of Manchester liberalism, which advocated freeing the economy from government interference, from the time of Catherine, and that by the end of the nineteenth century this school had influential advocates in the journal *Herald of Europe* and the Society for the Promotion of Trade with the Fatherland.

[7] Michael T. Florinsky, *Russia: A History and an Interpretation* (New York: Macmillan, 1947, 1953), I, pp. 2–9.

[8] Blum, pp. 14–15.

[9] *Op. cit.*, p. 117.

[10] *Op. cit.*, pp. 122–126.

[11] Billington, p. 193.

[12] *Op. cit.*, pp. 129–131.

[13] *Op. cit.*, pp. 288–292, 297–303.

[14] Sumner, pp. 344–345.

icled the remarkable growth of credit, consumer, and agricultural cooperatives during the first decade of the twentieth century. He notes that by 1914, they numbered over 30,000 and had about 12 million members, mostly peasants. [15]

No less a figure than Aleksandr Rutskoy, Vice President of the Russian Federation, has affirmed the historical importance of Russia's merchants. In a speech to the Congress of Civil and Patriotic Forces in February 1991, he extolled the contribution of the merchant class to Russia's economy, military might, culture and national awareness. He also stressed its native origins, calling it "flesh of the flesh" of the Russian people. [16]

### The Impact of Societal Change

Along with the historical basis for entrepreneurial activity, any assessment of its prospects must take into account the changing nature of Russian society. A salient question is whether the same trends that brought down the old political order will prove conducive to revolutionary changes in economic life as well.

Over the past four decades, two prominent trends have been urbanization and a rising education level. While Soviet society was still predominantly rural in Khrushchev's day, by the time Gorbachev took office two-thirds of the population lived in cities. Gail Lapidus has noted that over the same period, the number of Soviet citizens with a higher education grew from 5.5 million to 24 million, and the number of "scientific workers" increased from about 1.5 million to about 15 million. [17] This transformation of traditional Russian society into one more urban and sophisticated was a basic factor—if not the primary factor—in the groundswell of grassroots political activity that doomed the old order.

A related development, whose principal impetus came from Gorbachev's relaxation of controls under *glasnost*, is the ongoing revolution in communications. This phenomenon, characterized by a proliferation of media and unprecedented freedom of expression, has been manifest so far primarily in the printed and broadcast media. As more sophisticated means of communication become available, including advanced telecommunications and data processing links, the information revolution will play an increasingly influential role in shaping Russian society.

All of these changes hold favorable implications for entrepreneurship. As in earlier eras, the surge in urbanization has presented entrepreneurs with abundant opportunities in the form of mass markets and unmet demand, now compounded by the collapse of the command economy and the dislocations arising form political fragmentation. Improvements in their education have increased the number of Russians capable of learning new skills quickly and of functioning in a privatized economy. Expanding communications will provide entrepreneurs current information upon which to base

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[15] Sergei Pushkarev, *Self-Government and Freedom in Russia* (Boulder, Colorado: Westview Press, 1988), pp. 85-89. I am indebted to Nick Petro for alerting me to Pushkarev's study.

[16] Quoted in *Obozrevatel* No. 2, February 1992, pp. 5-10.

[17] Gail Lapidus, "State and Society: Toward the Emergence of Civil Society in the Soviet Union," in *Politics, Society, and Nationality inside Gorbachev's Russia*, ed. S. Bialer (Boulder, Colorado: Westview Press, 1989), p. 126.

decisions, aid them in finding new markets and advertising their products, and help match available labor to jobs. Improved communications can also help ensure that commercial law and trade practices develop uniformly among the various regions of the former Soviet Union, an important condition for successful privatization.

## CONTEMPORARY ECONOMIC TRENDS

The prospects for entrepreneurial activity appear good not only in light of historical precedent and social trends, but also as measured by current economic activity. Even under the command economy of the old order, a small private sector was allowed to operate in order to alleviate the critical shortage of certain goods and services. Some doctors, for example, were able to supplement their meager state incomes by providing quality medical care on their own time to those who could pay for it, and the peasant *rynok*, offering bountiful displays of otherwise unavailable goods at premium prices, was an established fixture in every Russian city. In addition to such legally sanctioned private activity, there was a thriving second economy comprising a range of transactions that were illegal, semi-legal, or based upon personal contacts and bartered favors. The pervasiveness of this *nalevo* economy after seven decades of socialist central planning provided graphic testimony to the survival of the entrepreneurial spirit. [18]

As the changes of recent years have rolled back restrictions, private economic activity has expanded at an accelerating pace and in an increasing variety of forms. According to the State Committee for Statistics (*Goskomstat*) of the Russian Federation, two billion rubles' worth of facilities were transferred from state to private or collective ownership in 1991, and by early 1992 the private business sector accounted for nearly four percent of Russia's fixed capital. [19]

Many of these new enterprises are a result of managers from state enterprises acting on their own initiative to convert state property to quasi-private use. [20] Legislation in 1988 authorized the establishment of cooperatives as legal entities and gave them considerable freedom from wage and price controls. This made them attractive business partners for state enterprises seeking ways to evade restrictive regulations, and by the end of 1990 over 80 percent of cooperatives were attached to state enterprises. [21] In 1989, legislation allowed the work force of a state enterprise to lease the whole enterprise if two-thirds voted to do so. Together, these laws led to the rapid establishment of cooperatives and the widespread transfer of state assets to their use. In the first half of 1991, the number of cooperatives in the USSR reached 255,000, employing 6.5 million people and producing output worth 42 billion rubles.

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[18] James R. Millar provides a useful discussion of private economic activity during the final years of the Soviet economic system in *Rubles and Dollars: Strategies for Doing Business in the Soviet Union*, ed. James L. Hecht (HarperBusiness, 1991), pp. 29–46.

[19] State Committee for Statistics, "The Russian Federation's Socioeconomic Situation in 1991," *Ekonomika i Zhizn*, No. 4, January 1992, published in Foreign Broadcast Information Service *Daily Report*, hereafter FBIS, February 6, 1992, pp. 25–35.

[20] For an informative analysis of this phenomenon, based upon interviews with managers in Russia and Ukraine, see Simon Johnson and Heidi Kroll, "Managerial Strategies for Spontaneous Privatization," *Soviet Economy*, 1991, 7, 4, pp. 281-316.

[21] Johnson and Kroll, p. 287.

Along with cooperatives, a growing number of small businesses have sprung up, encouraged by a decree of 1990 granting tax incentives. Because of such incentives, large numbers of cooperatives have converted to this form of organization. [22] According to one report, there were 200,000 small enterprises in Russia by April 1992, employing an average staff of 29. Thirty percent were privately owned. [23] Most small enterprises quickly reduced their dependence on parent state enterprises as suppliers and customers and relied increasingly on market transactions. [24]

These organizations are proving an excellent training ground for entrepreneurs; one Ukrainian manager told an interviewer, "Small enterprises are like small universities." [25] Commenting on the spinoff of cooperatives and small businesses from state enterprises, economist Jeffrey Sachs has written, "What comes through clearly is the entrepreneurial energy of a vast range of enterprise managers who are responding rapidly to changing legal possibilities and economic conditions." [26]

Entrepreneurial initiative has also found expression in the creation of new financial institutions modeled after those in the West. According to numerous reports, over 800 "commodities exchanges" had been formed in the former Soviet Union by early 1992, although Western-style legislation defining their activities has resulted in many becoming trading houses, wholesale firms and investment companies. [27] Numerous stock exchanges have also been formed, but their activity will remain small until a greater volume of equities becomes available. Commercial banking is another area that has seen rapid growth. The State Committee on Statistics reports that by early 1992 some 1,300 new commercial banks had been registered in Russia. [28] Most of these were formed from former state banks. A study of commercial banks in Kiev indicates that most were founded on capital provided by state enterprises and operate like venture-capital funds, aggressively seeking out new investments, particularly among small enterprises, and continually introducing new services. [29]

Private initiative is also gathering momentum in the agricultural sector, despite many obstacles. *Izvestiya* reported that the number of small private farms in Russia doubled during the first four months of 1992, from 49,000 to 100,000. Also noteworthy is the formation of farming associations. These institutions seek to increase their members' economic leverage by negotiating trade ties with other regions and even foreign countries, establishing their own retail chains, and setting up investment firms to acquire stock in major Russian companies. [30] The willingness of thousands to

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[22] Johnson and Kroll, pp. 288–89.

[23] *Rossiiskiye Vesti*, no. 4, p. 7, cited in SovData DiaLine—BizEkon News, April 24, 1992, copyright J.V. Dialogue.

[24] Johnson and Kroll, p. 298.

[25] *Ibid.*, p. 297.

[26] Jeffrey D. Sachs, "Spontaneous Privatization: A Comment," *Soviet Economy*, 1991, 7, 4, p. 317.

[27] See the interview with K. Zatulin, co-chairman of the board of the Interregional Exchange Union, *Komsomolskaya Pravda*, February 18, 1992, published in FBIS, March 10, 1992, pp. 44–46.

[28] "The Russian Federation's Socioeconomic Situation in 1991," FBIS, February 6, 1992, p. 25.

[29] Johnson and Kroll, p. 305.

[30] *Izvestiya*, April 28, 1992, published in FBIS, April 29, 1992, p. 34.

venture into private farming under uncertain and adverse conditions, and the creativity and organizational skills displayed by the farming associations, are promising indicators that the entrepreneurial spirit of the peasantry, noted above, has survived the devastating blows of collectivization and the campaign against the Kulaks.

Another example of entrepreneurial activity at the grassroots level, and an indicator of its acceptability to the public, is the mushrooming growth of street markets throughout Russian cities. Initial accounts portrayed these markets as composed largely of desperate citizens, primarily pensioners, selling personal possessions to supplement meager incomes in a time of runaway inflation. While some element of this remains, the markets have evolved into thriving businesses whose participants employ elaborate networks to procure or manufacture hard-to-find goods and sell them at premium prices. According to one April 1992 survey of participants at Russia's largest street market, located outside Detskiy Mir in Moscow, most were earning 80 to 100 rubles an hour, working 20 hours a week. [31] Municipal authorities recently have sought to regulate this activity by restricting it to certain locations and imposing a tax to cover cleanup costs.

While public opinion polls must be used with caution, they offer evidence that many Russians view entrepreneurial activity as a major means toward economic improvement. A poll of 1,000 Muscovites in January 1992, conducted by the Sociology of Parliamentarianism Institute, found that the largest category of respondents, 39 percent, believed that the way out of economic crisis lay with private enterprise. The second highest category, those placing their faith in governmental action, contained only 16 percent of respondents. [32] In March, under the accumulated impact of winter hardships, those placing their faith in entrepreneurs had fallen to 20 percent. They nonetheless represented the second highest category of respondents. The highest category, representing 23 percent, placed its confidence in Boris Yeltsin, who did not appear in the January poll. [33]

## CHALLENGES FACING ENTREPRENEURS

Despite the rapid expansion and growing diversity of entrepreneurial activity, there are grounds for caution. The prospects vary among and within the various republics, reflecting differences in cultural outlook, natural and human resource endowments, and infrastructure. For at least the next several years, entrepreneurial activity will be impeded by the absence of a legal and financial framework and the scarcity of investment capital. The inadequacy of existing legal norms to guide privatization is setting the stage for potentially massive litigation over ownership and contractual obligations, complicated by the proliferation of jurisdictions claiming authority.

Entrepreneurial activity will also face continued resistance from unreconstructed advocates of the old order, including political ideo-

[31] *The Economist*, April 25, 1992, p. 57.
[32] *Izvestiya*, January 28, 1992, p. 2.
[33] *Izvestiya*, March 24, 1992, p. 3.

logues, bureaucrats whose jobs depend upon preserving the central control mechanism, and leaders of heavy industry whose empires would crumble in a market economy. These factions could form a powerful alliance against privatization, particularly if the benefits prove slow in coming and public disaffection with reform increases.

Labor unions, particularly the old, official unions, are also likely to remain hostile to privatization out of a concern that it will bring unemployment and lower real wages. Opposition is likely to be particularly strong from workers in heavy industry, whose wages depend upon subsidies and whose skills are not easily transferable to other sectors. Over time, as the benefits of privatization spread, opposition from labor will diminish. Increasing numbers of workers will be attracted to private and cooperative enterprises by the prospect of higher earnings, and some will become entrepreneurs themselves.

Another force affecting the prospects for entrepreneurial activity will be the environmental movement, which in recent years has proven remarkably effective in generating and directing public support. Environmentalists could put a damper on entrepreneurial activity by demanding costly restrictions on manufacturing and extractive processes. However, having witnessed the havoc wrought by the state-run economy, they are likely to support the growth of private enterprise in principle as a means of accelerating the introduction of environmentally conscious policies and cleaner, more advanced industrial processes.

Another challenge likely to face entrepreneurs over the next several years is a more militant and demanding consumer. While consumers now use most of their energy locating and queuing for products, their expectations will rise as the economy stabilizes and the choice of goods increases. To a growing degree, the viability of enterprises will depend upon their ability to adapt to more competitive markets.

One of the most important but least predictable influences on the prospects for entrepreneurial activity will be the level of political stability. Ethnic conflict and separatist movements have taken their heaviest toll in the Caucasus but have also caused turmoil in Moldova, Central Asia, Ukraine and Russia. None of the former republics is invulnerable to conflict, and the threat of disorder is a powerful deterrent to entrepreneurial activity and the foreign investment that facilitates it.

Events of recent years suggest, however, that it would be as unwise to overstate the risk of instability as to understate it. From an historical perspective, the violence and disorder that have attended the breakup of the Soviet Union have been remarkably confined, relative to the scope of the changes that have taken place. Economic hardship has failed to spark the widespread disorder that many predicted. Ethnic violence has been confined to a few localities and, except for Nagorno-Karabakh, it has been sporadic. For the most part, political control has passed to moderate, pragmatic leaders who enjoy substantial popular support. No leader of significance has sought to exploit ethnic animosity, and most of the 100-plus ethnic groups continue to coexist in harmony. The public at large has displayed patience, discipline, and fortitude.

The political environment, therefore, does not in general appear adverse to entrepreneurial activity. Further changes are likely, perhaps including changes in boundaries, but need not bring instability or disrupt economic ties. Indeed, change can benefit entrepreneurs by further diminishing the influence of the old order and eliminating obstacles to privatization. Moreover, entrepreneurial activity itself can contribute to stability by helping reduce the economic hardship that fuels tensions.

### The Role of Foreign Investment

A final variable with a potentially significant impact on entrepreneurs is foreign investment, which can meet critical needs for capital, technology, and management skills and serve as a stimulus and a safety net for struggling enterprises.

Foreign investors, however, will face many of the same obstacles as native entrepreneurs, and native enterprises themselves will oppose foreign entities that appear as competitors rather than allies. The public response will be mixed, recognizing the need for outside investment but opposing any suspected exploitation of native resources. In polls conducted from December 1991 to February 1992 under the direction of Professor Ellen Mickiewicz, 52 percent of Russians said foreign investment helps create jobs, while 40 percent expressed fear that the government was yielding control of the economy to foreign interests. [34]

### The Outlook

These considerations suggest that foreign investment can play a significant but not decisive role in shaping the outlook for entrepreneurial activity in Russia and the other former Soviet republics. The decisive impetus must come from within, and the prospects for it doing so will depend upon a number of variables. The evidence reviewed in this paper suggests there is a broad indigenous basis for entrepreneurial activity, that it will continue to expand, and that it can play a key role in the successful development of a market economy.

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[34] Results as reported in *The New York Times*, April 23, 1992, p. A3. Support for foreign investment was strongest among the young, well-educated, urban segments of the population, and where it benefited industries with the greatest impact on the quality of life, including pharmaceuticals, clothing, hotels, and restaurants.

# II. INTEGRATION INTO THE WORLD ECONOMY

## OVERVIEW

By George D. Holliday *

One of the painful legacies of central planning in the former Soviet Union is an economy that is, to an unusual extent, isolated from international markets. Under the old regime, the government controlled international financial and trade flows to ensure that foreign economic transactions were carried out in accordance with the designs of the central planners and to minimize the influence of market fluctuations on the rigidly planned domestic economy. Government control of prices and exchange rates led to inconvertibility of the ruble, seriously inhibiting trade and capital flows. Such controls imposed a heavy cost on the Soviet economy: it was denied the full benefits of trading on the basis of comparative advantage and of using international capital to develop the domestic economy. Central planning led to the isolation of Soviet industries from foreign competition and from the technological advances of Western industry. It fostered manufacturing industries that were not competitive in world markets and lacked incentives to export.

Establishing financial, trade, and technological linkages to world markets can play a vital role in the transition of the former Soviet republics to market-oriented economies. By opening the Russian and other former Soviet economies to trade, reformers can expose domestic firms to the competitive pressures of the market place, thereby promoting efficiency and technological change, and provide opportunities for exporters to increase sales and profits. Equally important, by providing a propitious political and economic environment for foreign lenders and investors, the reformers can attract the foreign capital needed to rebuild and revitalize the economy.

Integration into the world economy can, however, cause economic and political problems, especially in the short run. Opening the domestic economy to foreign competition is likely to result in bankruptcies for many domestic firms and temporary increases in unemployment. Foreign loans can be squandered if they are not accompanied by domestic reforms. Increased foreign investment can generate a political backlash, as some elements in the former Soviet republics resist the influence of foreign firms in the domestic economy.

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The contributors to this section examine the difficult process of dismantling the old controls that isolated the Soviet economy and reestablishing the critical linkages between foreign and domestic markets. They discuss the roles of Western governments, multilateral economic institutions, and, most important, domestic reformers in overcoming the formidable obstacles to integration into the world economy.

## The Successor States and the International Financial System

Several authors focus on the vital linkage to international financial markets. Russia and the other republics begin their efforts to integrate their economies into the international system with a major handicap—a large foreign debt inherited from the Soviet government. According to Patricia Wertman, the size and short-term structure of the debt created a crisis in the early 1990s that required an agreement with foreign creditors to defer their debt payments. The inability of the successor governments to service their debts, estimated at $65.9 billion in October 1991, has virtually closed off credits from private sources and made public lenders more reluctant to guarantee loans. Wertman's analysis suggests that in the longer run, only Russia, with a relatively low debt-service ratio, and Belarus, with a moderate one, have good prospects for being able to service their debts. She concludes that the outlook for the other republics is not encouraging. (Subsequent data have generated considerably larger estimates for the total debt, suggesting a deteriorating ability of all the successor republics to service their debts.)

Given the handicap of high indebtedness, the successor states must rely on official financing from the international financial institutions (IFIs) and Western governments. Shirley Kan and Patricia Wertman describe the central roles of the International Monetary Fund (IMF), the World Bank, and the European Bank for Reconstruction and Development (EBRD) in helping to restructure the economies of the successor states. The IFIs, they say, face a unique set of problems: they must not only assist with economic stabilization, but also contend with political instability, the dissolution of the former Soviet economy, and creation of new market institutions. Kan and Wertman conclude that restructuring of the economies of the successor states will be more difficult than the IFIs' past efforts in assisting the troubled debtor nations of the Third World.

A vital role for IMF may be creation of a currency stabilization fund to help stabilize the international value of the ruble. It has been proposed that the IMF assist Russia to achieve convertibility by creating a $6-billion fund, borrowed from the major industrial countries, to support the ruble at a realistic exchange rate. Convertibility of the ruble could contribute significantly to the economic reforms. As Franklyn Holzman notes, convertibility could lead to a more rapid rationalization of Russian prices, increase the competitive pressures on Russian firms to operate more efficiently, and encourage foreign investment.

Both Holzman and Jozef M. van Brabant emphasize, however, that, if the Russian Government attempts to achieve convertibility

prematurely, losses to the economy could exceed the benefits. Holzman notes, for example, that initiating convertibility while domestic prices remain irrational could lead to large losses in international trade, and to the sudden bankruptcy of many Russian enterprises. Van Brabant emphasizes that attempts to achieve convertibility are likely to fail unless the necessary preconditions, including macroeconomic stability and domestic market reforms, are in place. He warns of the pitfalls of using a stabilization fund to support the ruble. Under current conditions, he argues, it seems implausible that the government could choose the correct exchange rate to support. He advocates a more gradualist approach to convertibility carried out in tandem with macroeconomic stabilization and microeconomic reforms.

## The Role of Western Governments

The other key sources of Western capital are the governments of Western industrial countries. Daniel Bond concludes that, although Western governments are, in principle, prepared to provide financing through their export credit agencies, current conditions in the former Soviet Union and Eastern Europe are not conducive to a rapid increase of such financing. He notes that Eastern demand for financing has declined because of the depressed state of the Eastern economies. Moreover, the official export credit agencies need reasonable assurance of repayment. According to Bond, concerns about creditworthiness of potential Eastern borrowers and inadequate legal and administrative frameworks in most of the countries are major impediments to increased lending by official export credit agencies. An urgent need, he says, is creation of viable commercial banks in the East, which can serve as intermediaries between Western export credit agencies and Eastern borrowers.

Western governments have taken other steps to strengthen commercial relations with and assist the reform programs in the former Soviet republics. William Cooper discusses the changes in U.S. policy—relaxed export controls, extension of most-favored-nation status, and removal of restrictions on trade and investment financing—that have created a better environment for trade with the former Soviet republics. Heinrich Vogel and Marie Lavigne describe, respectively, the German and French efforts to promote bilateral trade and assist the reform efforts in the successor states. All, however, paint a picture of stagnating, or declining bilateral trade and investment ties due largely to conditions in the successor states. Cooper and Vogel present similar lists of impediments to trade and investment on the Eastern side, including lack of progress on economic reforms, economic instability, poor infrastructure, inadequate legal framework, and inadequate commercial information.

The three authors suggest that most private banks and other businesses are unwilling to enter the markets of the former Soviet republics without more active participation on the part of Western governments. Many Western businessmen appear to be waiting for additional export financing or guarantees, development assistance to the successor governments, or other government participation that would reduce the risks of operating in the Eastern market.

Cooper, Vogel, and Lavigne also share a common theme with other contributors to this section: integration of the successor states into the world economy depends heavily on reforms of domestic policies and institutions. Although Western governments and multilateral institutions can help with financial and technical assistance and trade facilitation, the most important actions must be initiated and carried out in Moscow and other capitals in the East. Political and economic stability and microeconomic reforms are essential preconditions for normal economic ties to the world economy.

# PROSPECTS FOR COMMERCE—A FRENCH PERSPECTIVE

By Marie Lavigne *

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## SUMMARY

As for other Western countries France's trade with the U.S.S.R., then the CIS, decreased dramatically in 1989–91. This decrease reflects not only the impact of the disintegration of the Soviet economy, but also specific features of French-Soviet trade, which used to be dominated by state trading also on the French side, and had a rather narrow commodity basis as it was mainly an energy-for-food trade. The fragility of this trade was increased by the lack of finance when the French banks decided to disengage themselves from the Soviet risk (I). French business is also very reluctant to invest in the CIS, with very few companies displaying a global strategy, oil companies showing the main interest. The government, not followed, at least for the time being, by the French firms, shows a particular interest in the development of Ukraine, due to some closeness between the French and Ukrainian economic structures (II). This disappointing performance does not prevent French officials from having strong ideas about assistance to the CIS, as a part of a global scheme also applicable to East Central Europe. The traditionally centralist, *dirigiste*-minded approach of the French leadership, which is typical of the present Socialist-led government and some French entrepreneurs, is clearly apparent in the ideas proposed (III).

For a long time French businessmen, when clinching a deal with Soviet state organizations, had to answer a toast from their counterparts mentioning President de Gaulle and Soviet-French friendship and cooperation, which the *Général* had initiated and channeled through a whole network of bilateral agencies and agreements. The transition has put an end to these traditions. As a result, French businesses are performing worse in trade and investment than their Western competitors, with very few exceptions. French expertise, however, is not at a loss for suggesting specific

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directions in foreign assistance, which may not be quite acceptable either to the CIS leadership or to the Western partners of France.

## TRADE AND FINANCE

In 1991 French trade with the U.S.S.R. amounted to 0.7 percent of total French exports and 1.3 percent of French imports. It accounted for about one-half of the country's trade with the "Eastern bloc" as a whole. The total turnover of French trade with the U.S.S.R. was roughly equivalent to France's trade with Portugal. French exports to the U.S.S.R. were lower than the country's exports to the French *départements et territoires d'outremer*, i.e., what remains of the former French colonial empire (basically, the French West Indies and La Réunion). These figures provide an order of magnitude for the weight of the U.S.S.R. in France's trade.

Trade with the U.S.S.R. evolved differently from trade with East Central Europe. Whereas French sales to Eastern Europe increased more than 60 percent overall in 1989–1991 due to the reorientation of these countries to the West (with a doubling of the sales to the ČSFR, Poland, and Romania), sales to the U.S.S.R. decreased by 30 percent. As a result, France lost ground not only to Germany (despite the latter country's deterioration in exports to the U.S.S.R. in 1991), but also to Italy, and is now the fourth Western European partner of the CIS behind Germany, Finland, and Italy.

French businessmen were prompt to blame Germany for their failures in the Soviet market and to express a feeling of helplessness in view of the impact of German reunification on German market share. They also blamed the disaggregation of the U.S.S.R. in 1991. However, these factors are compounded with the specific traditional features of French-Soviet trade. In the past, two commodity groups dominated this trade. On the import side, energy trade had reached up to 85 percent of purchases when the energy prices were high, and still accounts for about 75 percent. On the export side, the majority of sales are made of food products (about 40 percent). Food, and especially grain, are very much conditional on the subsidies deriving from the Common Agricultural Policy (CAP) of the EC and on financial arrangements. As the major grain exporter in Europe, France has much to lose from the reform of the CAP in the 1990s. As regards financial facilities to assist the U.S.S.R. (now Russia) grain trade, France has to compete with the big non-European exporters, especially the United States and Canada. Prospects are thus gloomy both for expanding trade with the CIS, and for improving the French balance of trade, which is traditionally negative. France once obtained slightly over 10 percent of its energy imports from the U.S.S.R. [1] The magnitude of its negative balance of trade has been an issue with the U.S.S.R. since the second half of the 1970s. The French deficit used to be alleviated through increased food sales, and through equipment sales in the framework of large contracts of which the "gas pipeline deal"

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[1] See Regis Chavigny, "Le commerce entre la France et les pays d'Europe centrale et orientale en 1990," *Le Courrier des Pays de l'Est*, no. 362, September 1991, pp. 32–41.

was the most striking example in the early 1980s.[2] In 1989–1991, while the amount of French energy imports from the U.S.S.R. remained fairly stable, with increased oil products and gas imports compensating for decreasing crude oil purchases, the sales of equipment plummeted, and above all the sales of pipes (which decreased by 51 percent in 1991 alone).

More than any other Western European country France will be affected by the systemic changes in the former U.S.S.R. Its trade with the U.S.S.R. was basically a state trade on both sides. The French energy importers are state companies. The French equipment exporters used to be backed by a state export credit agency, the COFACE [3], and relied on trade-facilitating provisions included in bilateral intergovernment cooperation agreements. [4] The collapse of state trading on the U.S.S.R. side has been viewed as a setback by French exporters. [5]

The fragility of this trade is exemplified by the "food-for-oil" deal. In October 1991 France signed an agreement with the U.S.S.R. to supply the Soviet Union with food products (for about 300 million dollars) in return for oil and gas. This agreement involved two French companies, Interagra, [6] the main French supplier of grain to the former U.S.S.R.—in this deal a supplier of meat—and Sucres et Denrées, the leading French sugar trader. Payment was to be made in oil and gas deliveries. The French government was to guarantee 90 percent of the deal through COFACE.[7] The specific ingredients of French-Soviet trade were all there, i.e., monopolized supply and purchases on the French side, matching Soviet state trading, and French government involvement to ease financing. In fact the deal could never be finalized, due to the lack of finance for the remaining 10 percent: the banks, traders, and oil purchasers were not willing to carry the risk.

France is not the biggest creditor of the CIS. By the end of 1991 French banks had about 5 billion dollars of outstanding loans to the U.S.S.R., exceeded only by Deutsche Bank (7 billion). [8] To this one had to add the government debt, which is not officially disclosed. New official French credits have been granted solely to

[2] The French insistence on pushing the "gas-for equipment-deal" through after the Soviet invasion of Afghanistan triggered an argument with the U.S. administration, which accused the French government of violating the Cocom rules and of not complying with the sanctions policy against the U.S.S.R. See Marie Lavigne, *International Political Economy and Socialism*, Cambridge: Cambridge University Press, 1991, p. 259–266.

[3] Compagnie Française pour l'Assurance du Commerce Extérieur.

[4] This has brought about arguments with the French partners in the EC, especially as far as agricultural trade was concerned. See Lavigne, *op. cit.*, p. 80–81.

[5] This is emphasized in a major official report by the *Direction des Relations Economiques Extérieures* (the French agency for Foreign External Relations, which is a part of the Ministry of Economics), *L'Europe change á l'Est: l'enjeu commercial*, Paris: Centre Français du Commerce Extérieur, 1992, p. 64 (hereafter referred to as *DREE* 1992).

[6] Interagra, legally a cooperative, was chaired for many years by the "red baron," the French Communist billionaire Jean-Pierre Doumeng. Doumeng used to deal directly with the Soviet Communist Party officials and very often antagonized the French authorities on his privileged links with the U.S.S.R.

[7] Guillaume Roquette, "Un troc franco-russe de 1,6 milliard de francs", *Le Figaro*, 1 November 1991; William Dawkins, "French-Soviet food-for-oil deal not in trouble," *Financial Times*, 20 November 1991.

[8] Germany overall is supposed to account for about one-third of the debt owed by the former U.S.S.R., i.e., about 27 billion dollars of a total comprised between 70 and 81 billion mid-1992, as disclosed at the G-7 meeting in Munich in July 1992 (*Le Figaro*, 6 July 1992). It is not clear whether this amount includes the debt owned to East Germany, which is probably nonrecoverable.

Russia. A peculiarity of French involvement in the CIS debt, which was a constant feature in the past, is that the French share in total CIS debt is significantly higher than the share in exports to the former U.S.S.R., which is currently less than 5 percent.

FOREIGN DIRECT INVESTMENT

French investors have been very shy in penetrating the Soviet market. By mid-1991 France ranked fourth for the amount of funds invested in the Soviet Union, behind Germany, the United States, and Italy. By the end of 1990 there were 70 French-Soviet joint ventures of which only a few were operational. Some collapsed even before beginning to work, such as the venture established by the aluminum firm Péchiney in Armenia in 1989 to manufacture cans, which was stalled due to the civil war as well as to financial difficulties. [9]

Energy ranks among the most promising sectors for French foreign direct investment. As other major companies in the West, the French (state-owned) enterprises Elf-Aquitaine and Total have been negotiating for years to get a piece of the gigantic oil production potential of the U.S.S.R. Total had signed an agreement to create a joint venture that would develop an oil field in Tatarstan in December 1989. This joint venture became operational only in December 1991. Its future may be uncertain due to the home rule vote issued in the March 1992 referendum organized by Tatarstan. The implementation of another similar agreement signed in December 1991 with the Komi Republic is also delayed due to the uncertainties of the relations between the federal government of Russia and the local authorities. Elf was apparently more successful in securing firmer deals with Kazakhstan and Russia in February 1992, providing for production-sharing oil fields exploration in the Aktyubinsk area and in the Saratov region. [10] Both agreements were still awaiting ratification by the respective Parliaments in mid-1992, and the chairman of Elf-Aquitaine was quoted as expecting the first outcome of these agreements to become real in 1995. [11] While in February 1992 an official of the Russian energy ministry had declared in Paris to French businessmen that 50 percent of the oil industry might be foreign-owned, [12] the energy minister Vladimir Lopoukhin acknowledged at the World Forum in Davos that joint ventures accounted for just 0.1 percent of overall oil production. [13]

Some other sectors are seen as promising by the French: the aircraft industry, food processing and distribution, and tourism. However, most of the projects are stalled by the lack of foreign currency and the nonconvertibility of the ruble. The oil industry is therefore the only one in which payment problems may be overcome through barter in oil. At one point the French seemed particularly

[9] "Sociétés mixtes: le chemin de croix des investisseurs étrangers," *Les Echos*, 26 August 1991.
[10] Leyla Boulton, "The lure of oil's final frontier," *Financial Times*, 6 March 1992; Edouard Thévenon, "Elf cherchera du pétrole en Russie," *Le Figaro*, 7 February 1992; "Elf va prospecter au Kazakhstan," *Le Figaro*, 18 February 1992.
[11] *Le Monde*, 8 July 1992.
[12] Gérard Nicaud, "Peu de contrats mais des projets avec des firmes françaises," *Le Figaro*, 6 February 1992.
[13] Erik Izraelewicz, "Un entretien avec le ministre russe de l'énergie," 5 February 1992.

lured by the prospects of the conversion of the military-industrial complex. [14] Here too, the lack of finance dampened expectations. This may explain why the president of the European Bank for Reconstruction and Development (EBRD), Jacques Attali, tried to persuade the shareholders of the Bank to support conversion programs, a move that was met with strong resistance by the United States and had to be abandoned. [15]

Like their foreign counterparts, French businessmen are mostly interested in Russia, and therefore turned out in large numbers to greet Boris Yeltsin on his first state visit to Paris in February 1992, though the Russian President was quick to blame them for their lack of enthusiasm for the opportunities provided by Russia. Ukraine is also quite attractive to both the French government and entrepreneurs. Ukraine is similar to France in population and natural endowments (it resembles in fact what France was in the 1950s: a large grain producer, a country rich in coal resources and a producer of steel products). Hence emerged the idea that Ukraine could apply French recipes to restructure its capacities. In January 1992 the former French minister of planning, Lionel Stoleru, was appointed as a personal adviser to President Leonid Kravchuk. [16] France was the first foreign country with which Ukraine signed an intergovernment treaty, in June 1992, at the same time as it became a member of the Conference on Security and Cooperation in Europe (CSCE). At the end of June 1992 the French minister of Industry, Dominique Strauss-Kahn, visited Ukraine and promised France's help in improving security at nuclear power stations. Ukraine, like France 20 years ago, was seen as having to shift from coal-powered electricity production to nuclear-generated energy. [17] This is, among other reasons, why France was so eager to promote the idea of massive help to ex-Soviet N-reactor safety during the G–7 meeting in Munich in July 1992. [18] France is also active in the process of former Soviet Union transition to a market economy; it is assisting Ukraine in setting up a stock exchange. However, French industrialists are reluctant to invest in Ukraine, despite some successful deals, such as in the field of pharmaceuticals. This is due to the usual financial difficulties but also to the fact that Ukraine is perceived as a country not quite committed to the transition to a market economy and to privatization, and Mr. Stoleru's involvement, as a former central planner, is not bound to dispel such fears.

Foreign direct investment does not only involve French investment in the CIS. One has also to mention the Soviet-French companies with headquarters in France. There are 13 of them, more than

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[14] Erik Izraelewicz, "Le complexe militaro-industriel prend les armes de la séduction," 10 September 1992.

[15] "No soft option for the EBRD," *Financial Times*, 15 April 1992.

[16] Gérard Nicaud, "Quand l'Ukraine regarde à l'Ouest," *Le Figaro*,18 March 1992; Sophie Shihab, "Paris consacre l'ancrage européen de l'Ukraine," *Le Monde*, 19 June 1992. The titles of both articles suggest that in the French view,when Ukraine looks West, it looks toward France. However, already by the end of 1991 Ukraine had ratified 170 trade agreements ("Commonwealth of Independent States (formerly U.S.S.R.), Country Report," *The Economist Intelligence Unit*, no. 1, 1992, p. 81.

[17] Jean François Augereau, "La France va aider l'Ukraine à améliorer la sûreté de ses centrales nucléaires", *Le Monde*, 4 July 1992.

[18] This move was not a total success. "Soviet N-reactor safety cash cut down to 100m," *Financial Times*, 8 July 1992.

in any other Western country, including one of the very few Soviet-owned manufacturing companies in the West, Slava, which manufactures watches. The equity of these companies has been taken over by the Russian government after the collapse of the U.S.S.R. Most of them are trade companies, and are on the verge of bankruptcy due to the difficulties experienced by their former Soviet partners. The only ones to have improved their turnover are Prodintern, an exporter of food products, and Slava, which not only sells watches but also consumer durables and chemicals imported from Russia. The Soviet, now Russian, bank in France, the Banque Commerciale pour l'Europe du Nord, which once was the largest foreign bank in the country and one of the largest Soviet-owned banks abroad, has also suffered from the collapse of French-Soviet trade, with a balance cut in half between the end of 1989 and the end of 1991. [19]

## FOREIGN ASSISTANCE

French ideas are quite specific in the field of assistance, though officially France basically sides with Germany in this matter, and has thus supported the German chancellor's proposals for a rescheduling of the CIS debt at the G-7 summit in Munich (July 1992). There is some ambiguity regarding two major international institutions headed by French citizens, Michel Camdessus, managing director of the International Monetary Fund, and Jacques Attali, chairman of the European Bank for Reconstruction and Development (EBRD). Though these officials are supposed to express their institution's views, and are indeed totally independent from their national government, they nevertheless also express their own ideas (particularly in the case of the latter) which may be influenced by the French approach. One remembers the strong plea of Mr. Camdessus in favor of the republics of the former U.S.S.R., [20] and the efforts of Jacques Attali to gain support for his plan of improving nuclear stations security, already mentioned.

The French views have been recently expressed in an unofficial report prepared by nine experts, among them academics, bankers, and members of the French planning office. [21] The report strongly pleads for structural and industrial policies to be applied and supported in the CIS, in addition to macro-economic stabilization. Though advocating privatization, it warns that the state sector is to stay for many years to come. One should discard "the identification, which is still currently made, of a state-owned enterprise with a communist enterprise" (p. 54), and one should remember that many Western countries still have a large public sector. Hence one should help Eastern Europe, the CIS included, to efficiently

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[19] Christian Fontaine, "Les entreprises soviétiques en France", *Le Figaro*, 7 November 1992.

[20] Speech at the Georgetown University School of Foreign Service in Washington, 15 April 1992; *IMF Bulletin*, 4 May 1992.

[21] "Repenser le soutien de la communauté internationale à l'Europe de l'Est" (To think over the support of the international community toward Eastern Europe), May 1992, no institution mentioned. The authors are Michel Aglietta, Michle Bailly, Christian de Boissieu, Jean-Michel Charpin, Jean-Paul Dessertine, Etienne Lakits, Georges Mink, Jean-Pierre Pagé, and Jacques Sapir; Jean Pisani-Ferry (until mid-1992 working with the DGII at the European Commission, since June 1992 the head of the CEPII, the major French think tank attached to the *Commissariat Général du Plan*) is mentioned as having also contributed to this work. Note that in French parlance "Eastern Europe" has always included the U.S.S.R., and now includes the CIS.

manage its public sector in a market environment, with an adequate definition of the tasks and duties of the state as an equity owner. Though the report does not openly mention it, it is difficult not to think of the French experience in reforming the state sector. In the same spirit the report recommends an organized restructuring of the large-scale industries, along "government programs which ought to be credible and well detailed" (*ibid.*). Foreign assistance should be crucial in the revamping of industrial infrastructure (such as "energy production and distribution, transports, telecommunications, hospitals. . ."; p. 53). For all these reasons one should shift from macroeconomic and project assistance toward an increased assistance to "large-scale mid-term and long-term government projects": "the demise of the command economy and of compulsory planning, as well as the crisis of indicative planning in the West, should by no means lead to a shortening of the forecasting and decision-making horizon in the East" (emphasized in French text, p. 55).

The report also takes a very strong stance on the issue of regional cooperation. It argues that the legacies of the past are pleading in favor of regional cooperation, not only in trade but also in transition policy. Environmental policies, infrastructural development, and energy distribution should be conducted in a concerted way, and if possible so should fiscal and social policies. A cooperative approach to external convertibility of Eastern currencies is advocated as well, based upon the European Currency Unit (ECU). This last point is related to the future of monetary arrangements within the CIS. If a ruble zone ultimately emerges—which the report considers both probable and desirable, even if there are various national currencies within the CIS—there might be exchange arrangements between the Central Bank of Russia and its counterparts in East Central Europe. If a payments union is secured among the member states of the CIS, again East Central European banks might become a part of it. However, the present separation between the mechanisms of assistance to the CIS on the one hand, to East Central Europe on the other, would be maintained. Some of these theses have been aired at the G-7 Summit in Munich, in particular the idea of a common monetary and currency policy for the CIS members that would agree to stay within a ruble area.

## CONCLUSION

The transition in the former U.S.S.R. has triggered a host of new ideas in French think tanks. It has not provoked an adequate response from the direct economic agents, i.e., the banks and the enterprises. Only a handful of large French companies, often state-owned, have a global strategy for the CIS (and East Central Europe). The banks are very reluctant to take risks, and medium and small companies are close to nonexistent in the Russian and CIS markets. An unpublished report prepared by the French Institute for International Relations (French acronym IFRI) and a consulting company, Bain & Co, reached such dismal conclusions on this matter, after in-depth interviews with companies accounting

for 70 percent of the sales to the East, that the report was embargoed by the French ministry of Finance.[22]

France is constrained in many ways indeed in its approach to trade and cooperation with the former U.S.S.R. What has been a strength in the past is a weakness now. The state has always played a large role, regardless of political orientation. De Gaulle was successful in opening the era of "*entente, détente et coopération*" in 1966 with the U.S.S.R. because he spoke as head of state initiating economic relations; all subsequent French leaders, whatever their party affiliation, followed in his steps. French planning, French management of state-owned enterprises, could be seen as adequate models for reforming the command economy while retaining a "socialist" model. They are now liabilities: the French government is seen as left-wing though the country has for several years now been committed to a very orthodox economic policy as judged from standard criteria. The fact that France is engaged in preparing an XIth long-term plan sounds obsolete, and though French industry is hardly more state-owned than Italian industry, state-owned companies are conspicuous enough to attract an undue amount of attention, especially since they are the most engaged in business with the East. Small French companies have no personal links with the East, unlike the German or Austrian ones. The French economy is not perceived as strong and determining enough (on a world scale) to inspire confidence on the Eastern side at large, and this holds true for Russia if not for Ukraine.

Then the only thing left to the French is to give unpopular lessons, an exercise in which they excel—Boris Yeltsin remembered his first visit to France when he visited the country again months later.[23] Further developments may prove they have been right, but in such cases some acrimony inevitably remains, which may prove detrimental to regular business.

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[22] A half-page summary, with many quotations, was published in *Le Figaro*, 14 April 1992. Among the quotations: "We think that the USSR might be a huge market, but is surely not a good risk for the five next years" (A French company).

[23] He had been rebuked by a French socialist representative during his visit to the European Parliament in spring 1991.

# PROSPECTS FOR COMMERCE—A GERMAN PERSPECTIVE

By Heinrich Vogel *

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## SUMMARY

In the last two years, Germany has become the key partner for the successor states of the Soviet Union, at least in terms of shares in the respective export markets. This development is, however, accompanied by declining volumes of trade, a dramatic debt crisis of the new economies, and growing perplexity of the outside world in view of the decay of governmental controls.

German trade performance has to be seen from two sides: (a) ties of West-Germany established before unification which until mid-1991 implied a tolerable risk and (b) the involvement of the former GDR which has become a real headache for the Bonn government. German businesses, which had expected consistent efforts in the CIS states to lay the foundation for market-based, viable economies are deeply frustrated. Particularly the traditional partners of the U.S.S.R. in the new German Länder are in trouble. Pressures are building on the government in Bonn for additional measures to cushion the impact of a serious crisis in trade with the former Soviet Union.

The issue of assistance to the new states, in the short run for establishing functioning administration and viable economic structures, in the longer term for transition to market mechanisms and integration into the world economy, keeps a prominent place in the agenda of German foreign policy. It is argued, however, that the common interests of Western industrial states and the risks of destabilization in the former Soviet Union call for consistently joint Western efforts. The Munich summit has failed to come up with a workable concept.

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## German Trade Performance

"Germany reigning supreme ... resuming its relative pre-WW II importance in trade with the Eastern region"—such statements [1] of outside observers indeed capture one of the most spectacular effects of recent structural change in commerce of the former East with industrial Western nations. United Germany has become the key partner for the successor countries of the former U.S.S.R. (13.1 percent of their exports and 17.6 percent of their imports), way ahead of the next largest West European trading country (Italy, with respective shares of 6.3 and 5.7 percent). Among the successor states of the U.S.S.R., the most important partners are Russia, with 58.0 percent of total imports from Germany, followed by Ukraine with 13.8 percent.

But this calculation of trade shares describes a mixed blessing. Overall economic recession, soaring inflation, indebtedness, political turmoil, and the decay of governmental structures on the territory of the former Soviet Union are reflected in shrinking volumes of economic supplies and demand in relations with the entire outside world. The impact of this progressive crisis was increasingly felt in Germany with her traditional economic interest in the former Soviet Union. In 1989, with 1.6 percent of German exports going to the Soviet Union, the decline of 2.2 percent in 1990 still had appeared to be in the order of an "ordinary recession," caused by systemic change. Hopes for quick political consolidation and competent transition to market structures were, however, dashed by Gorbachev's failure to keep the central state together. The subsequent political and economic crisis and the reduction of former Soviet Union imports by 16.7 percent from pre-united Germany and by 35.4 percent from united Germany in 1991 were no longer covered by conventional risk analysis.

Unification makes for a distinct difference in German foreign trade. Having been the technologically most advanced trade partner of the U.S.S.R., the German Democratic Republic (GDR) once had a share in total Soviet trade of roughly 11 percent. Deliveries to the U.S.S.R. accounted for 38 percent of total GDR exports on average in the 1980s. On the one hand, GDR depended almost totally on imports of oil and gas and up to 75 percent on raw materials from the U.S.S.R., on the other hand it produced between 40–70 percent of some critical products (such as machine tools, transport equipment, optical instruments) for the Soviet market. Thus the GDR was extremely vulnerable to changes in Soviet trade patterns.

Since the beginning of 1992, hopes of modernizing and reorienting export capacities of former GDR enterprises in a short period of time to Western markets had to be shelved in most cases. But the potential for diversification of exports of former GDR enterprises has also clear limits in the longer-term view on perspectives of markets in the former Soviet Union. [2] In retrospect it is obvious

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[1] PlanEcon Report, vol. 8, nos. 27–28, July 21, 1992, p. 1.

[2] There is, however, one exceptional success story: Even in 1991, the Deutsche Waggonbau GmbH with a long tradition and special know-how of producing railway wagons for the Soviet Union, delivered 1,022 passenger and 1,400 refrigeration wagons to the former Soviet Union. See Rettungsanker Osthandel? Zur Bedeutung der osteuropaischen Exportmarkte für die Onternehmen in den neuen Bundeslandern—Friedrich Ebert Stiftung, Reihe Wirtschaftspolitische Diskurse, No. 25, December 1991.

that the risks incurred in agreements to safeguard crucial supplies for the Soviet economy ("the protection of confidence") was underrated—by both sides. [3] In the meantime, substantial projects (e.g., ore processing in Krivoi Rog) had to be canceled.

Since 1991, with a lag of one year, the GDR's trade legacy has become a matter of serious concern on the economic and political agenda of unified Germany. The spectacular decline by 16.7 percent in exports of pre-unification West Germany to the successor states of the Soviet Union might have been manageable, however painful the new situation. But a minus 35.4 percent for the consolidated exports of united Germany in 1991 and a further decline of orders from the Commonwealth of Independent States (CIS) countries in the first half of 1992 by 35 percent [4] imply macro-economic and political trouble in terms of unemployment, deindustrialization, even social unrest in the "new Länder" (the territory of the former GDR). Accounting in transfer rubles, which had eased Soviet balance-of-payment difficulties ended by December 31, 1990. And the surplus of 3 billion transfer rubles or 15 billion DM, generated in 1990 in the new Länder's trade with the U.S.S.R., was of little help, given the hopeless situation in the Soviet and post-Soviet balance of payments. [5]

## Problems of German Business

The negative trend in Germany's economic relations with the former Soviet Union is bound to continue, primarily due to weak prospects for political consolidation and economic viability—not to mention economic competitiveness—of the successors to the Soviet Union. For a large number of producers in the new Länder the situation now is "very dramatic." [6] By standards of Western markets, their products are obsolete and their technologies are ancient. Without help from government, they have no chance of survival. Special conditions (endorsed by the Commission of the European Community) extending coverage by Hermes credit-insurance helped to ease the situation in 1991. But these arrangements ceased to work after prolongation in 1992, due to insufficient cooperation of governments in the CIS states. As a result, procedures for trade (or what is left of it) have degenerated to cash-advance and barter agreements. In 1991, direct investment in the former Soviet Union (15 million DM) was half the level for the U.S.S.R. in 1990 (33 million DM), equalling 0.4 percent of German investment in France. [7] The number of joint ventures in the former Soviet Union (2,500 by the end of 1991, mostly in the service sector, 60 percent with an

[3] In 1990, President Gorbachev presented a list of 130 enterprises in the GDR that were under contract for delivering products of vital importance. There was a clear understanding that these enterprises should be granted preferential treatment by the German government.

[4] Wirtschaftswoche, no. 34, August 14, 1992.

[5] Ostausschuss der deutschen Wirtschaft, News Release of February 25, 1991; Bundesminister für Wirtschaft (ed) "Der deutsche Osthandel," no. 70, Bonn 1991; Institut für angewandte Wirtschaftsforschung, Der Aussenhandel der neuen deutschen Bundeslander mit Mittel—und Osteuropa: Chancen und Risiken Berlin, December 1991. The data on 1991 are based on preliminary information from the Bundesamt für Statistik.

[6] Huge quantities of machinery and equipment still produced under the traditional GDR-U.S.S.R. trade agreements are stalled. Hundreds of railway wagons are waiting for dispatch at the Russian border.

[7] Bundesministerium für Wirtschaft, Vermögensanlagen Gebietsansässiger in fremden Wirtschaftsgebieten, Runderlass Aussenwirtschaft no. 23, May 20, 1992.

investment of less than 1 million rubles)[8] is hardly growing.[9] Last but not least, the accumulated net-debt of the former U.S.S.R. vis à vis German banks (38.2 billion DM) and private business partners (7.2 billion DM)[10] by the end of 1991 is hardly conducive for additional large-scale engagements. It is in this perspective that one wonders about prospects and intentions of a German export offensive in the East, about "German expansion strategies," as seen by some neighbors in Europe.[11]

The establishment of bilateral "cooperation councils" with Russia (February 18, 1992), Ukraine, (March 27, 1992), and Kazakhstan (June 16, 1992) were efforts to fill the vacuum caused by the end of the Soviet-German "joint commission," an increasingly unproductive consultation body that had tried during the past 20 years to identify areas of economic cooperation. Working groups entered into a reassessment in areas such as energy (oil and gas, but also coal mining), textiles, agriculture and food industry (pilot projects, training) distribution, chemical and pharmaceutical industries, conversion of military production, and consulting for transformation of the economic system (protection of foreign capital, taxation, de-monopolization, and privatization). The discussion in every single working group of the cooperation councils centered around the issue of finance. Not surprisingly, the results are preliminary, describing intentions, fact-finding missions, new working groups, rather than viable commercial projects.

Business leaders in Germany, not less than the politicians, are frustrated and skeptical. Having worked for decades quite successfully in the U.S.S.R., they (like most leaders in the West) held out hope for a consolidation of the U.S.S.R. in the framework of Gorbachev's plan of a new federation.[12] The collapse of the very fundaments of the centralized Soviet state, tearing up the well-known networks, came as a very unpleasant surprise. German corporations are now facing a number of incalculable, i.e. primarily political, risks. Sober assessments prevail: "Transition of planned to functioning market economies turns out to be more difficult than was expected."[13]

The catalogs of conditions for further engagement, particularly for direct investments, presented to the successor states of the U.S.S.R. by representatives of German business on various occasions, are long and comprehensive:

- Adequate legal framework
- Freedom of price formation
- Free market access
- Tax and export-duty allowances

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[8] Sowjetunion, Landeranalysen der Frankfurter Allgemeine Zeitung GmbH, February 1991.

[9] There are no consistent statistics for the entire region. Numbers recently mentioned for Russia (268 in May 1992, 50 percent only in industry) indicate low levels.

[10] Monatsberichte der Deutschen Bundesbank, vol. 44, no. 7, July 1992.

[11] For example, articles like "The new utopias that threaten Europe" by Jacques Calvet, Chairman of PSA Peugeot Citroen, *The Financial Times*, April 30, 1992.

[12] A report of the Bundesanstalt für Aussenhandelsinformation "Konkurrenzsituation auf dem sowjetischen Markt" of November 1991 registered increasing dynamic of transformation with growing economic and legal freedom for the republics and reduction of barriers to foreign trade (Märkte der Welt—Spezialthema UdSSR, no. 45, Berlin, November 6, 1992).

[13] Otto Wolff von Amerongen in his address to the Round-Table of Ministers at the East-West preparatory summit meeting in Münster, May 5, 1992.

- Guarantees for property of land, financial, and productive capital, including intellectual property
- No governmental intervention in labor markets
- Functioning banking and financial sector
- Unlimited access for foreign investors
- Less bureaucratic procedures for the foundation of new enterprises,
- Free access to transportation
- Standardization of rules for accounting
- Better statistical information.

As the effects of the balance-of-payment crisis in the CIS are affecting German business, Bonn is confronted with claims for compensation, protection, and support. In a memorandum, "Safeguarding and Promoting Economic Cooperation with the CIS", [14] the Federation of German Industry went public calling for a temporary emergency program of the Government. "The time horizon and the complexity of the task to revitalize economic cooperation with the CIS should no longer be underrated." In view of an exceptional situation, not only for corporations in the new Länder, and with reference to the fact that the requirements of Hermes credit insurance are only met in countries with functioning economic administrations (seen only in Kazakhstan, Belarus and in Ukraine), the traditional instrument of German trade finance—Hermes—should be supplemented by additional measures. Areas and projects in the former Soviet Union demanding extraordinary conditions, being also of "special economic significance for the Federal Republic," are identified in

- The sectors of raw materials, oil, and gas where a return on investment in hard currency can be expected in relatively short term.
- Supplies and services for saving German joint ventures.
- Supplies of spare parts and maintenance projects.
- Infrastructure, especially transport and communication.
- Supplies and services for improving agricultural production, processing, and distribution.

In view of recent problems, which indeed are hardly typical for industrialized countries, the memorandum suggests recategorizing some of the CIS states as developing countries. This would provide access to proven national and international tools for widening the acute financial and organizational bottlenecks in trade and cooperation.

## Issues of Assistance

The "Commonwealth of Independent States" turns out to be kept together less by commonality of interest than by obligations inherited from the Soviet Union vis à vis the outside world (disarmament and indebtedness). The complexity of issues to be sorted out, but also the slowness of the new political leaders in addressing strategic problems, and the lack of structure, of competence, and

[14] Handelsblatt of August 7, 1992 and a news release of the Bundesverband der deutschen industrie, Cologne, August 1992.

responsibility, keep frustrating Western attempts to assist in the historical task of systemic change and reconstruction.

Without external assistance, none of the new states on the territory of the former U.S.S.R. will make it to the stage of firmly established market economies and democratic political systems. This argument—a distinct German credo in talks among the group of G7—was endorsed at long last in the meeting of the financial powers in Washington on January 22-23, 1992, paving the way for association and full membership of the new states in the International Monetary Fund. The logic that prevailed also in the G7-summit of July 6-8, 1992, in Munich is best described in the formula "In the long run, Western wealth will not last, if the problems of Europe's East remain unsolved." But despite considerable noise in the media, this spectacular event failed to come up with a clear concept of specific measures and coordination.[15]

On the one hand, Germany has become the key player in the organization of Western rescue attempts—not so much by intention, but mostly due to the absence of leadership and active interest of other leading industrial powers. In the former socialist countries and elsewhere, the image of Germany being a hybrid of "Santa Claus" and "Superman" still sticks, despite all the appeals to share the burden.

On the other hand, German political and business leaders have to consider a scarecrow perception of "Ugly Germany" taking over in Europe. With reference to German occupation in World War II, the plans and negotiations for German direct investment in the East are used as an argument of romantic isolationists and converted communists, who fish in the troubled waters of volatile domestic politics. Those, however, who have taken on the burden of responsibility for economic and political transformation in the new states, keep welcoming investors—from wherever they come.

Despite the drain on the domestic capital market arising from the need to transfer more than 150 billion DM annually to the new Länder, Germany contributed 69 percent of the total aid provided by Western industrial states for the CIS between September 1990 and May 1992. A large proportion (14.1 billion DM) is tied to the withdrawal of Soviet military forces from Germany until 1994—a welcome result of the 2+4 agreement of 1990, and not exclusively a matter of German national interest. It is only too obvious that the engagement of Germany in financial assistance to the CIS cannot be increased further. Other industrial states (the United States, Japan, Great Britain, and France) are less exposed and have more leeway for assistance, provided their governments care to mobilize adequate levels of risk-awareness in a broader public.

The key issue in assistance to the transforming countries, it turns out, is the transfer of technical and organizational know-how. Strangely enough, Bonn has not tried systematically since the beginning of serious reforms in the U.S.S.R. to promote the export of what might be called the German model of "social market econo-

[15] See the series of "Aktuelle Analysen" of the Bundesinstitut für ostwissenschaftliche und internationals Studien, nos. 26-27 and 35-37, written by H.H. Hohmann and C. Meier in the wake of the Munich summit, particularly "Die Russland- und GUS-Hilfe nach dem Münchener Gipfel," no. 35, Cologne, July 27, 1992.

my." In a carefully calibrated balance of the private and the public sector, supported by the rule of common sense in labor relations, it is the secret behind the German economic success story since 1949. Only in spring 1992, the Cabinet in Bonn agreed on a "Concept for Advising and Supporting the Nations of East Central Europe, the CIS and the Baltic States in their Transition to Democracy and Market Economy." [16] For the first time, it tries to document and coordinate the broad range of measures, developed, fostered, and financed by several Federal Ministries. This package, it is said, weighs 420.5 million DM in 1992.

All the combined efforts of Western nations will, however, be of no avail should the programs designed in cooperation of the G-7, the EC, and the IMF run aground, due to lack of consistent political cooperation on the side of the CIS states. Transnational coordination in direction and timing of national policies is indispensable in order to stabilize the national economies. The responsibility of the new leaders is clear: Economic viability and convertibility of national currencies of the Baltic and the CIS states will be reached only by:

- Replacing the ruble-zone by a new mechanism linking the new national currencies.
- Introduction of "hard-budget constraints" for public and private economic actors.
- Political consolidation, and at least abstention from violence in pursuing national goals.
- Consistent efforts to strengthen ties with the Bretton Woods institutions and the EC.

As long as these preconditions are not met, prospects for integration of the former Soviet republics into the world economy are dim. The perspectives of German trade—like any other competitor's chances—depend on systemic reform and economic consolidation in this troubled region and on its capacity to absorb external monetary and technical assistance. But political uncertainties remain the key handicap in any Western strategy for expanding economic relations with the region. They cannot be bridged by economic substitute measures, i.e., intergovernmental agreements on reducing trade barriers, etc. This is not the time for competition in prospective Eastern markets that simply are not ready. The common task is to face up to the political and economic risks of transformation in the East, to be fulfilled only in a well-defined division of labor. This, however, is still missing.

[16] Handelsblatt of August 6, 1992.

# INTERNATIONAL FINANCIAL INSTITUTIONS AND THE RESTRUCTURING OF THE SOVIET SUCCESSOR STATES

by Shirley A. Kan and Patricia A. Wertman *

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## SUMMARY

This article discusses the status, issues, and implications of the planned lending by international financial institutions (IFIs) to the Soviet successor states. It first reviews the background of the relationship between the Soviet Union and international lenders. After the country dissolved, full membership of the successor states in the International Monetary Fund (IMF), World Bank, and European Bank for Reconstruction and Development (EBRD) replaced limited participation, with the IFIs leading international support for post-Soviet reforms. The paper also examines the role of the IFIs in

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the Group of Seven (G–7) aid package for Russia, which has made the most progress in undertaking reform. It then discusses two issues: (1) the amount of external resources required by the successor states and whether they have been forthcoming; and (2) the implications of the EBRD's political conditionality for the IMF and World Bank.

## BACKGROUND

On April 1, 1992, the G–7 countries [1] announced a $24 billion international assistance package to support Russian reforms, highlighting the enormous task of post-Soviet transformation and the massive external needs of all the successor states. The G–7 assigned leading roles in the long-term effort to aid Russia and other states to three international financial institutions (IFIs): the IMF, World Bank, and EBRD.

The most astonishing feature of the Soviet Union's external finances during the 1980s was its movement from prime borrower to troubled debtor, a reflection of its collapsing economy and changing domestic politics. These developments also gave rise to a Soviet drive for greater participation in the world economic and financial system.

### SOVIET BORROWING IN THE 1980S

Until the mid-1980s the Soviet Union was characteristically a disciplined borrower and was not, therefore, constrained by the availability of financing. In early 1984, after an absence of four years, the Soviet Union returned to the syndicated credit market to borrow $150 million. This modest reentry marked the onset of a radical shift in Soviet international financial policy, eventually leading to stepped up borrowing in international credit markets, participation in foreign securities markets, and, ultimately, membership in the IFIs.

In the early years of the Gorbachev era Soviet international borrowing was driven by the short-term need to pay for imports in the wake of reduced hard-currency earnings. Oil exports were down. The U.S. dollar, in which oil and other commodity exports are denominated, was also down. More fundamentally, Soviet borrowing was increasingly driven by the need to restructure the stagnant Soviet economy. Revitalization of the Soviet economy required substantial imports of Western capital goods. Consumer imports were also needed to help ease the pain of restructuring the economy. By 1988 Soviet net debt to the West had begun to soar.

As hard-currency needs expanded, the Soviet Union began to diversify its sources of finance. In August 1986 Britain and the Soviet Union reached a settlement over defaulted czarist bonds, thereby starting the process of Soviet reentry into the international securities markets. In January 1988, the Soviet Union floated the first of eight international bond issues, for SFr100 million ($74 million) in Zurich. In this period, the Soviet Union also arranged some note issuance facilities and dropped the buy-back provisions on its trade

[1] The G–7 countries are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

claims, allowing them to be sold in the secondary (*à forfait*) market.[2] Soviet investment law was also liberalized to encourage joint ventures, with limited results.

By 1990 the Soviet Union had borrowed its way into a financial crisis. Economic and political uncertainties were making Western bankers, who by then were owed $50 billion, nervous. Western banks began to refuse to roll over short-term credits, precipitating a hard-currency liquidity crisis for the Soviet Union. This left Western official creditors, both bilateral and multilateral, as the only possible underwriters for the enormous costs of Soviet economic transformation.

### PARTICIPATION IN IFIS

Soviet interest in the IFIs was first expressed in 1986, when the Soviet Union attempted to diversify the sources of its external finance and gain greater status as a leader in the global community. By May 1990 it achieved its first full membership in an IFI by becoming a founding member of the EBRD. Soviet membership in the EBRD, however, was a contentious issue during the negotiations among Western countries to establish the Bank, and the Soviet Union's borrowing was limited to its paid-in capital (about $45 million per year).

At their July 1990 summit in Houston the G–7 countries asked the IMF, World Bank, EBRD, and Organization for Economic Cooperation and Development (OECD) to study the Soviet economy and make recommendations concerning the Soviet transition to a market economy. The study, issued in February 1991, concluded that external aid in the early stages of the transition should consist of technical assistance and food relief.[3]

President Bush proposed in December 1990 that the Soviet Union be given "special association" status in the IMF and World Bank in lieu of full membership, which was preferred by Soviet President Mikhail Gorbachev and some other G–7 leaders. This proposal was adopted at the London summit of July 1991, when the G–7 officially invited the Soviet Union to enter into "special association" with the two institutions. Lingering concern about Moscow's relationships with republic governments, coupled with the absence of reliable economic data from which to establish appropriate quota shares in the IMF and World Bank, convinced the G–7 that full Soviet membership was premature. Despite the G–7 position, the Soviet Union applied for full membership in both Bretton Woods institutions less than a week after the summit.

Special association was intended to provide technical assistance, but not borrowing rights, which are a privilege that accompanies full membership. Special association with the IMF commenced officially on October 5, 1991, when an agreement was signed by then Soviet President Mikhail Gorbachev and IMF Managing Director Michel Camdessus. The World Bank entered into a Technical Cooperation Agreement financed by a $30 million internal grant in November 1991.

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[2] *Forfait* is the discounting, without recourse, of medium-term export receivables in fully convertible currencies.

[3] IMF. *The Economy of the USSR.* International Monetary Fund [Washington] 1991. 51 p.

From the failed coup in Moscow in August 1991 until the dissolution of the Soviet Union on December 25, 1991, progress on the Soviet Union's membership applications was hampered by uncertainty about whether the Soviet Union should have single membership or the republics should gain individual membership. With the establishment of the Commonwealth of Independent States (CIS), leading to the formal dissolution of the U.S.S.R., Gorbachev's proposal of maintaining central economic authority was effectively rejected. In January 1992, the United States announced it favored the "early consideration" of the membership applications for the Soviet successor states.

On April 27–May 4, 1992, at the Board of Governors meetings the IMF and World Bank offered membership to Russia and other ex-Soviet countries. By late September 1992 all of the Soviet successor states, except Tajikistan, had attained membership and, thus, borrowing rights in the IMF and the International Bank for Reconstruction and Development (IBRD), the World Bank's primary lending agency. Russia and Kazakhstan also joined the International Development Agency (IDA), the World Bank's concessional loan subsidiary. Assuming IMF-supported reforms take place and the proposed ruble stabilization fund is set up, IMF lending to the successor states is projected at $25–30 billion over four to five years. World Bank lending for structural and sectoral reforms in those states is estimated to be $12–15 billion over the same period. The EBRD, which has also admitted all of the ex-Soviet states, may extend loans to them reaching at least $500 million a year.

LEADING ROLE OF THE IFIS IN POST-SOVIET REFORM

The G–7 countries have assigned to the IFIs the primary burden of negotiating acceptable reforms and extending substantial credits for policy changes and development projects. The three IFIs serve different, but complementary, roles in leading multilateral assistance. The IMF seeks to achieve a stable and well-functioning international financial system. In pursuing this goal, it monitors the economic policies and foreign exchange practices of its members. Most important, to minimize economic and financial disruption, it extends loans to countries experiencing balance-of-payments difficulties. IMF loans require macroeconomic reforms, including the alteration of fiscal, monetary, and exchange rate policies.

The World Bank finances economic development projects, as well as economic policy-reform programs. Four subsidiaries extend market-rate loans and concessional loans to governments, market-rate loans to and equity investments in local commercial firms, and insurance for foreign investors.

The EBRD has been in operation only since April 1991. It provides long-term capital, equity investment, and technical assistance. At least 60 percent of its lending is targeted for the private sector or privatizing public sector firms. The EBRD is the only IFI that explicitly links its operations to democratization and political reform.

G–7 leaders and others have cited several reasons in support of assigning the leading role to the IFIs in the international effort to aid the Soviet successor states.

*Working Multilaterally in Common Effort*

U.S. participation in the G–7 aid package and other programs targeting the new states of the former U.S.S.R. is intended to be guided by the "Freedom Support Act of 1992." [4] In transmitting this legislation to Congress on April 3, 1992, President Bush contrasted the post-World War II period—when the United States alone had to shoulder the burden of assisting Western Europe—with the current situation, when the major industrialized countries and a variety of international institutions are sharing the task. A multilateral effort also affords individual donors greater leverage in conditioning aid to shape politically difficult reforms.

The IFIs currently have the resources to extend loans to the Soviet successor states. The IMF, however, argues that it needs the proposed 50 percent capital increase (SDR of 45.1 billion or about $60 billion) [5] that has been pending since June 1990 (even before the U.S.S.R. collapsed), if its lending capacity is to accommodate the anticipated needs of not only the ex-Soviet states, but also its other borrowers. [6] There is also the possibility that a capital increase might be considered sooner than planned in the World Bank and EBRD.

*Supplementing Insufficient Bilateral Aid*

Many doubt, moreover, that the G–7 countries can provide enough funds bilaterally to meet the massive needs of the Soviet successor states. A multilateral strategy recognizes the limits of bilateral aid in responding to the massive needs of the successor economies and to the instability following the collapse of the Soviet system without a clearly defined replacement. The German government, for example, is transferring more than $100 billion to former East Germany for reconstruction in 1992. Despite previously generous levels of assistance to Russia, Germany is now financially and economically constrained from supplying much additional assistance. The United States also faces budgetary and, perhaps, political constraints.

Comparisons with a variety of estimates of external financing needs for the former Soviet states and with the record of financial flows to developing countries also suggest that bilateral assistance will be insufficient. In early 1991, for example, Harvard Professor Jeffrey Sachs, a consultant to the Russian government, estimated that the Soviet Union required $30 billion in Western aid per year for five years. [7] Soviet President Mikhail Gorbachev's special

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[4] For details, see CRS Issue Brief 92081, *Freedom Support Act of 1992: A Foreign Aid Program for the Former Soviet Union*, by Curt Tarnoff.

[5] The Special Drawing Right, or SDR, is an international reserve asset consisting of a basket of five major currencies created by the IMF and used to denominate all IMF accounts.

[6] Historically the IMF considers its resources to be adequate if its uncommitted useable (hard currency) resources totaled at least 70 percent of total liquid liabilities (the amounts not yet disbursed for approved loans and its obligation to pay member countries the hard currency in their reserve tranche of their quotas). The 102d Congress appropriated the U.S. share of the IMF quota increase ($12.3 billion) in the FY1993 foreign operations appropriations bill (P.L. 102–391).

[7] Sachs, Jeffrey. "From Rubles to Reform," *Washington Post*, May 12, 1992. The Sachs estimate was made in connection with the so-called "Grand Bargain" or Yavlinsky Plan, a detailed economic reform program that was prepared by a group of American, mostly Harvard, economists, including Sachs, and Grigory Yavlinsky, then a private Soviet economist and a former Russian deputy prime minister. Two of Sach's Harvard colleagues, Graham Allison and Robert

Continued

envoy, Yevgeny Primakov, also told the IMF, in June 1991, that the Soviet Union would need $150–250 billion over the next five years. [8] In April 1992 IMF Managing Director Michel Camdessus estimated that, in addition to the $24 billion G–7 aid package for Russia, the financing requirement of the other ex-Soviet states and the Baltic countries would be $20 billion in 1992 alone. [9] By comparison, the OECD's Development Assistance Committee (DAC), a group of 18 leading donor countries, disbursed $62.4 billion in total gross official financial flows to over 160 developing countries in 1990, [10] a level just $18.4 billion greater than the total estimated requirements of the former Soviet Union in the first reform year.

Assistance to the successor states is also likely to be complicated by political issues between donor and recipient countries. An increase in financial assistance from Japan is impeded by the Russian-Japanese territorial dispute over the Kuril Islands, or Northern Territories, as the Japanese call them. Finally, some analysts also suggest that the terms of bilateral aid might be too limited to be effective in promoting economic and political change in the recipient countries.

*Increasing Effectiveness of Aid*

The IFIs play significant roles in ensuring the effectiveness not only of their own lending programs, but also those of bilateral donors and potential private sector credits and investment. The IFIs have been providing: (1) timely analyses and reliable data on the former Soviet economy to estimate resource requirements; (2) technical assistance to help build critical institutions and market infrastructure, such as central banks and private ownership; and (3) "stamps of approval" on economic reform plans to establish credibility so that taxpayer and private sector support can be obtained. In short, the IFIs are catalysts in the long transition process to wholly new, market-oriented, multi-state economies.

### G–7 AID PACKAGE FOR RUSSIA: IFI PARTICIPATION

On April 1, 1992, President George Bush and German Chancellor Helmut Kohl announced agreement by the G–7 countries on a $24 billion multilateral aid package to support Russia's economic reforms in the first year. Of the proposed $24 billion, $6 billion would be used to establish a currency stabilization fund to support the ruble and $4.5 billion would comprise the initial lending programs

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Blackwill, also involved in preparing the Yavlinsky Plan, reportedly recommended grants of $15–20 billion for three years. Kondracke, Morton. "Soviet Democracy—Cheap at $100 Billion." *Wall Street Journal,* June 14, 1991. The Yavlinsky plan is briefly outlined in Lloyd, John. "G–7 To Consider Rescue Plan for Soviet Economy." *Financial Times,* June 13, 1991.

[8] Yang, John E. and Steven Mufson. "Massive Aid Plan Outlined by Soviet." *Washington Post,* June 1, 1991. The article also says that "[i]t was not clear how the Soviet envoy and members of his delegation arrived at the figure of as much as $250 billion in total Western financing, IMF officials said. 'It is a lot of money,' one said skeptically." The Primakov estimate may have been derived from independent estimates made by the Soviet government in response to the "Grand Bargain" or it may have been a "political estimate" made, not only for Primakov's Washington visit, but for the upcoming London economic summit which was to be attended by President Gorbachev.

[9] Camdessus, Michel. "Economic Transformation in the Fifteen Republics of the Former U.S.S.R: A Challenge or an Opportunity for the World?" Address to Georgetown University School of Foreign Service, April 15, 1992, p. 7.

[10] Total gross official development assistance plus total gross other official lows. *Geographical Distribution of Financial Flows to Developing Countries, 1987–1990.* Paris: OECD, 1992.

of the IMF, the World Bank, and the EBRD. However, the process for reform and development is likely to be long-term.

### THE IMF: CENTERPIECE OF MULTILATERAL ASSISTANCE

The IMF has been designated to lead donor efforts to negotiate acceptable reform plans in Russia and other successor states. The IMF is largely a creature of the industrialized countries, particularly the G-7. By August 31, 1992, the G-7 countries accounted for 45.7 percent of the IMF's quota resources and 74.0 percent of member reserve positions.[11] None of the 23 industrialized countries that are IMF members are borrowers. Rather, they provide the majority of the resources that the IMF lends. IMF policy toward the successor states will, therefore, reflect the policy goals of the G-7.

*Pre-Membership Phase: Russia's "Shadow Program"*

Implementation of an economic reform program in cooperation with the IMF was specified in a Memorandum of Understanding agreed on October 28, 1991, between the deputy finance ministers of the G-7 and officials of eight of the Soviet republics. The basic purpose of the memorandum was to provide for a moratorium on principal payments of Soviet debt owed to the G-7 countries.[12] The moratorium could not, however, be extended beyond March 31, 1992, without IMF approval of a "shadow program," so-called because it was not intended to provide any loan funds. Thus, the shadow program was, in a sense, intended to provide a temporary substitute for, as well as a precursor to, a full IMF standby program, which is normally a requirement for a Paris Club debt rescheduling.[13] Equally important, the shadow program was widely viewed at the time as likely to expedite negotiation of an IMF standby credit when Russia became a full member of the IMF.

Russia's reform program, embodied in a Memorandum on Economic Policy adopted by the Russian Government in February 1992, was approved by the IMF by the March deadline. The moratorium has been subsequently extended in 90-day increments. The shadow program provided for:

- The removal of price controls on most goods and services by the end of March, except for rents, transport, and domestic gas and energy;
- Freeing of domestic oil prices by April 20;
- Reduction of the budget deficit to one percent of GNP, mainly through cuts in subsidies and military spending;
- Restoration of the value-added tax of 28 percent and its introduction on imports after July 1, 1992;

[11] Calculated from IMF. *International Financial Statistics*, September 1992.

[12] For a discussion of the international debt problems of the Soviet Union and its successor states, see "The External Financial Position of the Former Soviet Union: From Riches to Rags?" by Patricia A. Wertman, in this volume. An updated and expanded version has also been issued by the Congressional Research Service. *International Debt and the Ex-Soviet Republics: Mortgaging the Future*, by Patricia A. Wertman. August 12, 1992. Report 92-678E.

[13] The Paris Club is an informal grouping of government creditors that meets on an ad hoc basis to agree on measures for dealing with countries that are in arrears or in default on international payments.

- Establishment of a unified regime of export taxes on energy and raw materials;
- Introduction by mid-summer of a single ruble exchange rate for all current transactions and one for capital transactions;
- A tightening of monetary and credit policies, including an increase in reserve requirements for commercial banks to 20 percent in April;
- A progressive tax on pay increases by state enterprises that exceed set norms; and
- More focused social subsidies for the worst off and the unemployed. [14]

The Russian government, facing political opposition, particularly in the legislature, has subsequently modified some of these "shock therapy" reforms, delaying an IMF standby loan agreement. A standby was originally expected soon after Russia attained formal membership on June 1, 1992, with a 3.2 percent quota share in the IMF.

*An IMF First Tranche for Russia: Phase One*

With a quota of SDR 2.9 billion, Russia can, theoretically, borrow slightly more than $4.0 billion from the IMF. Just before the U.S.-Russian summit in mid-June 1992, U.S. Administration officials expressed dissatisfaction with the IMF's delay in concluding a standby accord with Russia, reflecting concern about the viability of Russian President Boris Yeltsin's reformist government. As a result, in lieu of a full standby agreement, a first tranche borrowing was agreed, but only after IMF Managing Director Michel Camdessus broke a stalemate by flying to Moscow just before the start of the G-7 summit in Munich on July 6. First tranche drawings are historically unusual, but have been used previously with India, Venezuela, Chile, and Algeria. [15] Final approval by the IMF's Executive Board of Russia's first tranche drawing in the amount of SDR 719 million ($1.04 billion) came on August 5, 1992.

The first tranche drawing, which is the preliminary step of the IMF's phased collaboration with Russia, is to be used for rebuilding reserves. The arrangement, in effect for five months, calls for Russia to reduce its budget deficit from 17 percent to 5 percent of gross domestic product (GDP) and its monthly inflation rate from 15–20 percent to below 10 percent. Russia's July inflation rate was 7.5 percent, but in September increased to a rate of 20–25 percent. Internal disputes over additional credits for Russia's troubled industrial enterprises, however, make prospects for the budget deficit and future inflation look less than promising. Two months after the approval, Russia had not yet drawn the first tranche.

*An IMF Standby Agreement with Russia: Phase Two*

Completion of a full standby agreement between Russia and the IMF—phase two—is proving difficult. The date for its anticipated completion has slipped repeatedly since Russia became a member.

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[14] As summarized in Boulton, Leyla. "Russia To Fight for Bigger Role in IMF." *Financial Times*, March 3, 1992.

[15] Prowse, Michael. "Phased Approach Likely to Russian Reforms." *Financial Times*, July 1, 1992.

When the first tranche agreement was reached, it was suggested that a full standby might be completed by October 1992. It was suggested in early September that the agreement will be concluded by January 1993, but negotiations between Russia and the IMF have once again been postponed. Slippage is attributable to persistent IMF and G–7 concern over real and perceived Russian "backsliding" in the implementation of economic reforms for which agreement already has been obtained.

*The Ruble Stabilization Fund: Phase Three*

A $6 billion currency stabilization fund to support a ruble that is convertible on the world currency markets has also been proposed. This step is necessary for economic reform to succeed not only in Russia, but in all countries that will continue to use the ruble—collectively known as the "ruble zone." [16] Currency stabilization funds buy and sell currency in support of a particular foreign exchange rate. They are used to counter short-term currency volatility that is not justified by underlying economic fundamentals.

Because Russia lacks international reserves of its own that it might use for currency stabilization, the ruble stabilization fund would be created from $6 billion lent to Russia by the IMF. The IMF would, in turn, obtain the necessary funds, including $1.5 billion from the United States, by borrowing from the major industrial countries under a set of medium-term credit lines established in 1962—the so-called General Arrangements to Borrow (GAB).

On July 1, 1992, the Russian government officially made the ruble convertible on current account with a single exchange rate. [17] This was a first step toward full convertibility and currency stabilization. Convertibility has at least two major potential advantages for countries in the emerging ruble zone:

- By linking domestic prices to world market prices, it would help to establish a domestic pricing system, and
- It would facilitate trade and investment.

Two meaningful "hurdles" are likely to determine the timing of the activation of the GAB for the ruble fund. One of these two hurdles is the negotiation of an IMF standby credit involving macroeconomic conditionality. Macroeconomic stabilization is the foundation of successful currency convertibility. If it is not achieved when a currency stabilization fund is put in place, "capital flight" might rapidly deplete the fund, overtly signaling a lack of confidence in government policies and depriving the economy of needed invest-

[16] Other successor states, such as Azerbaijan, Belarus, Tajikistan, Ukraine, Kazakhstan, and Uzbekistan, are planning to issue their own currencies. Such proposed replacement of the ruble must also be negotiated. In some states, the currency situation is confused by the issuance of coupons, interim, and parallel currencies. Also, some of the successor states have shifted their position several times regarding the issuance of a separate currency. Thus, the IMF is likely to set up additional currency stabilization funds. Ukraine, for example, joined the IMF on September 3, 1992, and has requested a currency stabilization fund for its future currency, the hrivnya.

[17] The current account of a country's balance of international payments is the net balance arising from exports and imports of goods and services, together with unilateral transfers (gifts, emigrants' remittances, intergovernmental grants). Some restrictions still exist on current account transactions. To purchase amounts larger than $500, Russian citizens must present a passport or some other means of identification. In addition, private citizens may not take more than $500 abroad without special authorization. Finally, investment flows are a capital account item and are, therefore, not convertible under current regulations.

ment funds. Indeed, not using a stabilization fund is a measure of successful currency stabilization. Currency stabilization funds only provide confidence at the margin.

In addition to the macroeconomic stabilization that would underpin an IMF standby agreement, conditions of cooperation between the Russian central bank and the central banks of the other states that are likely to remain in the ruble zone must be worked out.

The other major hurdle for establishment of the ruble stabilization fund is determination of a realistic exchange rate for the ruble. In order to determine its value, the ruble has been allowed to "float," that is, its price is determined by market supply and demand in biweekly auctions on the Moscow Interbank Currency Exchange. Despite central bank intervention, the ruble has fallen from 125.26 rubles per dollar on July 1, to 241 rubles per dollar on September 23, 1992. This represents a drastic decline, in dollar value terms, of 48 percent in not quite three months. Eventually, perhaps a very-long "eventually," the Russian government intends to peg the ruble to the dollar, with a range of fluctuation of ± 7.5 percent. [18] In light of the difficulty of both macroeconomic and currency stabilization, the implementation of the proposed IMF ruble stabilization fund is certain to be substantially delayed. Some suggest that it might never be put in place. The Russian government has already announced that full convertibility will be delayed until sometime in 1993.

THE WORLD BANK'S LOAN PROGRAM

The World Bank is working closely with the IMF on lending to Russia, which became a member of the World Bank's IBRD and IDA on June 16, 1992. IDA is the World Bank's soft-loan window. Its loans are extended to the poorest countries based on their per capita income levels. Russia is unlikely to qualify for loans from IDA, but three or four of the Central Asian countries may qualify for IDA financing. The Bank plans three steps in its lending process for Russia: (1) import rehabilitation loans totalling $1.6 billion to finance critical imports, such as medical supplies and spare parts; (2) sectoral loans of about $500 million each, targeted for the oil and agriculture sectors; and (3) structural adjustment loans to establish social safety nets to help the most needy during the transition.

In the first year of lending, about $1.5 billion in Bank financing is planned for Russia, with another $1 billion for other ex-Soviet states. The World Bank's first loan to Russia, $600 million, to be used to purchase critical imports, was approved in August 1992, along with the IMF's $1 billion advance. Some $250 million of this loan will be disbursed by the central bank through the interbank currency exchange, thereby helping to support the ruble.

THE EBRD'S LOAN PROGRAM

In January 1992, the EBRD lifted the limit on Soviet borrowing for the successor states. The EBRD has decided that 40 percent of its lending, potentially at least $500 million a year, should benefit

[18] Boulton, Leyla. "*Russia Plans Fully Convertible Rouble*". *Financial Times*, May 6, 1992.

the ex-Soviet states. Russia and other successor states gained full membership once they agreed to EBRD standards regarding multiparty democracy, pluralism, and market economic principles in the Articles of Agreement.

In May 1992, the EBRD approved a strategy plan for Russia containing the following priorities: privatization, creation of small and medium-sized businesses, military conversion and nuclear safety, environmental protection, and strengthening of the financial, energy, and agricultural sectors. The EBRD has under consideration seven possible projects for Russia totalling $199 million. Four of those projects, accounting for over 90 percent of the funds, would support the oil and gas industries.

## ISSUES FOR THE NASCENT IFI PROGRAMS

The nascent IFI programs discussed above for financing Russian economic reforms have begun the enormous international task of helping the difficult transformation in all Soviet successor states. Two issues in particular, relating to IFI assistance for post-Soviet reforms, have received attention. First, how does one go about assessing the resource needs of the successor states and are they being met? Second, does the EBRD's approach to conditionality, which supports both economic and political reform, provide a model for the IMF and World Bank?

### FINANCING THE SUCCESSOR STATES: THE MOST EXPENSIVE "BAILOUT" IN HISTORY?

IFI lending is unlikely to solve the economic problems of the successor states. The successor states do, however, need external assistance. Realistically assessing their external resource needs is, however, difficult. Nevertheless, a lack of financial resources in the wake of the Soviet Union's fall 1991 liquidity crisis has made such assessments necessary.

#### *Assessing Resource Needs: Two Views*

A country's external resource requirements may be assessed in two ways. From the perspective of the domestic economy, the need for external resources may be measured by the "savings gap," that is, the difference between gross domestic capital formation, or investment, and gross domestic savings. This savings gap must be filled by external resources. From the perspective of a country's international economic relations, as summarized in its balance-of-payments, the external resource requirement may also be measured by the sum of net imports of goods and services plus net factor payments. [19] *Ex post*, these must be identical.

*Ex ante*, estimates of future resource requirements derived from the two different viewpoints might differ, particularly in the case of the Soviet successor states. From a domestic economic perspective, the infrastructure of the successor states is severely deteriorated. The so-called "ruble overhang" of domestic savings has been

[19] Factor payments include income from or payments on investment, such as rent, interest, dividends, and profits, and wages, salaries, or other types of compensation either earned by and paid to residents living abroad or paid to nonresidents.

eliminated by price liberalization and inflation. Domestic savings are likely to fall further. Most important, the financial structures for successfully channeling savings into productive investment that are characteristic of capitalist economies do not exist. In particular, the successor states lack modern banking systems and securities markets. Under these circumstances, an extraordinary amount of external resources would seem to be required.

*Resource Needs: Prospects for the Successor States*

Estimates of external resource needs are generally done from the balance-of-payments perspective. The IMF's estimate that Russia alone would require $20–25 billion during 1992, while the other former Soviet republics would need $20 billion, took account of the "expected level of exports, debt-service obligations, the need to replenish the international reserves, and ... a stabilization fund for the ruble (about $6 billion)." [20]

Recent balance-of-payments data indicate that Russia is currently meeting less of its resource needs from abroad, a concomitant of the decline in domestic production. Russian import levels, as shown in Table 1, were 24.0 percent lower during the first half of 1992 than in the first half of 1991.

TABLE 1. Russian Foreign Trade Performance, January–June 1992.

(Millions of Dollars)

| Measure | First Half 1992 | First Half 1991 | Percent Change |
|---|---|---|---|
| Exports | 15,367 | 23,640 | −35.0 |
| Imports | 14,877 | 19,570 | −24.0 |
| Trade Balance | 490 | 4,070 | −88.0 |

Source: PlanEcon. *PlanEcon Report*, August 7, 1992, p. 3.

From the balance-of-payments perspective, prospects for meeting Russia's resource needs from abroad also do not appear encouraging. Russia's recent export performance has not significantly strengthened Russia's immediate ability to pay for the required imports. As shown in Table 1, in the first half of 1992 its exports fell faster than its imports, causing its trade surplus virtually to disappear. The current account deficit that is the likely result implies reduced ability to pay for imports and, concomitantly, the need for increased capital inflows.

The IMF has not published the projections of Russian trade performance that underpin its estimate of Russian financing requirements. Did the IMF anticipate a deterioration in Russia's trade performance of this magnitude? If not, then Russian financial needs are now higher than the IMF estimated.

Russia's international reserve assets are also currently inadequate to support much of an increase in imports. They have been rebuilt somewhat from their March 1991 low of $6.4 billion, reach-

[20] Camdessus, *Economic Transformation*, p. 7.

ing $8.4 billion at the end of March 1992.[21] Nevertheless, at the import rate prevailing during the first half of 1992, the end-of-year reserve level represented only about 3.4 months' imports, barely above the three-months minimum generally considered necessary. As noted earlier, the IMF first tranche loan of $1.04 billion was intended to be used for the rebuilding of reserves, but, as of early October, has not been drawn. This addition to reserves, although helpful, would not substantially alter the picture of inadequate international reserve holdings. For reasons that have been discussed above, prospects for the ruble stabilization fund are not encouraging.

A major vehicle for providing financial "assistance" to the successor states has been the deferral of principal payments on both official and private debt incurred before January 1, 1991, and falling due after December 5, 1991. Debt deferral temporarily postpones *de jure* claims on existing financial assets—to the extent that there are any. It does not, however, provide significant new financial resources. As a result, the deferral contributes little to Russia's ability to meet its resource needs internationally. Moreover, Russia is in arrears on debt-service payments not covered by the deferral. Thus, limitations imposed by deteriorating export performance, by insufficient holdings of international reserve assets, and by the compositional mix of financial assistance suggest that a massive "bailout" of the Soviet successor states is not only unlikely, in the short-term, but that it simply is not happening.[22] An assessment of absorptive capacity might further suggest short-term limitations to the effectiveness of any massive infusion of external resources.

## SHOULD THE IFIS REQUIRE POLITICAL REFORMS?

A second issue relates to the implications of the EBRD's political conditionality for the Bretton Woods institutions. The proposed economic transformation of the ex-Soviet states is taking place in conjunction with political liberalization. Questions regarding the appropriateness of political conditionality are, therefore, particularly pertinent. Democratic politics in these newly emerged states are only nascent and have not been institutionalized. Some analysts worry, for example, that a military coup or an alteration in the government toward a more conservative composition might frustrate the reform agenda. Should the IMF and the World Bank then continue lending to the Soviet successor states, even with obstacles to democratic reform? The major donor countries have, at times, limited their support for World Bank lending in response to human rights violations in a particular country. An example is the suspension of approval for loans to China following the Tiananmen mas-

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[21] Latest available data. BIS. *International Banking and Financial Market Developments*, August 1992.

[22] Very few figures on the amount of financing that the successor states have recently received are available. A recent report states that net financial flows to the former Soviet republics amounted to $9.25 billion in 1991 and are expected to reach $21 billion in 1992. RFE/RL. *Daily Report*, September 1, 1992, p. 1. The latter figure, in particular, is substantial, but it is also considerably less than the IMF estimated is needed for 1992. Composition of this net financial transfer is not indicated. The point remains that a very substantial share of this assistance is in the form of debt relief and that the impact of any assistance is being undermined by poor export performance.

sacre in June 1989, with concerns about a possible reversal of reform policies.

*Political Conditionality and the EBRD*

The EBRD mandate embodies the belief that countries will be more successful in their transition to market economies if their governments are willing and able to protect the civil and political rights of their citizens. Those rights are defined in accordance with international standards. [23] Implicit in that policy is the contention that economic liberalization requires reinforcing political liberalization. The EBRD's policy is, therefore, to extend loans to countries of Eastern Europe and the former Soviet Union with explicit conditions relating to progress toward multiparty democratic politics and pluralism, as well as toward market economies.

In operation only since April 1991, the EBRD's experience in political conditionality is not yet established, with persistent questions about actual implementation. Nonetheless, the EBRD has approved procedures to implement this political mandate. Rather than evaluating performance on a project-by-project basis, annual EBRD country strategy papers assess broad political and economic progress. If the EBRD found that a country was not making sufficient progress in promoting democracy and pluralism, it has the authority under its Articles of Agreement, to suspend or modify some or all of its operations in that country.

*Model for the IMF and World Bank?*

The IMF and the World Bank are currently limited by their charters to the application of economic conditionality. The two Bretton Woods institutions, however, have been discussing, since 1991, the relevance and need for "good governance," as well as the impact that military spending may have on economic reform and development—previously an issue placed largely in a political and security context. Discussion of excessive military spending may be justified on the basis of avoiding unproductive public spending, but good governance issues, such as the rule of law and the appropriate role for the government, may be seen more as political intrusions by borrower countries. The IMF and World Bank have not, however, required their borrowers to adopt specific policy reforms in these controversial areas as a condition for lending. They have also not made their loans conditional on countries making changes in their human rights practices or their political systems.

The implications of EBRD's approach for the IMF and the World Bank are threefold. First, if it is accepted, as the EBRD notes, that "this link between economics and democracy is the new framework for the future," should political conditionality become a regular part of the lending policies of the two global financial institutions? Second, if their members generally agree that the World Bank and IMF may apply political conditionality, how should the IFIs define progress, or lack of progress, in democratization? Third, what consequences should there be for noncompliance with the defined po-

[23] International standards for human rights are often cited by observers as the United Nation's Universal Declaration of Human Rights adopted in 1948.

litical standards? The issues raised by these questions are examined below.

### *The Desirability and Appropriateness of Political Conditionality*

Requirements in aid policies for democracy and respect for human rights are seen by many non-Western countries as unacceptable intrusions in national sovereign affairs and unrelated to economic development. Many officials of developing countries also claim that human rights and democracy are Western notions and biases. It might, therefore, be unproductive for the international financial institutions, organizations that are primarily responsible for the world monetary system and economic development, to impose provocative political conditions on its members. More practically, countries might reject loans carrying unacceptable political conditionality or terminate participation in the Bretton Woods institutions altogether.

Foreign donors, on the other hand, believe they have the right to spend aid in accordance with their foreign policy goals and values. They feel the responsibility to assist the fulfillment of universal aspirations for participatory democracy and human rights, particularly the aspirations of women in developing countries.

Foreign donors also believe they have the responsibility to ensure the effectiveness and the efficiency of their aid. From this point of view, political conditionality in bilateral aid and EBRD operations is also based on the assertion that economic reforms cannot be sustained without political liberalization. Several arguments support this view:

(1) Extensive popular participation in the political process, including meaningful roles for women, fosters sound and broad-based economic growth;

(2) Accountability of political leaders and the civil service bureaucracy to the electorate or its representatives discourages corrupt practices;

(3) The rule of law and legal protection for private property and private ownership provide an environment conducive to domestic and foreign investment, enterprise, and efficient economic activity;

(4) Political demands for influence and civil rights are inevitable as citizens, especially in the enlarged middle class, increasingly link economic issues to domestic politics and foreign policy; and

(5) A legitimate and institutionalized political system that allows pluralism to flourish provides greater political and social stability.

### *Defining Progress in Democratization*

If the IMF and World Bank determined—as the EBRD has—that economic and political reforms are mutually reinforcing, a definition of democratization would have to be applied in lending policies. The EBRD acknowledges that different countries are likely to choose distinct paths, but also recognizes that international standards exist for assessing civil and political liberalization. The European Bank cites several examples of what constitutes democratization and pluralism: free elections, representative government with accountability of the executive to the elected legislature or the electorate, freedom of speech and assembly, freedom of conscience

and religion, freedom of movement, right to private property, right of redress against administrative decisions, separation between state and political parties, judicial independence, equal protection by law, fair criminal procedure, and the right to form trade unions and to strike.

*Sanctions for Noncompliance*

After defining progress in political reform, a third issue is the type and timing of response by lenders to "backsliding." The EBRD's Articles of Agreement provide for suspending or modifying a member's access to EBRD resources, providing two-thirds of the EBRD's Governors representing 75 percent of the total voting power consent. Related questions would be at what point in a regressive trend should lenders suspend operations in a country, rather than continue the assessment and dialogue that are part of the annual country reviews, and would such cutoffs be counterproductive for the long-term process of economic restructuring.

The EBRD has been a trail-blazer among the IFIs in raising the issue of political conditionality in lending strategy. Before the IMF and World Bank decide to apply this approach, it should be determined whether political conditionality would be appropriate given their established lending goals, how progress toward democracy and pluralism should be assessed, and when and how the IFIs should respond to possible backsliding. Forging a consensus among the more numerous members of the Bretton Woods institutions on these sensitive issues is certain to be more difficult than it was for the membership of the EBRD. It may be better for the officials of the IFIs to initiate consideration of these questions on their own rather than to have consideration forced upon them by legal and formal action by the leaders of the major donor countries.

## CONCLUSION: A LONG, UNTRODDEN ROAD

In conclusion, the economic transformation of the Soviet successor states is likely to be more difficult than the restructuring of the troubled debtor nations of the Third World. Even assuming the full and continuous commitment of the new leadership of the successor states, successful economic reform will undoubtedly also take longer than in many Third World countries. The latter had market-based economies, however poorly functioning. The IFIs, for their part, are strongly committed to the post-Soviet restructuring, so far investing more than two years of economic research, high-level negotiations, organizational and staffing changes, and now financing.

The IFIs and the successor states are charting new ground and setting new precedents—in terms of both substance and process. IFI programs have sometimes been inaccurately characterized as imposing "cookie-cutter" solutions. In this instance, however, there is no "recipe" for what, in reality, has to be a shared undertaking. Concerned policymakers are, therefore, watching closely the nascent IFI programs in the ex-Soviet states for implications for the IMF's macroeconomic stabilization efforts, the World Bank's poverty-reduction focus, and the EBRD's political conditionality. The disturbing lack of a dramatic increase in net resource availability also

makes the transformation of the successor states more difficult. Finally, the greatest risk for all is the risk of failure.

# THE ROLE OF EXPORT CREDIT AGENCIES IN THE "NEW EAST"

By Daniel L. Bond *

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## SUMMARY

Private creditors have largely ceased providing new financing for Eastern Europe and the Soviet Union or, in the case of their trade and project financing, they are now requiring repayment guarantees from Western governments. In theory, Western governments are prepared to support, through their export credit agencies (ECAs), financing for this region because it promotes their domestic exports and has little budgetary impact. However, in practice, the level of ECA financing depends upon demand in the importing country and reasonable assurance of repayment. Conditions in Eastern Europe currently are not conducive to continued rapid expansion of ECA financing. It will be particularly difficult for the ECAs to provide financing for the emerging private sector where it is most needed.

## INTRODUCTION [1]

A recent report by The Institute of International Finance noted that commercial banks are unlikely to take the lead in providing finance to Central and Eastern Europe and the former Soviet

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[1] This paper is drawn largely from an earlier monograph by the author, *Trade or Aid? Official Export Credit Agencies and the Economic Development of Eastern Europe and the Soviet Union*, Public Policy Paper 4, Institute for East-West Security Studies, New York, 1991.

Union—a region referred to in this paper as the "New East." It went on to urge that "because of the nature of the task and the political implications, Western governments will need to take the lead in organizing assistance through their own national agencies and international institutions." [2]

The primary "international institutions" referred to in the IIF report (usually called the international financial institutions or IFIs) are the International Monetary Fund, the World Bank, and the newly formed European Bank for Reconstruction and Development. Information on these institutions and their policies is widely available. And their evolving role in the New East has been analyzed in a number of places.

The primary "national agencies" referred to by the IIF are the official export credit agencies (ECAs). Information on the ECAs and their policies is less readily available. And little has been written thus far on their role in this region. The purpose of this paper is to help fill this latter gap.

A better understanding of the role of the ECAs by policymakers and the public is particularly needed at this time in order to avoid further misunderstanding about the degree of financial assistance being offered by the West to the restructuring economies of the New East. Most Western nations have extended large lines of officially backed trade credit to the New East, amounting to several times the level of concessional loans and grants offered. However, most of these trade credits are currently not being utilized for reasons detailed below. As a result, when comparisons are made between offers of financial assistance and actual disbursements, there appear to be large discrepancies. This has caused accusations of bad faith or incompetence to be leveled against Western governments. Some of this misunderstanding could be avoided if donors were more exact in identifying the type of financing offered and recipients were better informed as to the conditions attached to trade financing.

## THE SHIFT TO OFFICIAL FINANCING

Economic and political turmoil in the New East, combined with the economic contraction going on in most of these countries as they attempt the transition from central planning to market economies, has caused a sharp decline in the creditworthiness of these countries. This has made it more difficult for New East countries to attract financing from Western commercial banks or other private sector lenders, unless these lenders obtain repayment guarantees from Western governments. Use of the international syndicated credit and bond market by the New East dropped by roughly two-thirds in 1990 compared to 1989 and remains low today. While there appears to be continued private sector financing for investment banking, project financing, or the emerging private sector, this is a rather restricted sphere of activity at this time.

As a result of the withdrawal of private credit, the involvement of official creditors has increased sharply. This is occurring in

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[2] *Building Free Market Economies in Central and Eastern Europe: Challenges and Realities*, The Institute of International Finance, Inc., April 1990.

three ways. First, private creditors are willing to provide trade and project financing only when they can obtain repayment guarantees from Western governments. Second, Western governments are providing increased bilateral assistance in an effort to support the process of political and economic reforms in the region. Third, those countries that are members of international financial institutions are seeking increased financial support for their economic stabilization and restructuring programs.

In order to explore the consequences of the shift from private to official financing in the New East it is useful to consider how the various major groups of creditors differ in terms of their willingness to assume repayment risks, the degree of financial subsidization they offer, and their ability to impose conditionality.

### RISK ASSUMPTION

The shift from private to official financing for the New East has occurred primarily because creditors differ in their willingness to assume risks. When a country begins to have balance-of-payments problems, there is an increased risk that they will not be able to service their debts as scheduled or in full. Commercial lenders are very sensitive to such risks, and will usually curtail or stop their activities when they perceive them developing. Official creditors are usually prepared to accept a higher degree of repayment risk—and will even directly assume such risks for commercial lenders so that the latter will continue to provide financing.

While export creditor agencies are usually willing to accept higher risks than private creditors, they do seek to be repaid and will normally withdraw their financing if the risks appear too great. Sometimes a government will allow ECA transactions to be put on the "national account." This means that the creditor government will cover any losses that the ECA experiences. In this way a government, for commercial or political reasons, can encourage an ECA to stay open in a country even if the risks are very high.

IFIs are also able to operate in high-risk countries because they are accorded preferential treatment when a country has debt-service problems. Payments to private and official bilateral creditors are subordinated to payments to the IFIs, and reschedulings cf IFI debts is not permitted.

### SUBSIDIZATION

The degree of subsidization refers to the extent to which the financing is provided on terms more generous than those available from world capital markets. Subsidization normally takes the form of lower interest rates and exposure fees, and longer grace and repayment periods. Subsidies are also provided by mixing non-concessional loans with grants—so called "mixed credits." Since the private market is the basis upon which subsidization is measured, by definition private creditors provide no subsidies. On the other hand, while there is usually some element of subsidy involved in official lending, this is not always the case. Official financing can fill gaps in the private capital market, without providing subsidies to the borrower.

In fact, most of the official financing for the New East is being provided on commercial terms, with only a modest amount in the form of grants or concessional loans. The low concessionality provided in Western financing for the New East is appropriate given the relatively high per capita income of this region relative to Third World countries. However, the debt-service difficulties of some countries in the region are quite severe, and this calls into question the wisdom of piling on new debt. If new financing is provided, it should be recognized that there is a significant chance that it will not be fully repaid and thus contains a high level of potential subsidization.

### CONDITIONALITY

The degree of conditionality refers to the extent to which the financing is related to the recipient government's policies and actions. Private financial flows into the New East are based primarily on commercial considerations and creditor's assessments of repayment prospects. In the case of official bilateral financing the conditionality is often dictated by the lending country and relates not only to economic policies, but to political or social policies as well. Sometimes the latter are stated clearly in advance (such as the U.S. insistence on acceptable emigration policies as a precondition to receiving export credits). Often they are implicit and applied after the fact (such as when government financing is withdrawn to protest some action by the recipient country). In the case of IMF programs, there is usually a negotiated agreement between the IMF and the government, which relates primarily to economic policies.

Considering these different creditor characteristics, the shift from private to official financing means:

- continued willingness to provide financing even in the face of a relatively high level of repayment risk;
- a limited degree of concessional financing; and
- a higher degree of Western government and IFI attention to—and even involvement in—the internal management of the New East economies.

### OFFICIAL EXPORT CREDIT FINANCING

The remainder of this paper is focused on the single largest component of Western official financing to the New East—trade financing provided by official export credit agencies. The current level of such funding, the terms on which it is offered, the degree of subsidization involved, and possible future developments in ECA financing for the New East will be examined.

It is useful to begin with the following definition:

> Broadly defined, an export credit arises whenever a foreign buyer of exported goods or services is allowed to defer payment. Export credits are generally divided into short term (usually below two years), medium term (usually two to five years) and long term (usually over five years). . . . official support may be limited to "pure cover," by which is meant insurance or guarantees given to exporters or

lending institutions without financing support. Alternatively, it may be given in the form of "financing support," which is defined as including direct credits, refinancing and all forms of interest subsidies. [3]

It is important to note that ECAs generally do not provide foreign exchange to foreign countries or firms. The disbursements made as a result of an ECA's financing go to exporters located in the creditor country and serve to reimburse these companies for the goods they ship or services they supply. The obligor obtains these goods and services—plus the obligation to repay the debt incurred in a specified foreign exchange.

Almost all the industrial countries, and many of the larger developing countries, have officially supported ECAs. The structure and operations of these agencies, and their relationships to their governments, vary considerably. Some are parts of government ministries, others are independent governmental agencies, and a few are private firms operating on behalf of the government.

Most ECA business today is for higher risk transactions, primarily financing of exports to developing or New East countries. Total exposure of the ECAs to countries outside the OECD was over $200 billion in mid-1990. Of this amount, two-thirds was in the form of loans from the ECAs and one-third was guarantees on commercial bank loans.

Total ECA exposure in the New East currently represents roughly two-thirds of the region's estimated $65 billion of official bilateral debt. Only 10 percent of this amount is short-term cover. Over half of ECA exposure in the region is to Russia and other states of the former Soviet Union.

Since official ECAs finance primarily their own country's exports, these exposure levels generally reflect the pattern of New East imports from the industrialized countries. The most active ECAs in the New East are those of Austria, Germany, and Italy. Together, these countries do almost two-thirds of the business. The ECAs of France, Japan, the U.K. and the United States share about one-quarter of the region's business.

Because commercial banks (and companies) have largely ceased to provide financing in the region without official ECA guarantees, this exposure has grown rapidly in the last few years. During 1990, ECAs made an estimated $6 to $8 billion in new commitments to the region.

While official export credit agencies operate with government backing, most attempt to do so on a self-financing basis. Not only do they attempt to avoid heavy direct funding subsidies, they are also cautious about the repayment risks they assume on transactions.

### SUBSIDIES AND COSTS IN ECA FINANCING

While official ECAs often provide financing to developing countries that would not be available otherwise, or at lower cost than it would be provided commercially, development assistance is not the

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[3] Organization for Economic Co-operation and Development, *The Export Credit Financing Systems in OECD Member Countries*, fourth edition, Paris, 1990, p. 7.

purpose of these organizations. However, experience has shown that competition among the ECAs, if left unchecked, leads to higher and higher levels of subsidization for the importer. Thus, the governments that support the ECAs now attempt to limit competitive subsidization of official export financing.

In 1976 a consensus was reached among six OECD export credit agencies to restrict competition. The agreement was later formalized and expanded to include 22 countries. The OECD Consensus Arrangement has greatly reduced funding subsidies for official export credits supporting trade with relatively developed countries like those of the New East.

In order to support this last assertion a clear definition needs to be established for the concepts of "subsidies" and "costs." Subsidies are defined from the point of view of the borrower, while costs are defined from the viewpoint of the lender. There is some degree of subsidy in all ECA transactions. However, not all ECA transactions involve costs for their governments.

Funding subsidies arise when an ECA makes possible financing at interest rates, or on terms, more attractive to the borrower than those offered by private lenders. Subsidies also arise when an ECA is willing to assume the commercial and political risks of repayment at a lower charge than would a commercial insurer. Some analysts have termed the interest rate differential a "direct" or "funding" subsidy and the repayment risk surcharge differential an "indirect" or "risk" subsidy.

"Costs" occur when the taxpayer makes net outlays to support ECA financing, i.e., when the income the ECA makes from its transactions is less than its operating expenses. Costs occur when the interest the ECA receives on its direct loans is less than the interest the ECA has to pay to fund its operations. Costs can also be incurred when a borrower defaults or is granted a debt write-off.

Subsidies do not necessarily entail costs to the government budget. The critical consideration from the viewpoint of costs is whether the interest rate on ECA loans is more or less than the ECA's own costs of borrowing. In order to provide financing to its national exporters that is competitive with official financing offered to foreign suppliers, an ECA sometimes offers loans at rates below its own cost of borrowing. In such cases there are both financial subsidies and costs.

Over the last decade, through the tightening of terms allowed under the OECD Consensus Agreement, the level of financial subsidies and costs have been greatly reduced. Today there are still subsidies in ECA financing for the poorest developing countries. However, for middle income countries such as those in the New East, ECAs charge interest rates that are close to market rates.

The minimum terms established under the Consensus Arrangement do not currently address the indirect or risk subsidies connected with exposure risks on export credits. As was pointed out above, the subsidy element in these programs arises from the government's willingness to assume risks that private insurers are not willing to assume or at lower fees than private insurers would charge.

There is no immediate cost to the government when an ECA assumes these risks. Costs are incurred only if the borrower fails to

repay according to the original terms. In order to help cover the potential expenses of defaults, ECAs charge exposure fees. Some ECAs charge the same exposure fee for all transactions, but most charge variable exposure fees, with higher fees charged for transactions that are perceived to carry higher risks.

It is difficult to judge whether these exposure fees are adequate to fully cover the risks of defaults or debt write-offs. Direct comparison with fees charged by commercial banks is not possible, because in many cases commercial banks are not willing to provide coverage for long-term transactions in high-risk countries. Also, since governments often have greater leverage than commercial banks in collecting debts, particularly sovereign debts, this reduces the relevance of comparisons with commercial bank fees. Historical ECA experience with defaults and write-ups is difficult to evaluate, since it is not clear what will be the final outcome of the debt crisis of the 1980s or when such an event might happen again.

The General Agreement on Tariffs and Trade (GATT) includes a provision that requires ECAs to charge exposure fees that cover the operating costs and losses of their programs over a reasonable period of time. The OECD Export Credit Group has recently begun discussions on how this requirement can be made both operational and enforceable.

## MIXED CREDITS

A clearly defined and significant subsidy in ECA financing is due to the use of mixed credits. Mixed credits combine concessionary government funds with standard export credit financing to create a tied export financing package at lower than standard OECD Arrangement interest rates and more lenient terms. The use of mixed credits has increased in recent years, particularly in middle income countries and for capital and infrastructure projects involving sophisticated equipment (e.g., in the telecommunications, power, construction and transportation sectors).

Because mixed credits can be a form of predatory trade financing, designed to capture key markets for a country's exporters, the OECD Consensus Arrangement has been modified to include guidelines on their use. The most important provision is that when mixed credits are offered they must have a subsidy level of at least 35 percent (and at least 50 percent for the least developed countries). This provision came about largely through the efforts of the United States, and with the intention of reducing the use of mixed credits by making them more expensive to offer. So far, it has not had the desired effect of reducing the level of mixed credit offers.

Some governments defend the use of mixed credits on the grounds that they help generate political support from the business community for higher aid budgets. However, most governments realize that there are negative consequences for both the donors and recipients. For the donors, mixed credits greatly increase the costs of trade promotion in the countries and sectors affected. For the recipient country, aid that is untied is more efficient than mixed credits because it allows the country freedom to import from the most suitable and cost-effective suppliers.

In addition to negative consequences mentioned above, many governments feel that whatever aid (i.e., grants and concessional financing) is provided to the countries in this region should be used to promote political and economic reform. And they appreciate that the use of aid in support of mixed credits may conflict with this conditionality.

Because of the potential negative aspects of mixed credits, and given that the New East was a largely "unspoiled" market in which mixed credits were not used, the United States has proposed an agreement among the ECAs to refrain from using commercially oriented mixed credit in the New East. (The United States has proposed excluding food aid and other assistance provided in the form of outright grants, on the grounds that these are not trade-distorting or commercially motivated.)

This issue was discussed at the 1990 Houston Economic Summit. As a result, the final communique of the Summit urged that "trade distortions" in Western financing for the New East be avoided. Although the Western governments have not been able to agree on a more explicit prohibition, they have informally agreed not to use mixed credits in the New East.

OFFICIAL DEBT RESCHEDULING

Although ECA financing is initially tied to exports at the time of disbursement, the foreign exchange pledged for repayment of these debts can be diverted into balance-of-payments financing either through arrears and defaults or rescheduling and write-offs. Since the beginning of the "debt-crisis" in the early 1980s the ECAs, like the commercial banks, have had to develop policies for dealing with countries with severe payments difficulties.

Working within the multinational forum of the so-called "Paris Club," ECAs and other official creditors have provided debt relief through rescheduling of arrears and payments of principal—and in most cases interest payments as well (which commercial banks have been unwilling to do). The objective of these reschedulings has been the provision of short-term liquidity relief to avoid default. The rationale is that if temporary balance-of-payments relief is provided, the debtor will have time to undertake stabilization and adjustment measures so that full debt servicing can take place in the future. The amount of relief provided has been determined through negotiations on a case-by-case basis, in an effort to match the amount and categories of debt rescheduled to the debtor's ability to pay.

In order to be eligible for rescheduling, debtor countries normally have to first implement appropriate policies, which usually means adhering to an adjustment program monitored by the IMF. Since the Paris Club does not have the power to withdraw debt relief once it is agreed upon, the practice has been to limit the rescheduling to repayments of arrears, plus principal (and sometimes interest) due during a period of only 12 to 24 months. This means that most countries have had to seek repeated reschedulings. The Paris Club has used this necessity of reschedulings to help keep debtor countries in compliance with their economic adjustment programs.

In many cases, ECAs have continued to provide new trade credits even while rescheduling old debts. The key to this is the policy of debt subordination arrived at through Paris Club negotiations. The first time a country reschedules, a "contract cutoff date" is established. Payments due on all debt incurred before the cutoff date can be included as necessary under the first and future Paris Club reschedulings. But by mutual agreement, all payments due on debts incurred after this date must be serviced as initially contracted. Export credit agencies regard a firm cutoff date as essential to the provision of new credits and cover, as it gives some assurance that these new obligations will not be included in future reschedulings. To date, cutoff dates have remained firm. However, as most of these dates were set in the early 1980s, and there has been only modest new lending to the more highly indebted countries, the real tests of this policy will come in the future.

## OFFICIAL DEBT FORGIVENESS

Outright debt forgiveness is new to the Paris Club. In 1989, in response to the problems faced by highly indebted low income countries (primarily in sub-Saharan Africa), the Paris Club adopted the "Toronto menu of options" for concessional rescheduling for such countries. This allowed official creditors to choose one or a combination of types of forgiveness of principal, interest rate reductions, or very long repayment periods.

Even though the Paris Club agreed to an exceptional 50 percent write-off of Poland's official bilateral debt in 1991, the group continues to oppose debt-forgiveness for higher income countries, in part because the benefits of debt write-offs for such countries are not clear. It is often argued by those supporting such write-offs that:

> ... high levels of official debt and debt service can cause uncertainty that may inhibit domestic and foreign investment and can reduce the incentives to adopt strong adjustment policies, because external creditors will appear to receive much of the benefit while domestic citizens pay most of the cost. [4]

However, a recent OECD study has examined this hypothesis and found little empirical evidence to support the view that debt overhangs inhibit investment. [5] Instead, it was found that low investment in highly indebted countries was more likely due to a scarcity of financial resources resulting from the fact that these countries usually have a net capital outflow (i.e., the level of debt-service payments is greater than their foreign borrowing).

If this finding is correct, then debt-forgiveness can actually have a negative impact on investment if it causes net capital outflows to increase. Thus, for countries that are not servicing their debts, the question becomes whether they will be able to increase their borrowing after a debt write-off enough to compensate for the debt-service payments they will then be expected to make.

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[4] World Bank, *World Debt Tables 1990-91*, Volume 1, p. 8.

[5] Bert Hofman and Helmut Reisen, "Debt Overhang, Liquidity Constraints and Adjustment Incentives," OECD Development Center, Technical Paper No. 32, Paris, 1990.

Even if countries obtaining debt reduction are better off, other highly indebted countries are likely to be adversely affected since the established "rules" of debtor-creditor relations will have changed. Given that other countries will demand, and receive, similar write-offs, creditors will tighten their lending policies or increase their exposure fees for those countries where they view future write-offs as possible.

### IMPEDIMENTS TO ECA FINANCING

Because ECA financing of trade to New East countries involves little or no immediate budgetary costs, Western governments have, for both political and commercial reasons, been very generous in offering such financing. However, it is unlikely that more than a fraction of the financing offered will be used. Demand for capital goods imports in the New East will likely be depressed for some years. And the difficulties involved in underwriting borrowers in the region—particularly private sector borrowers—will make it difficult to find transactions that can be supported by the ECAs.

This is unfortunate, since an essential element of the market oriented economic reforms being introduced in the New East is the development of the private sector. Currently, the private sector consists primarily of small-scale service enterprises and family farms that have little demand for imports. But as existing state-owned enterprises are privatized or larger private firms created, they will seek foreign financing. This will pose problems for Western creditors and a dilemma for the officially supported agencies whose governments have been proponents of privatization.

In the past, almost all the financing for the region has been for the public sector and was backed by sovereign guarantees. Western creditors thus looked primarily to the borrowing country's overall balance-of-payments prospects and debt-service record when assessing the prospects for repayment. Since most transactions were guaranteed by the government, few underwriting decisions were necessary—decisions that are often difficult, time consuming, and expensive to make for the many private sector importers in a foreign country. However, Western creditors will now have to begin assessing the creditworthiness of these newly established private firms. Given that these enterprises have no track record (at least in their new independent status), this will be difficult. An additional problem is that the legal and administrative frameworks in most New East countries are viewed by the ECAs as inadequate to safeguard their interests.

### TRADE FINANCE FOR THE PRIVATE SECTOR

Several features of ECA financing should facilitate support for the private sector, but there are also some major barriers.

First, much of the private sector borrowing is short-term. Since it has been the practice of the Paris Club to exclude short-term debt from reschedulings, this allows creditors to provide this type of trade financing for the private sector even when the prospects for public sector debt service is poor.

Second, in the mid-1980s, official creditors began excluding from reschedulings the payments owed them by the private sector if

these had originally been financed without a debtor government guarantee. Earlier, all debts to official creditors had been caught up in Paris Club reschedulings in order to provide equitable creditor treatment. Because of this change, ECAs are now more willing to provide continued cover for exports to private firms, even if there is a possibility that new public sector debt could be rescheduled.

Finally, as ECAs have come to realize that debtor government guarantees are not as much security as once thought, they have become more willing to provide financing directly to the private sector without sovereign guarantees. This usually requires that the debtor country have a free and relatively stable foreign exchange market. In addition, some ECAs have reached agreements with debtor countries concerning procedures to follow if the government places restrictions on the foreign exchange market that would lead to transfer payment problems for private firms and banks.

However, one of the major impediments to ECA financing directly to the private sector is lack of information on the part of both parties. The importing firms often are not familiar with this type of finance and do not know how to go about obtaining it. The ECAs often do not have adequate information about the private firms to make the necessary underwriting decisions. Commercial banks in the borrowing countries often play a vital role as intermediaries. The ECA provides financing under the guarantee of the bank, with the latter making the underwriting decisions on the private firms who are its customers. (The banks also educate private buyers about ECA financing and execute the transactions.) The banks thus undertake to cover the commercial risks involved in lending to the firms, while the ECA is left with the commercial risks of the bank and the political risks.

Normally, ECAs need 3 to 5 years of audited accounts of a company's or bank's operations in order to make an underwriting decision. This poses particular problems in the New East, where most private enterprises are newly formed and where accounting practices do not measure up to Western standards. Even in cases where the private enterprise or bank is well established, or where a well-known state enterprise is privatized, the underwriting decision can be difficult. The sweeping changes under way in these countries often result in a complete change of management, legal framework, and economic environment. Thus even established firms with a good track record need to be scrutinized.

It will similarly be difficult for ECAs to work with the commercial banks in the region. Most of these banks have either been formed out of pre-existing state banks—in which case they are likely to be burdened with bad loans—or they are newly formed—in which case they are likely to be undercapitalized and short on experience.

Nevertheless, the transition period may be shortened by the fact that the ECAs are willing to make considerable efforts examining New East banks, since each bank can eventually provide important leverage in establishing contact with private enterprises. Also, since most countries in the region are likely to receive substantial Western assistance in their efforts to set up viable commercial banking systems, this should bolster ECA confidence. The govern-

ments in these countries can play a role during the transition period by offering supporting guarantees to newly formed commercial banks, so that they can quickly gain experience with trade financing.

Fortunately, there are several alternatives to financing based on the creditworthiness of individual firms. For example, ECAs are willing to provide asset-based financing. In such cases the financed export product itself serves as collateral, and there is no need for a host government repayment guarantee. Such transactions require that the creditors have clear rights, in the event of non-payment, to gain possession of the asset and that the expected future value of asset is sufficient to cover the remaining payments plus the costs associated with repossession and resale of the asset. This type of financing is largely limited to aircraft financing.

Another alternative, for major private sector projects that have the potential to generate significant hard-currency revenues, is limited recourse project financing. Such financing is designed primarily for new projects of substantial size (in the tens of millions of dollars) in which the participating export credit agencies rely for repayment on the cash flow of the project itself without recourse to a third party guarantor, such as the host government, a bank, or an existing enterprise. Often such financing requires the establishment of an escrow account outside the country (often in a major commercial bank) into which earnings from the project's exports are directly deposited and then drawn on to make payments to the project's creditors.

This is an attractive form of financing from the point of view of the governments in the New East since funds for debt payments must come from the project's own earnings. Usually the commercial risks are covered by the private creditors, with the ECAs providing only political risk cover. (However, in some cases the ECAs may be willing to provide comprehensive cover.) Usually in projects of this type the sponsors seek certain assurances from the government as to its policies (e.g., pricing, marketing, public procurement, or trade policies) which could affect the success of the project. The political risk coverage required from the ECAs is often tailored to cover the government's adherence to any agreements it has made with the project sponsors. Western ECAs are preparing themselves for increased demand for this particular type of financing in the New East once investment in these economies begins to pick up again.

## Conclusion

The majority of Western financial assistance for the New East countries over the next decade is likely to be in the form of officially supported export credits. However, there are a number of impediments to be overcome before disbursement levels reflect the substantial offers of financing currently being made by Western governments. The most urgent need is for viable commercial banking systems to be established in the region. Local banks can then serve as intermediaries, allowing Western ECAs to provide financial support to the emerging private sector.

# THE EXTERNAL FINANCIAL POSITION OF THE FORMER SOVIET UNION: FROM RICHES TO RAGS?

By Patricia A. Wertman *

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## SUMMARY

The debt of the former Soviet Union (FSU) was approximately $65.9 billion at the end of October 1991. The maturity structure of this debt has been substantially altered in favor of longer maturities. In addition, a greater share of FSU risk is now held by official creditors. The late 1991 debt moratorium deferred, rather than solved, the current debt-servicing problems. Debt ratios of the 15 successor republics are currently low, but are likely to change in an unfavorable direction. The prospects for most of the former Soviet republics being able to service their hard-currency debt are not encouraging.

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## INTRODUCTION

The decline from prime creditor to troubled debtor mirrors the economic deterioration of the former Soviet Union perhaps more clearly than any other aspect of its international economic relations. This study examines the level, composition, and maturity structure of the external debt of the former Soviet Union. It also examines the prospects of the fifteen newly emerged successor states for paying this debt.

## THE EXTERNAL DEBT OF THE FORMER SOVIET UNION: COMPOSITION

The external indebtedness of the former Soviet Union has two major components: hard-currency debt, which is owed to the Western creditor nations, and transferable ruble debt which is owed to the former CMEA countries.[1] Hard-currency debt constitutes the bulk of external debt, while CMEA debt represents a significant, but largely undetermined obligation.

### HARD-CURRENCY DEBT: THE CORE

The former Soviet Union has only recently begun to disclose its international debt position. As a result, estimates of Soviet external indebtedness have had, until recently, to rely largely on Western data sources, that is, creditor reporting. The Organization for Economic Cooperation and Development (OECD) and the Bank for International Settlements (BIS) are the primary sources of creditor data on external finance of the former U.S.S.R.[2]

Unguaranteed commercial bank debt, officially guaranteed commercial bank debt, official export credits, and officially guaranteed and insured suppliers' credits are reported jointly by the BIS and the OECD. Taken together these constitute the largest component and the core of FSU external indebtedness. The latest BIS/OECD data tally these categories of debt at $51.1 billion as of the end of June 1991. [3] Calculations from International Monetary Fund (IMF) data suggest this figure may have risen to $51.2 billion at the end of October 1991. [4]

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[1] The CMEA or Council for Mutual Economic Assistance is now defunct. It consisted of Bulgaria, Cuba, Czechoslovakia, German Democratic Republic, Hungary, Mongolia, Poland, Romania, Vietnam, and the USSR. Albania never formally suspended its membership, but ceased participation. The CMEA's purpose was to assist the economic cooperation and development of its members.

[2] Data are reported to the BIS from banks in the Group of Ten countries (Belgium; Canada; France; Germany; Italy; Japan; the Netherlands; Sweden; United Kingdom; the United States; and Switzerland, an associate member), Luxembourg, Austria, Denmark, Finland, Ireland, Norway, Spain, the Bahamas, Bahrain, the Cayman Islands, Hong Kong, the Netherlands Antilles, and Singapore, and by the branches of U.S. banks in Panama.

[3] BIS/OECD. *Statistics on External Indebtedness*, January 1992, p. 12. The BIS/OECD figures are shown in table 1 of this report.

[4] The IMF data on FSU debt are shown in table 2 of this report. The IMF estimates total debt guaranteed by Vneshekonombank (VEB) at $53.7 billion, excluding VEB-guaranteed letters of credit amounting to $4.6 billion. The IMF-estimated total includes $0.8 billion in lend-lease debt and $1.7 billion in bonds. In estimating the amount of FSU debt outstanding which BIS/OECD may report later this year, these latter two categories have been subtracted to achieve rough comparability. International Monetary Fund. *The Economy of the Former U.S.S.R. in 1991*, April 1992, Table 34, p. 75.

It is unclear why the IMF has reported lend-lease debt at $0.8 billion. The U.S. Treasury reports lend-lease debt at $674 million. The IMF data in table 2 have, therefore, been revised to reflect this difference. Otherwise, the data in table 2 are the data presented in IMF Table 34 of the source cited. Presentation of the data has also been altered. U.S. Department of Treasury. *Status of Active Foreign Credits*, September 30, 1991.

TABLE 1. Soviet External Bank and Nonbank Trade-related Debt, End of 1985–June 1991

(Millions of Dollars)

| End Year | Total Debt | Bank Claims: | | | Nonbank Trade Claims |
|---|---|---|---|---|---|
| | | Total | Guaranteed | Unguaranteed | |
| 1985 | 31,359 | 22,726 | 6,406 | 16,320 | 8,632 |
| 1986 | 37,375 | 29,079 | 5,071 | 24,008 | 8,296 |
| 1987 | 40,208 | 33,344 | 4,836 | 28,508 | 6,864 |
| 1988 | 41,752 | 36,864 | 5,883 | 30,981 | 4,888 |
| 1989 | 50,267 | 44,832 | 4,883 | 39,949 | 5,435 |
| 1990 | 56,872 | 50,253 | 10,230 | 40,023 | 6,619 |
| June 1991 | 51,111 | 43,853 | 10,782 | 33,071 | 7,258 |

Source: BIS. OECD. *Statistics on External Indebtedness*. Various years.

For financially troubled countries, arrearages represent a source of finance. Arrears on the principal and, in most instances, on the interest on commercial bank debt and official and officially guaranteed export credits are included in BIS/OECD statistics. Arrearages on unguaranteed suppliers' credits are not included in BIS/OECD statistics. These have been estimated at $4.0 billion by the IMF.

U.S. World War II lend-lease debt amounts to $674 million. International bonds issued between 1988 and 1990 currently are valued at $1.7 billion. [5] Short-term debt amounted to $3.4 billion, including $2.6 billion in gold swaps. Finally, the IMF reports $3.7 billion in debt outstanding as a result of "loans under license" and $4.6 billion in letters of credit guaranteed by Vneshnekonombank (VEB). After 1989, VEB, later succeeded by Gosbank, permitted other agencies to borrow abroad. These loans are specifically attributable to the Ministry of Marine Transport ($3.0 billion) and the Ministry of Fisheries ($0.7 billion). [6] Thus, as of the end of October 1991, on the broadest possible measure, the clearly identifiable external indebtedness of the former Soviet Union may be estimated at $65.9 billion, as shown in table 2 below.

After December 1990, ruble debt owed to the German Democratic Republic state bank of about $8–9 billion is included in the BIS/OECD data. Banking claims on the two CMEA banks, the International Bank for Economic Cooperation (IBEC) and the International Investment Bank (IIB), are also reported as FSU debt in the BIS/OECD data, but not as an identifiable category. [7]

TRANSFERABLE RUBLE DEBT: AWAITING SETTLEMENT

By and large, Western estimates of the debt of the former Soviet Union have not included the hard-currency value of outstanding CMEA debts, which are still being negotiated. Formally denominat-

[5] See table 2. The OECD reports the value of bonds issued at $1.5 billion. Bonds issued by the Soviet Union were denominated in a variety of European currencies. The difference may possibly be explained by the choice of currency conversion rate. OECD. *Financial Market Trends*, February 1992, p. 78.

[6] International Monetary Fund. *The Economy of the Former U.S.S.R. in 1991*, April 1992, p. 22.

[7] BIS/OECD. *Statistics on External Indebtedness*, January 1992, p. 32.

TABLE 2. FSU Hard-currency Debt, End 1986–October 1991

(Billions of Dollars)

| | 1986 | 1987 | 1988 | 1989 | 1990 | Oct. 1991 |
|---|---|---|---|---|---|---|
| Bank Loans [1] | 11.2 | 12.1 | 10.9 | 13.3 | 17.0 | 20.5 |
| Suppliers' Credits [2] | 6.2 | 7.9 | 6.4 | 5.8 | 7.8 | 8.3 |
| U.S. Lend-lease Debt | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Total Long-term credits | 18.1 | 20.7 | 18.0 | 19.8 | 25.5 | 29.5 |
| Medium-term Loans [3] | 5.9 | 9.7 | 13.4 | 15.1 | 19.0 | 19.0 |
| Bonds | — | — | 0.3 | 1.4 | 1.7 | 1.7 |
| Total Medium-term Financial Credits | 5.9 | 9.7 | 13.7 | 16.5 | 20.7 | 20.7 |
| Short-term Loans | 7.4 | 8.6 | 11.2 | 17.7 | 7.3 | 3.4 |
| Of which: gold swaps | — | — | — | — | 1.8 | 2.6 |
| Letters of Credit | — | — | — | — | — | 4.6 |
| Total VEB-guaranteed debt | 31.4 | 39.0 | 42.9 | 54.0 | 53.5 | 58.2 |
| Arrears | — | — | — | 0.5 | 5.0 | 4.0 |
| Loans under License | — | — | — | — | 2.5 | 3.7 |
| Total Debt | 31.4 | 39.0 | 42.9 | 54.5 | 61.0 | 65.9 |

Source: IMF, as derived from Ministry of Finance, Vneshnekonombank (VEB), the Bank for International Settlements estimates, IMF staff estimates, and U.S. Treasury.

[1] Maturities of normally seven to eight years, tied to imports, partly guaranteed by official export credit agencies.

[2] Maturity exceeding one year, mostly guaranteed by official export credit agencies.

[3] Untied credits with maturities of one to five years.

ed in transferable rubles, they are now subject to settlement in hard-currency. CMEA transferable ruble (Trs) debt amounts to Trs 18.5 billion which is offset by assets of Trs 2.9 billion. [8] In addition, Trs 4.4 billion is owed in clearing debts to CMEA and non-CMEA countries; this is offset by Trs 1.4 billion in assets. Czechoslovakia, Hungary, and Yugoslavia have agreed to receive oil, gas, and other raw materials exports in settlement of the transferable ruble debt.[9] By accepting payment in raw material exports, these three countries now, in effect, have the equivalent of a priority claim on the hard-currency earnings of the former Soviet Union.

Holders of the remaining outstanding gross FSU debt of Trs 17.0 billion owed on both transferable ruble accounts and clearing accounts would like to settle this debt at the inflated dollar rate which was in effect prior to the introduction of the commercial ruble on November 1, 1990. If settled at the rate of Rbs 1.7652 per U.S. dollar, this debt would amount to $9.6 billion. If settled at the recent official rate of 90 Rbs per U.S. dollar, it would amount to about $189 million. The difference is, therefore, not academic and the outcome of negotiations to settle outstanding ruble debt is important to the total picture of indebtedness.

[8] IMF. *The Economy of the Former U.S.S.R. in 1991*, April 1992, p. 80. See table 3 of this study for a country-by-country presentation of transferable ruble balances.

[9] Ibid., p. 23.

TABLE 3. FSU Transferable Ruble Debt, 1991

(Millions of Rubles)

| Country | Ruble Balance, as of 9/1/91 | Clearing Account Balance, as of 11/1/91 |
|---|---|---|
| Former CMEA countries: | | |
| Bulgaria | −651 | −146 |
| Cuba | 2,358 | — |
| Czechoslovakia | −2,205 | −166 |
| Former German Democratic Republic | −6,406 | — |
| Hungary | −1,999 | — |
| Mongolia | 84 | — |
| Poland | −7,198 | — |
| Romania | −48 | 86 |
| Vietnam | 443 | −15 |
| Total CMEA | −15,622 | −241 |
| Other Countries: | | |
| Afghanistan | — | 665 |
| Argentina | — | −649 |
| Bangladesh | — | −13 |
| Cambodia | — | 80 |
| China | — | −358 |
| Cyprus | — | 549 |
| India | — | −514 |
| Iran | — | −151 |
| Lao People's Democratic Republic | — | −3 |
| Pakistan | — | −14 |
| Somalia | — | 6 |
| Syria | — | −859 |
| Yugoslavia | — | −1,552 |
| Total Non-CMEA | — | −2,814 |
| TOTAL | −15,622 | −3,054 |

Source: IMF from Vneshekonombank.

A positive figure indicates a credit balance; a minus sign (−), a debt, that is, the FSU is a debtor in the indicated amount.

## The Debt Burden

The debt burden of the former Soviet Union is moderate. The IMF estimates that the ratio of debt to exports of goods and services was 149 percent as of the end of October 1991.[10] While the somewhat more inclusive picture of FSU debt which has been suggested above would raise this ratio, it would not appear to substantially alter the picture of moderate indebtedness.[11]

The source of external financial difficulties of the former Soviet Union is not, therefore, to be found in the absolute or relative size of its debt. Rather it is to be found in the structure of its repay-

[10] Ibid., p. 75.

[11] IMF data present the services balance on a net basis, making it impossible to recalculate the debt service ratio using the broader definition of debt suggested above.

ment schedule. As shown below in table 4, the Soviet Union was confronted with a very substantial "bunching" of interest and amortization payments in 1990 and 1991. In these years, the resulting ratio of debt service obligations to exports of goods and services, at 61.7 percent and 41.3 percent, respectively, was well above the 30 percent level which is considered to be an indicator of debt-servicing problems. The servicing of short-term credit accounted for a substantial share of the bunching problem: 49.3 percent, in 1990, and 30.6 percent, in 1991, of hard-currency debt-servicing obligations.

TABLE 4. Hard-currency Debt Service Obligations (Principal + Interest), 1986–1994 [1]

(Billions of Dollars)

| Type of Obligation | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|---|---|---|---|---|
| Long-term bank credits | 3.5 | 3.9 | 3.6 | 3.5 | 4.6 | 4.3 | 6.2 | 6.4 | 5.0 |
| Commercial credits | 2.4 | 2.9 | 2.8 | 2.4 | 3.1 | 4.1 | 2.4 | 2.2 | 1.3 |
| Medium-term financial credits | 1.3 | 1.4 | 1.2 | 1.9 | 3.9 | 3.4 | 3.8 | 3.4 | 3.7 |
| Licensed Debt (non-VEB) | — | — | — | — | — | — | 0.3 | 0.2 | 0.2 |
| Short-term financial credits | 0.6 | 0.6 | 0.8 | 1.6 | 11.3 | 5.2 | 0.7 | 0.2 | 0.2 |
| Debt after 1/1/92 | — | — | — | — | — | — | 1.2 | — | — |
| Interest on Arrears | — | — | — | — | — | — | 0.7 | — | — |
| Interest on Clearing Accounts | — | — | — | — | — | — | 1.2 | — | — |
| Payment on Principal Deferred | — | — | — | — | — | — | — | 7.5 | — |
| Total | 7.8 | 8.8 | 8.4 | 9.4 | 22.9 | 17.0 | 15.6 | 19.9 | 11.6 |
| Principal | 5.4 | 6.2 | 5.4 | 5.7 | 18.2 | 12.8 | 9.6 | 16.9 | 8.2 |
| Interest | 2.4 | 2.6 | 3.0 | 3.7 | 4.7 | 4.2 | 6.0 | 4.2 | 3.4 |
| Percent of Exports of Goods and Services | 27.7 | 26.5 | 23.1 | 24.2 | 61.7 | 41.3 | — | — | — |

Source: Vneshnekonombank and IMF staff estimates.

[1] 1991 debt-service obligations are based on external debt outstanding at the end of 1991; 1992, on projected debt disbursements in 1992. Debt-service payments for projected disbursements for the FSU in 1993–1994 have not been taken into account.

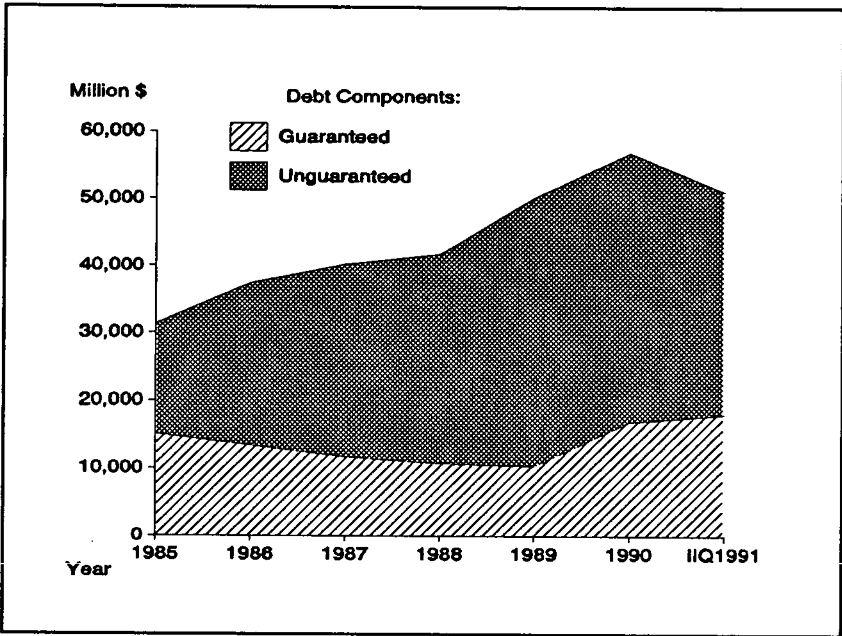
Somewhat troubling for the future is that scheduled debt repayment obligations for 1993 are also high, as shown in table 4. To a great extent this is the result of deferring $7.5 billion in principal, equal to more than one-third (37.7 percent) of the total debt service due in 1993. Debt service due in 1994 is only somewhat less than that due in 1993, excluding the deferred principal. The debt moratorium currently in effect, therefore, has merely postponed the problem.

## The Reallocation of Risk from the Private Sector to the Official Sector

Figure 1 is based on table 1. It shows the debt of the former Soviet Union as reported to BIS/OECD. It breaks the debt into two kinds of debt: "unguaranteed" and "guaranteed." "Unguaranteed" refers solely to unguaranteed commercial bank claims. "Guaranteed" includes guaranteed commercial bank claims and officially supported nonbank trade-related claims.

Figure 1 illustrates the course of external debt since the end of 1985. Debt rose consistently until the end of 1990, with a dramatic jump in 1989. The share of unguaranteed bank claims was 52.0 per-

FIGURE 1. Guaranteed Trade Claims and Unguaranteed Bank Claims of the FSU
End 1985-June 1991




cent of total debt in 1985. As the Soviet Union increased its borrowing following 1985, it was generally considered an attractive borrower. As a result, banks were willing to lend on an unguaranteed basis. Thus, the share of total debt represented by unguaranteed commercial bank claims rose, peaking at 79.4 percent of total external debt at the end of 1989. Following 1989, bankers began to lose confidence in the Soviet Union. Short-term credit was withdrawn and new lending slowed. Unguaranteed bank claims, therefore, dropped to 70.4 percent of total debt at the end of 1990 and 64.7 percent at the end of June 1991. The value of unguaranteed bank claims, however, continued to rise until the end of 1990.

After 1989, guaranteed bank claims and officially supported nonbank trade credits rose, reversing the trend since 1985. These guaranteed claims, in 1989, amounted to $10.3 billion, less than the $15.0 billion outstanding at the end of 1985. At the end of 1990, guaranteed claims surpassed the 1985 level. By the end of June 1991, they had risen to $18.0 billion. A DM 5 billion (about $3.0 billion) bank loan 90 percent guaranteed by the German government helped to fuel the 1990 increase.

After 1990, however, public lenders appeared to demonstrate the same reluctance toward FSU credit as private lenders. The rate of increase in guaranteed claims slowed dramatically. Guaranteed

claims increased by 63.3 percent from the end of 1989 to the end of 1990. Between the end of 1990 and the end of June 1991, however, the rate of increase in guaranteed claims dropped considerably, to 7.1 percent. Nevertheless, net disbursements came only from the official creditors during 1990 and 1991. [12]

Despite the post-1989 tendency to reallocate FSU risk toward the public sector, the greatest share of debt and, hence, its risk still resides in the private sector. The share of total debt represented by guaranteed claims was less at the end of June 1991 than at the end of 1985, 35.2 percent compared to 48.0 percent respectively.

## THE MATURITY STRUCTURE OF THE DEBT

A dramatic shift in the maturity structure of the debt of the former Soviet Union also occurred after 1989. As can been seen from figure 2, both hard-currency short-term debt, that is, debt with *residual* maturities of under one-year and hard-currency debt with maturities over two years tend to increase roughly together until the end of 1989. [13] The level of each maturity moves upward in line with the general increase in debt. In 1990, however, the level of debt with maturities exceeding two years increases dramatically while the level of short-term debt drops equally dramatically. Between the end of 1989 and mid-1991, the increase in maturities of greater than two years amounted to 66.2 percent; simultaneously short-term credits dropped by 64.5 percent. [14] Finally, by October 1990, $2.6 billion of Soviet short-term bank credit was represented by gold swaps. [15] The U.S.S.R. was very nearly out of the market for short-term borrowing.

The involuntary reorganization of the debt maturity structure which occurred after 1989 has altered the maturity structure in a manner which is likely to enhance debt repayment capacity. The maturity structure of FSU debt has been lengthened. IMF/VEB data indicate that long-term bank debt increased by $7.2 billion, from 24.6 percent of VEB-guaranteed debt at the end of 1989 to 38.2 percent of VEB-guaranteed debt at the end of October 1990. [16] These loans are largely supported by export guarantees and, therefore, reflect the trend discussed earlier of greater official participation in lending to the former Soviet Union. Medium-term loans with maturities of up to five years also increased, but at less than

[12] International Monetary Fund. *The Economy of the Former U.S.S.R. in 1991*, April 1992, p. 22.

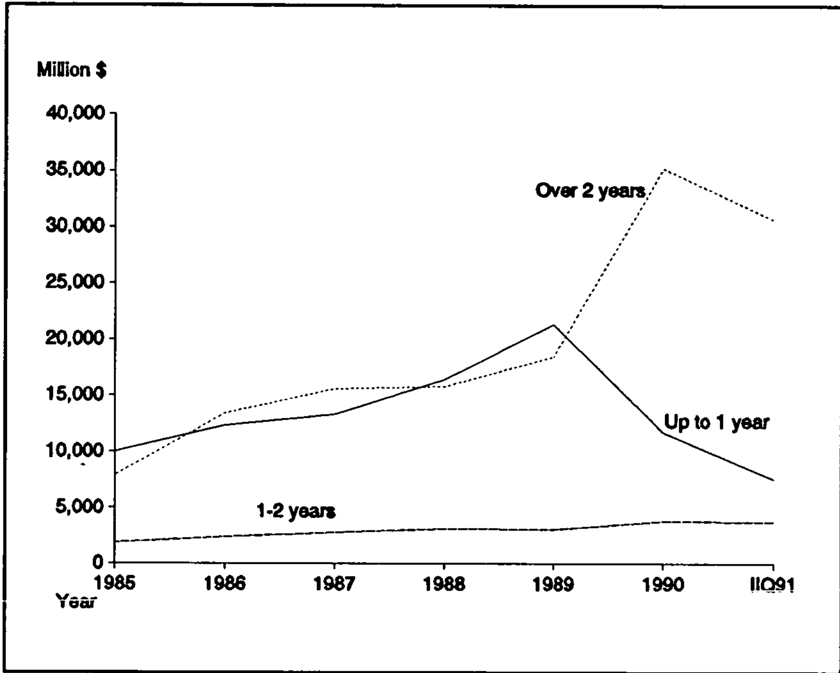
[13] Figure 2 is based on data in table 5.

[14] The decline in bank confidence demonstrated by a failure to extend short-term credit was apparently somewhat greater than reflected in BIS/OECD data. Vneshnekonombank (VEB) data published by the IMF show an even greater drop off in short-term credit between the end of 1989 and the 1990 than BIS/OECD data. For this period VEB data show a decline of $10.4 billion or 58.8 percent compared to the $9.5 billion or 44.8 percent shown by BIS/OECD. VEB defines short-term debt as debt with an *original* maturity of one-year or less whereas BIS/OECD defines short-term debt as debt with a *residual* maturity of less than one-year. Thus, some of the drop-off in short-term debt shown by BIS/OECD data involved debt which had medium- or long-term original maturities. Because of this definitional difference, BIS/OECD short-term debt data for 1989 and 1990 exceed VEB data by $3.5 billion and $4.4 billion, respectively. IMF. *The Economy of the Former U.S.S.R. in 1991*, April 1992, Table A4, p. 102.

[15] This percentage is based on the BIS/OECD data in table 5. Calculated on the IMF/VEB data, gold swaps would represent just over three-quarters of debt with an original maturity of one year or less. See table 2. A gold swap technically is the simultaneous sale of gold and purchase of currency. The transaction is intended to be reversed at some time in the future. Thus, it is, in effect, a short-term loan collateralized by gold.

[16] See table 2.

**FIGURE 2. Level of Various Maturities of FSU Debt**
**1985-IIQ 1991**




half the rate of long-term bank debt. Medium-term bank debt rose by $3.9 billion, from 28.0 percent to 35.3 percent of VEB-guaranteed debt.

TABLE 5. Soviet Liabilities to BIS-reporting Banks Year-end 1985–June 1991

(Millions of Dollars)

| | 1985 | 1986 | 1987 | 1988 | 1989 | IIQ 1990 | IVQ 1990 | IIQ 1991 |
|---|---|---|---|---|---|---|---|---|
| All Liabilities | 22,022 | 28,685 | 32,206 | 36,148 | 43,353 | 40,561 | 51,492 | 42,619 |
| Up to One Year | 9,978 | 12,352 | 13,298 | 16,411 | 21,344 | 17,844 | 11,692 | 7,585 |
| 1–2 Years | 1,870 | 2,375 | 2,780 | 3,137 | 3,055 | 3,278 | 3,817 | 3,752 |
| Over Two Years | 7,903 | 13,387 | 15,566 | 15,782 | 18,432 | 18,773 | 35,201 | 30,637 |
| Unallocated | 2,271 | 571 | 562 | 818 | 522 | 666 | 782 | 645 |

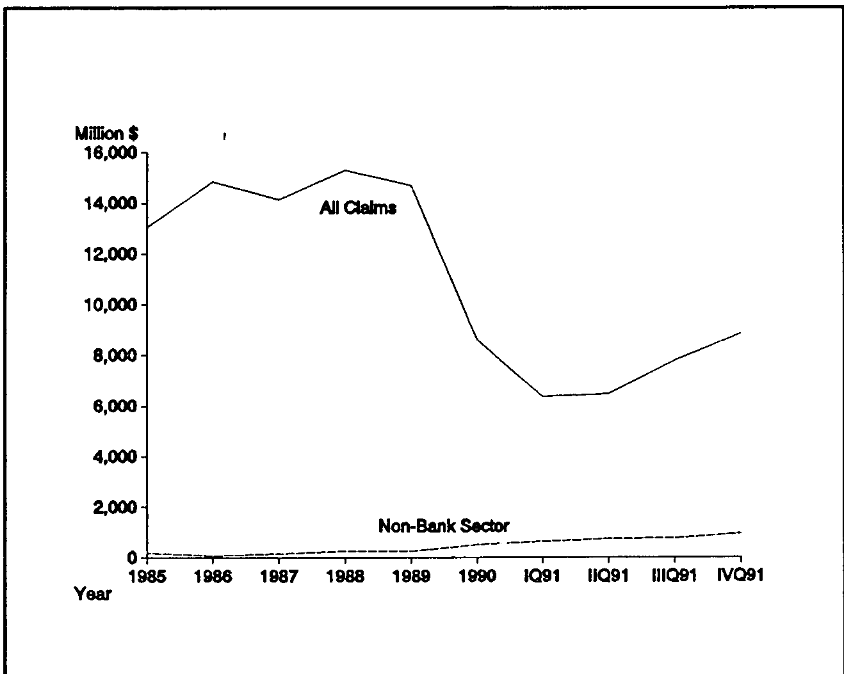
Source: BIS. *The Maturity and Sectoral Distribution of International Bank Lending*. Various issues.

## International Reserve Assets

International reserves are the financial assets with which governments make international payments. Their level is a key to a country's ability to service its international debt and, thus, its creditworthiness. The international reserves of the former Soviet Union, consisting largely of hard-currency deposits in Western banks, dropped dramatically after 1989. This was occasioned mainly by the withdrawal of short-term bank credit which has been previously discussed and by the emergence of a current account deficit. [17]

FSU deposits in Western banks are regularly reported by the BIS. Data on these claims are shown in figure 3 which is derived from data in table 6. Between the end of 1985 and the end of 1989, Soviet end-of-year bank claims were consistently in excess of $13 billion. The peak level occurred at the end of 1988, when Soviet claims on Western banks amounted to $15.3 billion. As figure 3 shows, in 1990, a dramatic drop in the level of Western bank deposits of the FSU occurred, followed by a partial recovery from their March 1991 low.

**FIGURE 3. Claims of the FSU on BIS-reporting Banks**
**1985-1991**




[17] For a more detailed discussion see U.S. Library of Congress. Congressional Research Service. *The International Reserve Position of the Former Soviet Republics: Is the "Cupboard" Bare?* by Patricia A. Wertman. April 10, 1992, 11 p.

Perhaps a somewhat better approximation of the share of FSU international reserves represented by Western bank deposits may be obtained by excluding the deposits of the Soviet "nonbank sector," which is comprised of enterprises in the former Soviet Union, whose deposits, while growing, are unlikely to be accessible to the government. [18] Between the end of 1989 and the end of the first quarter of 1991, FSU bank reserves excluding the nonbank sector dropped by slightly more than 60 percent. After the trough at the end of March 1991, FSU deposits, excluding those of the nonbank sector, recovered by about 38 percent, to $7.9 billion at the end of 1991. They still amounted, however, to only slightly over half of the year-end 1988 peak of $15.0 billion.

TABLE 6. Soviet Claims on BIS-reporting Banks Year-end 1985–Sept. 1991

(Millions of Dollars)

| | All Claims | Non Bank Sector | All Other Sectors |
|---|---|---|---|
| 1985 | 13,060 | 204 | 12,856 |
| 1986 | 14,841 | 93 | 14,748 |
| 1987 | 14,135 | 155 | 13,980 |
| 1988 | 15,311 | 263 | 15,048 |
| 1989 | 14,699 | 278 | 14,421 |
| IIQ 1990 | 8,630 | 369 | 8,261 |
| IVQ 1990 | 8,625 | 527 | 8,098 |
| IQ 1991 | 6,362 | 636 | 5,726 |
| IIQ 1991 | 6,469 | 736 | 5,733 |
| IIIQ 1991 | 7,780 | 776 | 7,004 |
| IVQ 1991 | 8,846 | 939 | 7,907 |

Source: Bank for International Settlements. *International Banking and Financial Market Developments,* May 1991 and February 1992.

The level of Soviet monetary gold reserves, the other major component of Soviet international reserve assets, has been a state secret since 1926. As a result, their level has long been a matter of speculation. IMF/VEB data report gold reserves, as of the end of 1990, at 484.6 tons worth $6.6 billion at market prices, thus ending the speculation of Western analysts who had estimated Soviet gold reserves at between 1,500 and 3,000 metric tons. [19] Of this amount, $2.6 billion was pledged in gold swaps by October 1991, [20] leaving about $4.0 billion in monetary gold unencumbered. Reluctance on the part of Soviet officials to accept a gold swap facility proposed by the G–7 as part of the official debt moratorium suggests that the unpledged monetary gold is politically illiquid. [21] Recent reports

[18] Data for claims excluding the nonbank sector appears as "all other sectors" in table 6. In figure 3, these claims are illustrated by the space between the line for "all claims" and the line for claims of the "non-bank sector."

[19] International Monetary Fund. *The Economy of the Former U.S.S.R. in 1991*, April 1992, Table 34, p. 75.

[20] Ibid.

[21] See Hiatt, Fred. Soviet Union Wins Reprieve on Debt. *Washington Post*, November 22, 1991, A1, A38.

suggest that official gold reserves may have fallen further, to 210 tons, with 75 tons held by the Russian central bank and 135 tons held by the Committee for Precious Stones and Metals, the Russian Republic's chief coordinating body for these resources. [22]

With accession to IMF membership, each republic will acquire an IMF quota, one-quarter of which is also an international reserve asset. Excluding Azerbaijan, whose quota had not been determined at this writing, the quotas of the former Soviet republics, taken together, are SDR 4.5 billion or about $5.9 billion. Unlike the former Soviet Union's international bank deposits and its monetary gold, "ownership" of the IMF quotas is clear and undisputed.

### National Wealth and International Reserves: A Distinction

International reserves are not a measure of a nation's wealth, although they are an indication of a country's ability to meet its international payments. National wealth includes many things which are not readily acceptable as a means of international payment. Many components of national wealth may, however, be converted to hard-currency reserves through their sale in international markets or through their collateralization in exchange for hard-currency loans. Most notably, this includes readily marketable natural resources such as oil, gas, gold, platinum, and diamonds. Some of the former Soviet republics, particularly Russia, are rich in natural resources. Thus, some former Soviet republics may be "wealthy" while at the same time being strapped for the hard-currency reserves needed to make international payments.

### Payments Difficulties: A Liquidity or a Solvency Crisis?

Clearly, the relatively low level of international reserves, coupled with the bunching of debt-service obligations, makes it indisputable that the former Soviet Union is suffering a short-term or liquidity crisis. Less clear is whether the current debt problem is also a long-term solvency crisis. The distinction between international reserves, which are liquid assets, and national wealth, which is significantly less liquid, lies at the core of any assessment of the solvency of the former Soviet republics. In particular, it requires critical judgements about natural resource production in the FSU.

Some have suggested that natural resource industries in the former Soviet Union are experiencing production problems resulting from a lack of investment and deteriorated capital equipment. Thus, in assessing the solvency of the former Soviet republics critical questions might include: What natural resources does each republic have? To what extent can they get them to market in order to earn sufficient hard-currency earnings to meet debt service obligations? In what time frame? Can foreign investment remedy existing production problems? How rapidly is foreign investment likely to be available? If the answers do not suggest that the outlook is encouraging over the medium-term, then, surely, the FSU is faced with a solvency crisis.

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[22] Boulton, Leyla. Exports Dent Russia's Official Gold Reserves. *Financial Times*, June 11, 1992. The article also states that Russia exported 30 tons of gold so far in 1992.

An assessment that some or all of the republics of the former U.S.S.R. face a solvency crisis must also consider the prognosis for economic reform. Given the length of time which it took Mexico and other Latin American debtor countries to reform their market economies, is it not likely to take as long or longer to reform the disintegrated nonmarket economies of the FSU?

Under the December 4, 1991 memorandum of understanding on external debt, the former Soviet republics are jointly responsible for the external debt obligations of the Soviet Union. At present, however, only Russia is actually paying any debt service. If some of the republics, particularly the smaller republics, are insolvent, might it make sense to drop the fiction that they can pay, and disaggregate the debt, extending debt forgiveness? Would such an action be helpful to their economic reform efforts or should it be extended only as a reward for efforts already taken? With regard to Russia, would debt forgiveness for the smaller republics amount to a case of moral hazard, turning existing incentives for economic reform perverse? What are the economic and political trade-offs of debt forgiveness, a one-time only action, versus single- or multi-year rescheduling?

If existing debt is not, on the other hand, disaggregated, and Russia remains the only republic contributing to debt service, what incentives can be set up to prod the other republics to contribute their share of debt service? What are the political and economic consequences of pushing the other republics to contribute? Finally, given existing debt-servicing difficulties, do additional loans, including loans for imports, make sense?

## The Outlook for the Future: A Brief Overview

The quality of FSU data, accompanied by the present need to disaggregate them, has increased the difficulty of making an assessment of the creditworthiness of the former Soviet republics. In addition, many of the indicators used to assess debt burden are ratios. As a result, factors influencing both the numerator and the denominator need to be understood before an interpretation can be made of a particular ratio. Debt indicators are also frequently contradictory, especially with regard to short- and long-term indicators. With regard to the former Soviet republics, the lack of any previous "track record" also makes assessing debt-servicing capacity difficult. Finally, debt indicators are descriptive, not predictive.

Debt ratios and the debt-service ratios for each of the fifteen successor states are presented in table 7. The debt ratio is the ratio of external debt to gross national product (GNP); the debt-service ratio, the ratio of debt service (principal and interest) to exports of goods and services. The debt ratio is a measure of solvency; the debt-service ratio, of liquidity.

In calculating debt- and debt-service ratios for the fifteen former Soviet republics, gross domestic product (GDP) and merchandise export data were used in lieu of GNP and goods and services exports, data for which were unavailable. The resulting ratios are undoubtedly higher than they otherwise might be, thereby somewhat overstating the burden of indebtedness. They are likely, however,

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TABLE 7. Estimated Debt Indicators by Republic, 1991

| Republic | Exports (Million): | | Quota [2] (Percent) | Debt [3] (Millions of Dollars) | Debt Service/ Exports [4] | Est. GDP (Billions of Dollars) [5] | Debt/GDP |
|---|---|---|---|---|---|---|---|
| | Rubles | Dollars [1] | | | | | |
| Armenia | 119.5 | 67 | 0.86 | 538 | 152.4% | 8.75 | 6.1% |
| Azerbaijan | 557.7 | 311 | 1.64 | 1,025 | 62.3% | 12.48 | 8.2% |
| Belarus | 2,900.0 | 1,616 | 4.13 | 2,581 | 30.2% | 39.94 | 6.5% |
| Estonia | 114.0 | 64 | 0.62 | 388 | 115.2% | 9.30 | 4.2% |
| Georgia | 366.6 | 204 | 1.62 | 1,013 | 93.6% | 15.65 | 6.5% |
| Kazakhstan | 1,354.4 | 755 | 3.86 | 2,413 | 60.4% | 51.25 | 4.7% |
| Kyrgyzstan | 79.7 | 44 | 0.95 | 594 | 252.5% | 8.47 | 7.0% |
| Latvia | 253.0 | 141 | 1.14 | 713 | 95.4% | 12.42 | 5.7% |
| Lithuania | 403.0 | 225 | 1.41 | 881 | 74.1% | 18.27 | 4.8% |
| Moldova | 270.0 | 150 | 1.29 | 806 | 101.2% | 12.42 | 6.5% |
| Russian Fed. | 64,236.5 | 35,786 | 61.34 | 38,338 | 20.2% | 629.52 | 6.1% |
| Tajikistan | 486.0 | 271 | 0.82 | 513 | 35.7% | 7.24 | 7.1% |
| Turkmenistan | 167.3 | 93 | 0.70 | 438 | 88.6% | 10.33 | 4.2% |
| Ukraine | 8,365.2 | 4,660 | 16.37 | 10,231 | 41.4% | 130.36 | 7.8% |
| Uzbekistan | 1,131.3 | 630 | 3.27 | 2,044 | 61.2% | 34.04 | 6.0% |

Source: IMF data and CRS calculations based on IMF data.

[1] Ruble data is from the IMF and has been translated into dollar values at the end of 1991 official exchange rate of 0.5571 Rbs per U.S. dollar for the entire table.

[2] Share of debt and debt service according to December 4, 1991 agreement. Moldova, Azerbaijan, Turkmenistan, Uzbekistan, and the three Baltic republics have not signed the agreement.

[3] Medium- and long-term debt only, that is, $62.5 billion ($65.9 billion total debt less $3.4 billion, short-term).

[4] Debt service on medium- and long-term debt only, that is, total debt service ($17.0 billion) less short-term debt service ($5.2 billion) or $11.8 billion.

[5] IMF GDP data in rubles translated into dollars at the official rate of Rbs 0.5571 per U.S. dollar.

to represent a reasonable approximation of the relative positions of the fifteen republics with regard to their debt-carrying capacity.

Debt ratios for all fifteen republics, calculated using the 1991 official exchange rate, are currently low, that is, current data appear, at first glance, to suggest that the long-term ability of these economies to carry their external debt is very good. This is a reflection of the Soviet Union's history of maintaining its external indebtedness at a manageable level. Currently, the debt ratios range from a low of 4.2 percent (Estonia and Turkmenistan) to 8.2 percent (Azerbaijan). Russia, with a debt ratio of 6.1 percent, is at the mean. By comparison, at the start of the debt crises at the end of 1982, Mexico, had a debt/GDP ratio of 61.1 percent; Brazil, 37.4 percent.

The low debt ratios of the former Soviet republics are likely to deteriorate. While indebtedness is unlikely to rise (or, barring debt forgiveness, to fall) by very much, GDP for most, perhaps all, of the fifteen republics is likely to fall, at least in the near-term. Indeed, 1991 saw significant declines.[23] The differing rates of change in

[23] According to the IMF, the following 1991 declines in net material product (NMP) were reported for the 11 members of the CIS: Azerbaijan, 0.4 percent; Armenia, 11 percent; Belarus, 3 percent; Kazakhstan, 10 percent; Kyrgyzstan, 5 percent; Moldova, 12 percent; Russia, 11 percent; Tajikistan, 9 percent; Turkmenistan, 0.6 percent; Uzbekistan, 0.9 percent; and Ukraine, 11 per-

Continued

GDP will also mean that the debt-servicing ability of the individual republics will diverge. When market-determined exchange rates for local currencies are established, the dollar value of GDP is also likely to be altered unfavorably.

Current debt-service ratios, a measure of liquidity, demonstrate a much broader range than current debt ratios, from 20.2 percent (Russia) to 252.5 percent (Kyrgyzstan). Russia alone has a low debt-service ratio; Belarus, a moderate one. The other former Soviet republics may currently be described as having high debt service ratios. On a comparable basis (debt service/merchandise exports), Mexico had a debt service ratio of 73.9 percent at the end of 1982; Brazil 94.6 percent. Eight of the fifteen republics currently have ratios above that of Mexico in 1982, suggesting the likelihood of debt-servicing difficulties were they, in fact, servicing their debt. The eight republics are: Lithuania (74.1 percent); Turkmenistan (88.6 percent); Georgia (93.6 percent); Latvia (95.4 percent); Moldova (101.2 percent); Estonia (115.2 percent); Armenia (152.4 percent); and Kyrgyzstan (252.5 percent).

## Conclusions

The former Soviet Union has a hard-currency debt of $65.9 billion owed to Western creditors, with an additional undetermined hard-currency debt of up to $10 billion owed to CMEA countries. Some of the latter is likely to be settled by exporting natural resources. The FSU's current debt problem is primarily the result of a near-term bunching of hard-currency debt-service payments and of a lack of international reserve assets. The current debt moratorium has merely deferred the problem, not solved it. Ironically, the forced paydown of short-term credit has left the FSU with a much more manageable debt structure, with a greater share of debt now being long-term. This is also a reflection of a reallocation of some FSU risk from the private sector to the public sector. The greater share of debt is still, however, held by the private sector.

An assessment of debt-servicing prospects for the newly emerged republics is difficult both because of problems with the existing data and because of the need to disaggregate current data. The low level of FSU external debt relative to GDP is reflected in current debt ratios for the republics. This picture is likely, however, to prove short-lived. GDP is likely to decline, at varying rates; market-determined exchange rates, when implemented, are likely to further cut dollar-value GDP.

Debt-service ratios present a clearer picture of current difficulties. Only Russia, the one republic now servicing FSU hard-currency debt, has a low debt-service ratio. Belarus has a moderate debt-service ratio, while the remaining republics may be characterized as having high debt-service ratios. While this is a very "shorthand" method of evaluating debt-servicing capacity, the prospects

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cent. According to the IMF, these figures reportedly exclude the defense sector. IMF. *The Economy of the Former U.S.S.R. in 1991*, April 1992, Table 1, p. 41. NMP equals GDP less services and depreciation. The ratio of GDP to NMP was 1.5. In Latvia, real GDP fell 7.9 percent. IMF. *Latvia*, April 1992, Table 3, p. 17. In Estonia, real GDP fell 10.8 percent. IMF. *Estonia*, April 1992, Table 1, p. 25. Finally, in Lithuania, real NMP fell by 12.8 percent. The ratio of GDP to NMP in Lithuania was 1.335. IMF. *Lithuania*, April 1992, Table 3, p. 19.

for most of the former Soviet republics being able to service their hard-currency debt do not appear to be encouraging.

# THE SOVIET-RUSSIAN RUBLE: THE PAST, PRESENT AND FUTURE OF CONVERTIBILITY

By Franklyn D. Holzman *

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## SUMMARY

The U.S.S.R. and nations of Eastern Europe have experienced much more serious currency inconvertibility problems than the capitalist market economies. Currency inconvertibility is, in fact, an endemic disability in these nations and can be eliminated only by introducing free prices and markets in place of direct control central planning. This inconsistency between central planning with direct controls and convertibility does not seem to have been well-understood in the pre-Gorbachev period as indicated by the number of unsuccessful efforts made to eliminate the negative effects of inconvertibility on foreign trade and investment. For example, in 1963, CMEA established an International Bank for Economic Cooperation (IBEC) which issued a new international currency, the Transferable Ruble (TR). The TR was supposed to eliminate one of the most serious problems in intrabloc trade, namely, the need to balance trade bilaterally between each pair of nations. This attempt failed. Several other attempts were made, all unsuccessful. Also largely unsuccessful were attempts to launch joint ventures and investment projects. A third problem—how to determine an efficient commodity structure of trade with irrational prices and non-

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functioning exchange rates—was never successfully solved. In the 1970s, in an effort to cope with inconvertibility problems in East-West trade, the TR was declared "externally" convertible. Within two years, this effort was abandoned. With the exception of abortive externally convertible TR, Soviet efforts were not really designed to achieve convertibility, but simply to ameliorate the problems connected with the rigid bilateralism caused by inconvertibility.

With perestroika and its aim of "ultimately" replacing planning with decentralized economic activity and free prices, convertibility became a realizable goal, one that was understood by many eastern economists. Unfortunately, progress toward reform was slow and inflationary pressures grew rapidly constituting a multi-faceted deterrent to ruble convertibility. An even more serious deterrent developed when, as a result of glasnost, ethnic and nationalistic unrest burgeoned, reducing Soviet and increasing republican power. Before Gorbachev was replaced, the power over taxes and foreign exchange had largely shifted to the republics, making it impossible for the Soviet Government to manage the ruble. The major problem now, under CIS, is whether there will be a currency union with all the republics using the ruble or, more likely, whether each republic, in due course, will introduce its own currency. There are advantages and disadvantages to each course of action but it appears that there is so much diversity of interests between republics that each will have to manage its own financial affairs. The republics that have their own currencies will have to choose between a fixed or floating rate and, if the former, whether to tie to the ruble or to one of the major currencies. The latter course would seem to make more sense. Finally, each republic will have to decide whether to follow a "big bang" or a more measured, evolutionary transition to convertibility.

## Introduction

The currency of a nation is fully convertible if all persons and enterprises are free to buy or sell that currency for other currencies at the going exchange rate(s). A market economy experiences inconvertibility when its exchange rate is overvalued and its foreign exchange reserves and credit are exhausted and/or when it experiences serious balance-of-payments deficits because of overvaluation or for other reasons. Under these circumstances the demand for foreign currencies exceeds the supply and the foreign currencies must be rationed by the nation's monetary authorities, i.e., free convertibility can no longer be supported. Convertibility can, of course, be restored by using fiscal, monetary, and exchange rate policies to eliminate the excess demand for foreign currencies.

Centrally planned economies (CPEs) also experience currency inconvertibility but it is of a much more stubborn variety and cannot be eliminated short of substituting markets for central planning by direct controls. Two related aspects of central planning deprive a nation's currency of convertibility. First, under direct control central planning, as it was practiced in the U.S.S.R. and Eastern Europe over the past 45 years, domestic prices tend to be irrational for well-known reasons. Now a major function of exchange rates is

to provide organic links between the prices of different countries and thereby provide a basis for international trade transactions and for the valuation of foreign currencies. If, however, those domestic prices are irrational and, for that reason, cannot be used in trade transactions [world prices are used instead], they obviously cannot serve these important functions.

Second, CPEs are characterized by "commodity inconvertibility" in the intermediate product and investment goods markets. In these markets, virtually all inputs and outputs are, in effect, rationed by the central planners. The money that accompanies these administered transactions is "passive"—it has no options. Since the value of a currency is ultimately based on what it can buy freely (unrationed by planners), the value of rubles to be used in nonconsumer goods markets is very low indeed and rubles have been, in fact, virtually inconvertible outside of domestic consumption. Reflecting this situation, Soviet legislation has always prohibited foreigners from taking rubles out of the country. For their part, foreign traders had no incentive to hold rubles.

## Convertibility Problems in the Pre-Gorbachev Period

### PROBLEMS CREATED BY INCONVERTIBILITY IN INTRABLOC TRADE

The major and most visible problems created by inconvertibility after World War II were problems in intrabloc trade. The significance of these problems was enhanced by the fact that between 50 and 75 percent of the trade of the CMEA nations was among those nations themselves. The first problem that had to be faced was determining which prices should be used to conduct trade. The problem arose because each CMEA nation's internal prices were not only irrational but irrational in different ways from its partners' relative prices. This problem was tentatively resolved early on by (1) conducting trade in world prices, which remained fixed over five-year periods after which they were revised; and (2) by establishing a CMEA commission to establish an "own" pricing system for intra-CMEA trade. Sometime in the 1970s, this commission was dissolved without reaching a satisfactory solution.

A second problem that had to be faced was how to finance trade deficits given inconvertible currencies and nonfunctioning exchange rates. Exchange rates did not function as real prices for at least two reasons. First, as noted above, domestic prices were heterogeneously irrational and there is no point to exchange rates that equate irrational prices. Second, since intrabloc trade was conducted by state monopolies of foreign trade, with market forces largely repressed, exchange rates were also established administratively—without reference to market forces. Under these circumstances, deficits and surpluses could not be translated reliably from dollars into bloc currencies nor from one bloc currency into another. Moreover, even if exchange rates could have been used to translate values from one to another bloc currency, no bloc nation would be willing to accept another bloc nation's currency because of its commodity inconvertibility.

These problems were resolved initially by having each bloc country bilaterally balance its trade with each other bloc country in dollars. (Since dollar prices differed from domestic prices, a balance

in dollar prices almost always meant an imbalance in domestic prices). Bilaterally balancing trade avoided the necessity of having to use an exchange rate; such trade was, in effect, a gigantic barter. Suppose trade happened to be imbalanced, what then! The arrangement was that imbalances had to be paid off by shipments of goods in the next quarter or the nation was required to pay off the deficit that remained in dollars. Since dollars were so highly valued for what they could buy in the West, deficit nations made sure to meet their export obligations on time.

Bilateral balancing of trade was costly to CMEA nations. Typically, bilateral trade imbalances amount, on an average, to one-fourth to one-third of total trade under free multilateral trade. Since these bilateral imbalances are eliminated in intra-CMEA trade, trade is reduced by similar amounts (unless, as sometimes happens, the surplus nation accepts, in payment, commodities it really does not want.) Moreover, a nation was not always able to import desired goods from the cheapest source, if it happened to have a deficit with the nation in question.

Bilateral balancing of trade as described above was eventually made even more restrictive to allow for the fact that some goods traded between CMEA partners were of such poor quality that they could not be sold in the West ("soft" goods) whereas other products ("hard" goods) were, in fact, marketable anywhere (e.g. oil). This situation led to the adoption of a practice called "structural" bilateralism. [1] Under this system, soft goods were traded for soft goods, and hard goods for hard goods. If a commodity balance for hard goods could not be struck, then the deficit nation had either to pay in hard currency or forgo the import. This, of course, reduced bilateral trade still further.

It is interesting to note that bilateral balancing was not a problem in East-West trade. This was because in East-West trade, CMEA nations earn hard currency by exporting to Western nations. Since the hard currency is convertible, it need not be spent in the country from which it came but may be spent anywhere. Hence, multilateral trade between East and West was quite common.

## INCONVERTIBILITY AND INTRABLOC JOINT INVESTMENT PROJECTS

It was natural for a group of CPEs to try to integrate their economies and to attempt to engage in joint investment and joint cooperation projects. Unfortunately, although there were some exceptional success cases such as the electricity grid and petroleum pipe lines, currency inconvertibility proved to be as big, or bigger, a stumbling block than it was in trade. In the absence of convertible currencies, two (or more) nations launching a joint project were faced with having to determine a conversion coefficient of valuation for each input, including different grades of labor, and also for the various outputs of the project. Apparently, the coefficients (which must have been like "purchasing power parities") were

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[1] Jozef M.P. van Brabant, *Bilateralism and Structural Bilateralism in Intra-CMEA Trade*, Rotterdam: Rotterdam University Press, 1973.

often estimated in complex ways. [2] As one might expect, where one nation's contributions exceeded another's, repayments were often in kind.

Major efforts were made by CMEA to launch investment coordination and joint investments in the "Complex Program, 1971-75" and the "Coordinated Plan, 1976-1980." However, planned expenditures for investment in the Coordinated Plan were estimated to have amounted to only 1-2 percent of total CMEA investment. [3]

### THE DETERMINATION OF EFFICIENCY OF TRADE AND INVESTMENT DECISIONS: INTRABLOC AND EAST-WEST

Without a convertible currency, decisions regarding international trade and investment choices are bound to be biased. As we know, overvalued exchange rates, in effect, subsidize imports and tax exports; undervalued exchange rates, the reverse. With currencies as inconvertible as those of the CPEs in which exchange rates are administered virtually without reference to market forces [4], the planners are really in the dark regarding the ruble's true value. This problem is exacerbated, of course, by the fact that relative prices of individual domestic products are irrational and, in the aggregate, may be either too high or too low. In intrabloc trade, problems are compounded by the fact that prices and exchange rates in all nations provide no guide to choice.

Perhaps because rational decision-making in trade was so hopeless, the problem was largely sidestepped (as it was in domestic output decisions) and trade plans between pairs of nations were largely administered without any real attempt to make careful assessments of costs and benefits.

The situation was different, however, in East-West trade. Here, the CPE could compare prices and exchange rates of its Western trade partners. Moreover, the commodities and currencies were much more valuable than in intrabloc trade and, for this reason, were dealt with more carefully. The major efforts along these lines have been the development of export and import effectiveness indexes. The export indexes attempted to determine which domestically produced goods would earn the largest amount of convertible foreign exchange per ruble of expenditures of domestic resources. The import indexes assess which commodities would save the largest amount of domestic resources per dollar of convertible currency expended. Because internal costs and prices were so irrational, they were supposed to be adjusted by the authorities to eliminate

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[2] Marie Lavigne, "The Problem of Multilateral Socialist Enterprises," *ACES Bulletin*, Summer 1975. It is worth mentioning here some of the other deterrents to these projects: very low interest rates on loans; the custom of not charging other nations for developments in technology; and the virtual absence of labor flows between nations.

[3] Ed Hewett, "Recent Developments in East-West European Economic Relations and Their Implications for US-East European Relations," in *East European Economies Post-Helsinki*. Washington, D.C.: Joint Economic Committee, U.S. Congress, 1977.

[4] Actually, in 1936 and 1960, the value of the ruble was changed to eliminate the growing disparities between internal Soviet wholesale prices and world prices. Basically, this was done to eliminate the large bookkeeping losses on exports and profits on imports that the growing price disparities generated. (Cf. Franklyn D. Holzman, "The Ruble Exchange Rate and Soviet Foreign Trade Pricing Policies," *American Economic Review*, September 1968, pp. 803-825.). In 1950, the ruble was raised in value by about 35 percent despite an almost 50 percent decline in its purchasing power parity value. The Soviet economist Boris Milner, who had been involved in the decision, has stated that this was done on direct orders from Stalin.

the "irrationalities" to the extent possible, for use in calculating the indexes (cf. Holzman, 1968). Similar indexes were developed to help choose among potential investments in domestic exportable and import-competing industries.

While these indexes, if they are any good, might have rationalized trade somewhat, personal discussions with Soviet and East European economists in 1976 convinced me that, despite the availability of the indexes, trade with the West was largely administered without their use.

## THE TRANSFERABLE RUBLE

In 1963, a major effort was made to overcome the rigidities of CMEA's bilateral balancing system. An International Bank of Economic Cooperation (IBEC) was established and the Bank, in addition to granting credits to member nations, created an all-CMEA currency unit called the transferable ruble or TR. Superficially, the TR resembled the IMF's SDR (special drawing rights) in being an international paper currency. The TR presumably was backed by member deposits in IBEC of gold and domestic currency. Intra-CMEA trade was to be conducted in TRs that were pegged to dollars and gold at the same rate as the Soviet ruble. CMEA members, while continuing to conduct their trade on a bilateral basis, were encouraged to *not* strive for bilateral balances but to let the chips fall where they might. Then each year, all the nations would gather together and multilaterally cancel surpluses and deficits in TRs. Imbalances that remained were to be eliminated by additional exports to overall surplus nations by overall deficit nations; the overall surplus nations were to use their accrued TRs to pay for the additional goods received.

As some Western scholars predicted, the attempt failed and no perceptible multilateral intra-CMEA trade developed. [5] The reason was that the TR had to operate in an economic space characterized by irrational national prices and commodity inconvertibility, conditions under which convertibility and multilateralism were not possible. In the final settlement envisaged above, the surplus nations had to accept commodities they did not want in the first place or, alternatively, to accumulate a so-called currency, the TR, which had all of the disadvantages of CMEA national currencies in the face of irrational prices and commodity inconvertibility. The TR had an additional disadvantage—it was not the domestic currency of any nation. Hence, unlike domestic currencies, the TR could not even be used in the domestic consumer goods markets of the CMEA nations. Since there was, in fact, no mechanism to insure that the deficits and surpluses of each nation would, in the aggregate, balance out via the new mechanism envisaged, nations continued to balance trade bilaterally with each CMEA partner to avoid generating aggregate surpluses in the first place. This proved that "transferable" was not equivalent to "convertible," possibly the reason why the new currency was called TR rather than CR.

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[5] Franklyn D. Holzman, "A Comparative View of Foreign Trade Behaviour: Market vs. Non-Market Systems," Morris Bornstein (ed.), *Comparative Economic Systems: Models and Cases (6th edition)*, Richard D.Irwin, Inc., Homewood, Ill., 1989, pp.463–484. Note: the original version of this paper was published in 1966.

### OTHER ATTEMPTS TO INCREASE CONVERTIBILITY AND REDUCE BILATERALISM IN INTRABLOC TRADE

Additional attempts to eliminate the intrabloc financial problems that plagued trade and integration were outlined in the all-CMEA "Comprehensive Program" (CP), which was announced in July 1971. For the most part, the CP appears to have given up the ghost on financial reforms because most of the document proposes detailed administrative plans for integration and trade in different industries. It does, however, refer to the development of unplanned trade and to the development of a "collective currency" that will eventually be convertible into national currencies. What the "collective currency" actually was, how it related to the TR, and how it would have been implemented was not made clear. Nor was there a discussion of how unplanned trade was likely to develop. Other goals included, but also without means of implementation, were to use the TR for multilateral settlements; for payment settlements with third (read Western) nations; for mutual convertibility between the TR and other CMEA currencies; and for full convertibility of the TR.

The only concrete step that was taken in the CP designed to improve the payments situation was, as usual, misguided. It was proposed that there be a gradual shift to multilateralism by requiring that 10 percent of trade imbalances be paid for in hard currencies and that this percentage be gradually increased until intrabloc trade was conducted 100 percent in dollars. The starting percentage may look impressive, but it is extremely modest. Note that the 10 percent applies not to total trade but to trade imbalances. Trade imbalances, however, amounted at the time generally to between 1 and 5 percent. So the requirement for dollar financing amounted, for each country, to between 0.1 and 0.5 percent of the value of trade—which was trivial. Yet two of the CMEA nations refused to agree to this procedure! Bilateral balancing continued unabated. And there is no reason why it shouldn't have. In effect, trying to get nations to finance deficits in dollars was to admit defeat for the TR.

Defeat for the TR was further indicated by the development of a practice related to structural bilateralism. Some CMEA nations exported "soft" goods to other nations which contained, however, inputs that were produced in the West and for which hard currency had been paid. Eventually, nations that exported "soft" goods that contained a hard currency input required compensation in hard currency for that input. It was actually claimed that this practice increased "convertibility" since it made dollars and TRs exchangeable. In fact, it did just the reverse.

At various times, attempts were made to develop multilateralism without convertibility by planning commodity flows to achieve such a result. These were equivalent to planned barter trade-offs, such as A buys 2 cats from B who buys a dog from C who buys a duck from A. One of the authors, speaking of such measures, argued that this type of planning would make the TR more transferable! In fact, if the TR were convertible, such measures would be otiose.

## EXTERNAL CONVERTIBILITY AND EAST-WEST TRADE

The CMEA nations turned serious attention in the mid-1970s, for the first time, to my knowledge, to achieving convertibility with hard currencies. Their interest may have been awakened by their detente-induced rapidly rising hard currency deficits and by a 1973 article by Peter Wiles entitled "On Purely Financial Convertibility".[6] An idea similar to that of Wiles' was proposed and discussed at length at a conference in Vouliagmeni (near Athens) of Eastern and Western international financial experts (which I had the good fortune to attend). At this Conference, leading Eastern financial officials proposed that CMEA sponsor an "externally convertible ruble" or ECR. An externally convertible ruble was just that—a financial instrument that presumably would be redeemed in hard currency by foreigners who happened to hold it, but not to be held or used by (or converted for) domestic citizens or enterprises.

Clearly, ECRs would do nothing for intrabloc trade since, in the first place, they were not allowed to be used in intrabloc trade. Furthermore, the causes of existing ruble inconvertibility, namely, irrational domestic prices and commodity inconvertibility, would not have been alleviated one whit by the introduction of ECRs.

In theory, ECRs might have served two possible functions for the CMEA nations in their trade with the West. First, they might have facilitated the transfer of profits and other returns to Western participants in CMEA joint ventures. However, this was not a very likely possibility since (1) Western joint ventures were not, at this time, allowed in most of the CMEA nations and (2) it was not envisioned that ECRs could be exchanged for domestic CMEA currencies. Second, it seemed clear to me, from the arguments that I heard at Vouliagmeni, that the CMEA economists viewed the ECR as a source of cheap credit. At that time (1975), detente had led to a rapid increase in East-West trade, a trend in which imports led exports. The resulting deficits were exacerbated by the recession-induced decline, at that time, in Western imports from CMEA. The deficits were financed by Western governmental loans, bank loans, and commercial credits. Western deficits are financed similarly but, in addition, nations like the United States (especially) and the United Kingdom have been able to import more than they export simply because foreigners are willing to hold their currencies and, often, at lower interest rates than have to be paid on loans and credits. If the dollar and the pound sterling, why not the ruble, the zloty, the TR?

What the CMEA experts apparently did not understand was that the realm of world currencies is not a "classless" one! At the top of the heap sits the dollar—the major intervention currency. Just below the top are, including the dollar, the five so-called vehicle currencies—the British pound, French franc, West German mark, and Japanese yen—the currencies that constitute most of the world's currency reserves and in which almost all trade is conducted and financed. This is because, historically speaking, these nations have been among the largest traders, and have relatively

[6] Peter J.D. Wiles, "On Purely Financial Convertibility" in Y. Laulan (ed.), *Banking, Money and Credit in Eastern Europe* (NATO Colloquium: Brussels, 1973).

large and stable financial markets. Other nations—whose currencies comprise the proletariat in this realm—use the vehicle currencies almost exclusively because their use reduces exchange risks and transaction costs. There is, in effect therefore, virtually no international demand for the currencies of the remaining nations. By the same token, there would be even less demand for the CMEA currencies, given the prevalence of irrational domestic prices, commodity inconvertibility, the fact that they had never been used in international transactions and, in the case of the TR, being in effect, a currency without a country.

What would it take to induce creditors to hold these currencies? Creditor aversion could be reduced or, possibly, even eliminated if the ratio of hard currency reserves to creditor deposits was set quite high and if the interest rate on deposits was also set high. Of course, the larger the amount of hard currency reserves that would have to be immobilized and the higher the interest rate on deposits, the less the seigniorage that might be earned. My guess is that the possibilities of positive seigniorage via this route were zero and that the CMEA nations could have obtained cheaper credit by borrowing in the normal fashion in world financial markets (implying negative seigniorage).

The above skeptical view was presented at an East-West Conference in Dresden in July, 1976. [7] Imagine my surprise when, three months later, the International Bank for Economic Cooperation (Moscow, USSR) announced that noncommunist traders and banks could accept and hold TRs in payment for exports and use them in settlement of accounts. Nothing was done to make the TRs attractive. The interest rate on TR deposits remained, as before, at a noncompetitive 1 percent. Once a Westerner accepted TRs in place of convertible currencies in payment for exports, the TRs were not exchangeable into convertible currency. That is to say, unlike the hypothetical ECR, the TR was not externally convertible. TR deposits could not be spent anywhere in CMEA but only in the country whose payment generated the deposit. Moreover, to be spent in that country required special arrangements underlining the fact that liquidation of these TRs was impeded by the usual commodity inconvertibility problems.

Apparently, not very many Western exporters accepted TRs in place of hard currency. One wonders why any TRs were accepted! Two possible explanations come to mind. First, in the beginning, there was undoubtedly confusion regarding the degree of convertibility that would prevail in the new situation. Second, it has been rumored that, in this period of Western recession, CMEA importers with monopsonistic power played Western exporters off against each other, promising to "favor" exporters who would accept part payment in TRs.

Needless to say, this attempt to increase the convertibility of the TR was a failure and within a year or so was abandoned.

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[7] Franklyn D. Holzman. "CMEA's Hard Currency Deficits and Ruble Convertibililty", in Nita Watts (ed.), *Economic Relations Between East and West*, International Economic Association Series, MacMillan: London, 1978, pp. 144-163.

## Ruble Convertibility Issues After 1985

### CONVERTIBILITY DURING THE GORBACHEV PERIOD

Certainly the major intellectual difference between the pre-Gorbachev and Gorbachev periods in Eastern Europe and the Soviet Union has been the fact that, in the latter period, there has been an understanding by many Eastern European economists and leaders that convertibility is inconsistent with central planning by direct controls; this led to an end to the "gimmicky" efforts like those described above, to achieve convertibility without moving, first, toward a market economy. It is possible that this issue was understood by some Soviet and Eastern European economists before the recent reforms but that publication of their views was censored. The only exception, to my knowledge, was *Theory and Practice of CMEA Cooperation* by the late Hungarian economist, Sandor Ausch, which I picked up in English translation in Budapest in 1979 and which contained excellent chapters on convertibility theory. The major pre-Gorbachev era Western exceptions were papers by Brainard and Holzman. [8]

The "gimmicky" efforts of the pre-Gorbachev period are largely explainable by the fact that there was little or no inclination by the authorities to give up direct control central planning. In fact, ruble convertibility was undoubtedly viewed as an obstacle to the effectiveness of planning since it necessarily would have involved removing international trade and finance from planners' control. That is to say, ruble convertibility implies commodity convertibility and much freer prices. The major interest of the planners before 1985 was not convertibility, per se, but simply the elimination of rigid bilateralism in intra-CMEA trade. The more dramatic reforms envisaged after 1985 were, of course, reforms that looked toward a shift from planning to market, greater trade with the West, East-West joint ventures, imports of Western technology, and so forth—reforms that would benefit from, and assist in, achieving convertibility.

At this point, the crucial problems became largely problems of how to effect the transition from planning to market and also, of course, when and how to introduce (varying degrees of) convertibility. Attempts can always be made to introduce convertibility. However, under imperfect conditions, the gains from introducing convertibility have to be weighed against the losses, looking at the situation from both short-run static and long-run dynamic viewpoints. Reasonable persons may well differ in their evaluations of such matters.

Unfortunately, particularly in the U.S.S.R., several obstructions to achievement of convertibility worsened sharply as the reforms began and as central controls over both the economy and the society were relaxed.

First, a major economic problem was the sharp increase in macro-instability. Beginning around 1985, the Government began to run very large budget deficits, deficits that eventually (circa

[8] Lawrence Brainard, "CMEA Financial System and Integration," in Paul Marer and J.M. Montias (eds.), *East European Integration and East-West Trade*, Indiana University Press, Bloomington, Ind., 1980, pp.121–138; and Holzman, 1978.

1991) amounted to as much as 15 percent of GNP. Moreover, these deficits were not financed, as is usually the case in the West, by the sale of interest-bearing bonds, but rather by the more inflationary procedure of printing money. Shortages rapidly developed inducing larger queues, increased hoarding, growing shortages, expansion of black markets and accelerating inflation in these black markets, and eventually price increases in normal trade. The succession of large deficits combined with growing shortages of goods led to the development of a substantial "monetary overhang." At this point, ruble inconvertibility caused by irrational prices and commodity inconvertibility, was exacerbated by the growing weakness of the ruble due to its excess supply relative to other currencies and to the supply of available commodities. Dollarization increased as did barter between individuals, enterprises, and regions. The increase in barter was equivalent, of course, to increased commodity inconvertibility (reduced internal convertibility).

A second major problem was, with the flowering of glasnost, the explosion of separatist movements of both ethnic and nationalistic varieties. As the central Soviet Government and Communist party lost power, federal republics, autonomous republics, and ethnic groups asked for or demanded greater economic and political independence. To the extent that independence was partially achieved in the economic sphere, inflationary pressures were increased as the budgets and banks in the new political units increased their ruble loans and expenditures with little or no caution.

A third major problem was the very slow progress in substituting markets for planning—even where planning had been eliminated—and in developing the infrastructure (commercial, legal, banking, etc.) necessary for the efficient operation of market economies. In a nation like the U.S.S.R., reforms along these lines simply take time. "Evolution" rather than "Big Bang" is the approach preferred by this writer and many others. [9]

Toward the end of Gorbachev's Presidency—in the fall 1990—some of the major issues were crystallized by the so-called liberals' Shatalin Plan and by the response contained in the so-called Gorbachev Plan. Both plans scheduled major efforts at reducing the budget deficit and monetary overhang. Other domestic economic reforms were designed in both plans to move the nation toward a market economy. Where the two plans differed in a fundamental way was in the distribution of political and economic power between the republics and the Soviet Government. The Shatalin Plan foresaw a federation of republics in which the republics guided their own trade, largely controlled their own fiscal and monetary operations, and their holdings of foreign exchange. In fact, the Soviet Government was to be dependent on the individual republics for tax revenues and for foreign exchange. The Gorbachev Plan, while yielding much power to the republics, left the Soviet Government in charge of taxes and of foreign exchange, as it had always been under central planning.

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[9] For example, Janos Kornai, *The Road to a Free Economy*, New York and London: W.W. Norton, 1990; Peter Murrell, " 'Big Bang' Versus Evolution: East European Reforms in the Light of Recent Economic History," *PlanEcon Report 6*, no. 26, June 29, 1990, pp. 1-11. See also Joseph Berliner's, "The Gains of Privatization" in this volume. Jeffrey Sachs, in his many recent well-known articles, has been the major proponent of "Big Bang".

Now, both plans assumed that the ruble would continue to be the currency of the federation and of each republic in the federation. However, it seems quite clear that under the financial arrangements of the Shatalin Plan, the central government would not have had the power it would have needed to exercise fiscal, monetary, and exchange rate policies that would have been required as the federation and its members moved toward a market economy.

In this one important sense, the Gorbachev Plan was more consistent than the Shatalin Plan. In theory, at least, it would have preserved the Soviet Union as both a common economic space or common market and as a unified currency area. Since intra-republic trade amounted to more than 70 percent of total trade (and much higher for all republics but the R.S.F.S.R.) [10] this could have been viewed, in theory, as a positive feat. Another major advantage of the Gorbachev Plan would have been that it would probably have been easier to achieve macro-stability (especially) and to introduce price and infrastructure reforms across all of the republics simultaneously.

Unfortunately, the Gorbachev Plan was also unrealistic. The Shatalin Plan's program of tilting the balance of power in favor of the republics and at the expense of the Soviet Union was recognition of the fact that the forces that had repressed ethnic and nationalistic yearnings for more than half a century were gone and that this genie could never again be put back into the bottle. It was unrealistic of the Gorbachev Plan to allot so much less power to the republics than the Shatalin Plan. Furthermore, given the increase in power demanded by the republics, it was to be expected that conflicts of interest would be generated or, at least, finally become visible. Under the old system, these conflicts were quietly and invisibly resolved by the exercise of dictatorial administrative power. With Soviet dictatorial power having "withered away," how would such conflicts be settled?

## EXCHANGE REGIMES IN THE COMMONWEALTH OF INDEPENDENT STATES (CIS)

In attempting to answer this question, we assume that the process of the "withering away" of Soviet dictatorial power has been largely completed, leaving a new politico-economic environment. The Soviet Union no longer exists as a political or economic unit. The republics are now independent. While elements of a common currency remain, the common market is largely destroyed. Republics have not coordinated either price reforms or fiscal-monetary policies and, therefore, no longer have identical prices for identical goods nor similar rates of inflation. Despite increased marketization, products no longer flow as freely in interrepublic trade as before under the plans. Interrepublic export and import controls are widely used. Some republics have issued partial currency substitutes for rubles while most continue to use rubles exclusively. And so forth.

[10] International Monetary Fund, *Common Issues and Interrepublic Relations in the Former U.S.S.R.*, Washington, D.C. 1992, Table 1.

Under these circumstances, most interrepublic economic conflicts are still being resolved administratively by the republic governments by use of direct controls and price controls (including tariffs and subsidies) over exportables and imports. These crude techniques will continue to be relied upon by the independent republics in the chaotic near future. Eventually, however, it is to be expected that most of the republics will establish their own currencies. The fact that the republics still share a common currency, the ruble, is an anachronistic residue of the enormous political and economic upheaval that republics of the former U.S.S.R. experienced as well as a reflection of the many complexities that the shift to separate currencies entails. It will, undoubtedly, take a while before the various republics will be able to establish the conditions necessary to introduce their own currencies and to disengage from the ruble.

The motivations for introducing separate currencies will vary from nation to nation. To some extent, all of the republics are motivated by the fact that, next to having one's own armed forces, having one's own currency is a major symbol of statehood, "sovereignty," and independence. This is certainly the key factor, for example in the cases of the Baltic Republics and the Ukraine, nations that share strong mutual hostilities with Russia. A few of the other small republics may be less motivated, if at all, by this factor. Sovereignty is not the only motive for having one's own currency. The fact of the matter is that while having a common currency has many benefits,[11] sharing a common currency may have many drawbacks for participating nations (regions).

Probably, the major drawback is that a nation (region) that shares a common currency loses most, if not all, control over its monetary, fiscal, and exchange rate policies. For a nation whose needs tend to fit in with the policies that are being pursued by the members of the currency union, this may not be a problem. But suppose, for example, one of the nations has high and rising unemployment, but the others don't. One way the nation with unemployment has of dealing with its problem would be to devalue its currency. However, given a common currency, it can neither devalue against its partners nor necessarily convince its partners to devalue against world currencies. If it has its own currency, both options would be available to reduce unemployment. With its own currency, it might also reduce unemployment by reducing taxes and interest rates, and increasing budget expenditures, measures which might not be undertaken willingly by the group. Of course, it is possible that the group directorate might legislate fiscal and monetary measures to help out members with special problems like that mentioned above. It is also possible that other mechanisms might be available through which unemployment may be reduced: migration—factor mobility permitting; and governmental or private capital flows.

Implicit in the above discussion is the fact that nations with common needs, problems, policies, and reactions to various shocks

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[11] The success of the U.S. economy is attributed *ad nauseum* to the use of dollars by all 50 states. The advantages of having a common currency (as well as the disadvantages) have been paraded frequently in connection with the movement in that direction by the members of the Economic Community.

might well want to adopt a common currency. In fact, such nations would have relatively little need for national autonomy in fiscal, monetary, and exchange rate policies. So, for example, if all nations in the union were experiencing declining exports along with declining employment in export and import-competing industries, all would benefit from currency devaluation or from various fiscal and monetary measures.

This "similarity" prerequisite for a successful currency union, or so-called "optimum currency area," tends to highlight a major reason why it is unlikely that a common currency is apt to be preferred by most of the nations of the CIS. In effect, the set of conditions conducive to a common currency is one without conflicts to begin with and in which conflicts are unlikely to develop. These conditions are unlikely to describe the situation that exists, and will exist for some time, in the CIS. In fact, there is almost no way of describing the situations that exist in the CIS because they change constantly within each nation and the changes between nations differ in pace, direction, and substance. [12] With so many differences among the CIS nations, it is chastening to realize that just one factor—differential rates of inflation—is sufficient to preclude the successful introduction of a common currency. [13]

While conflicts of interest will develop constantly as a result of moving chaos in each nation, it is worth noting that for a brief period trade relations may benefit from the fact that under Soviet planning, the republics were developed to an excessive extent to produce goods for each other. This was due, among other things, to the very protectionist Soviet foreign trade policy and to the development policy of establishing excessively large enterprises. As time goes on and restructuring begins, these historic arrangements and forced interdependencies will begin to fall apart and conflicts will develop. In each republic, enterprises producing exportables and imports will go bankrupt for many reasons: plain inefficiency, comparative disadvantage, technological backwardness, etc. As enterprises go bankrupt, their former trading partners (for inputs and outputs) within and between republics will suffer and perhaps also go bankrupt. Further disruption will occur as republic enterprises, freed from the "plan", substitute trading relations with enterprises in Eastern Europe and the West for what had formerly been domestic trade. This is likely to happen on a large scale because the central planners allocated resources so poorly.

Conflicts of interest in CIS are also likely to develop in many other areas: on fiscal and monetary policies, legal systems, accounting techniques, and so forth. Without going into further details, it seems clear that the use of the ruble as the common currency of the CIS is likely to prove dysfunctional and in due course should be discontinued. The economic and political relations between the CIS

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[12] For excellent descriptions and analyses of the conditions and problems in inter-republic relations, the following three sources are recommended: International Monetary Fund, 1992; Alastair McAuley, "The Economic Consequences of Soviet Disintegration," *Soviet Economy*, vol.7, no. 3, July-September, 1991, pp. 189–214; and Donna Bahry, "The Union Republics and Contradictions in Gorbachev's Economic Reform," *Soviet Economy*, vol. 7, no. 3, July-September, 1991, pp. 215–255.

[13] Of course, the use of a common currency would put pressures on the members of the currency union to reduce and eliminate their inflation differentials.

members are much too unstable and too much in conflict to lead to net benefits from a common currency. Each republic needs all the policy tools it can to maneuver its economy successfully through the uncharted waters of economic reform. With so little coordination between them, each republic will benefit from the opportunity to choose its own appropriate fiscal, monetary, and exchange rate policies. These will, of course be supplemented by nonmonetary policy tools.

Once having decided to establish its own currency, each republic will have to determine (1) whether to have a fixed or floating exchange rate (or something in-between) and (2) if fixed, whether it is to be tied to the ruble, the special drawing rights (SDR), the dollar, or some other currency. From all that has been said above, it seems probable that, for some time, most of the republics will be better off with floating rates—or if fixed rates are chosen—they are viewed as "fixed" only until the next change is required. Given the prevalent economic and political instabilities, it would undoubtedly be very difficult to maintain reasonable trade and current account balances without floating rates. Changes in exchange rates are needed to neutralize differential fluctuations in prices, in demand and supply, and other shocks to the economies. Nevertheless, it must be taken into consideration that too large and too frequent fluctuations in the exchange rate could substantially reduce the value of the currency, worsen the terms of trade, lower the volume of trade, and increase the difficulties of eventually harmonizing domestic with world prices. These potentially negative side-effects of purely floating rates suggest the need for some exchange rate "management."

If fixed rates are attempted, it would seem unwise for the smaller republics to tie to the ruble, at least until the Russian economy and its currency have stabilized. Even then, it would be better to tie into one of the major currencies or the SDR as a strategy for improving the feedback of world prices on the domestic prices and thereby facilitating the development of rational prices. Moreover, it must be recognized, as mentioned earlier, that the ruble has been, and will continue to be, a very unimportant currency in world financial and trade markets. The ruble and the other new currencies should all tie into a major currency or currency unit, like the dollar. An eventual possible exception might be a situation in which a small republic trades a preponderance, say half, of its GNP with Russia. In such a case, the small nation's prices would be so tied in with Russian prices that effective devaluation would not be very feasible. That is to say, devaluation would increase the small nation's import prices by a roughly equivalent amount, which in turn would induce a wage-price spiral. The appropriate policy in this case, therefore, might be to rigidly peg the small nation's currency to the ruble, but not to adopt the ruble. This would preserve the small nation's ability to make macroeconomic adjustments via fiscal and monetary tools.

## THE TRANSITION TO CONVERTIBILITY: A BRIEF NOTE [14]

The Russian Government announced in June, 1992 that it planned to make the ruble convertible in August. Such a move would, in my opinion, be premature. True, under favorable conditions, convertibility could be very beneficial to the Russian economy. A major benefit would be the more rapid rationalization of Russian prices through competition with foreign products and inclusion of these products in the Russian price structure. Second, the competition of foreign products with both exportables and import-competeing industries would force domestic enterprises to strive to be more efficient as well as provide role models. Finally, to the extent that convertibility enhances the repatriation in dollars of profits on investment, foreign investments, including joint ventures, in Russia will be encouraged.

Unfortunately, if conditions are not favorable for convertibility, the losses can be large, indeed. For example, if convertibility on current account is introduced, foreigners can buy anything they want from Russia, and Russians who have foreign exchange can buy whatever they want from the West. However, with irrational prices, private purchases from and sales to other nations can involve large losses to the nation.

Second, given the relative inefficiency of Russian enterprises and relative unattractiveness of Russian manufactured products, an enormous number of Russian enterprises could go bankrupt very quickly. True, over the long run, many domestic enterprises will fail anyway. However, the introduction of premature convertibility may well cause more business failures and unemployment in the short-run than is consistent with the survival of any democratic Russian Government. Moreover, many of the enterprises that will go bankrupt from premature convertibility will be enterprises that, given a little time and assistance, and some experience with free markets, may well turn out to be "comparative advantage" enterprises. Their premature bankruptcies would be a tragedy.

Third, Russia sadly lacks the market infrastructure that is necessary for truly efficient market operations. As noted earlier, such infrastructure "evolves" for decades and centuries and cannot be put in place overnight. Introducing convertibility provides little help on this front. Nevertheless, without this infrastructure, former Soviet republic enterprises are handicapped in competition with the West. This does not mean that convertibility must be delayed forever, but it does suggest avoiding headlong haste.

Finally, one further disadvantage of outright convertibility: it has been argued that with convertibility and floating exchange rates, a nation can depend on balancing its current account. It is worth asking: at what cost? It may well be that under the conditions that exist in the former-Soviet republics at present, that balancing the foreign accounts by using the "price mechanism" may be very unwise. Given the huge unsatisfied demands of the nation, and inadequate supplies of marketable exportables, an exchange rate that immediately balances the current account may turn the

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[14] An extended discussion of this issue is contained in Franklyn D. Holzman, "Moving toward Ruble Convertibility" *Comparative Economic Studies*, vol. 32, no. 3, Fall 1991, pp.3–66.

terms of trade against the nation to such an extent that foreign trade may be, if not "immiserizing", at least not very profitable.[15] Prices and exchange rates that reflect extremely abnormal conditions are apt to force nations into very harsh bargains. Until conditions have normalized to some extent, it might be wiser to have less than full convertibility and to put some of the burden of adjustment on various relevant trade controls.

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[15] The term "immiserizing" was first used by Jagdish Bhagwati to describe a perverse situation in which an increase in domestic output could cause a decline in real income, because of the resulting deterioration in the nation's terms of trade. See his, "Immiserizing Growth: A Geometrical Note," *Review of Economic Studies*, vol. XXV, no. 3, (June 1958), pp. 201-205. The terms of trade improve after a devaluation if the product of the demand elasticities is greater than the product of the supply elasticities:

$$DmDx > SmSx.$$

Put in these terms, it seems very probable that a fall in the value of the ruble would lead to a large fall in terms of trade. For obvious reasons, Russia's demand for imports (Dm) is likely to be very inelastic—very small. World demand elasticity for Russian exports (Dx) is also apt to be very low for manufactured products (many of their products cannot be sold even at prices that are far below world prices) and overall, lower than that of most nations. On the other hand, the world elasticity of supply of Russian imports (Sm) is apt to be close to infinite—when one considers the very small part that Russia plays in world trade. Finally, Russia's supply of exports (Sx) is likely to be relatively inelastic. To sum up: given the very high value of Sm, the product of the supply elasticities should be much greater than the product of the demand elasticities.

# RUBLE CONVERTIBILITY AND EXTERNAL AND INTERNAL EQUILIBRIUM

Jozef M. van Brabant *

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## SUMMARY

This paper addresses two key issues, namely the role of convertibility in the transition to market-based economic systems and the desirability of arranging international support for ruble stabilization. The first has been motivated with a view to obtaining international discipline, gaining macroeconomic stability, progressing with the transformation of the legacies of planning, and maintaining useful ruble trade among the republics (this topic is examined elsewhere, however). As far as gaining support for a fund to enhance ruble convertibility is concerned, one must be clear about the meaning of convertibility, the alternative policies that can be embraced, the initial conditions, and indeed the scope and credibility of domestic policies directed at stabilizing the economy and introducing structural reforms. Taking everything into account, I am not favorably inclined toward a ruble stabilization fund as presently conceived. A broader effort to co-manage the transition with international financial and technical support as well as far-reaching surveillance of the type employed after World War II for Western Europe would seem more promising, but this option is not now seriously entertained for, on the whole, narrowly partisan reasons.

## INTRODUCTION

International support for fostering ruble convertibility has grown considerably with the introduction of liberalization policies in early 1992 in Russia. This has three broad objectives. One is ensuring

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that the economy stays competitive and undertakes timely structural adjustments, just like mature market economies do, through international discipline. The second aims at gaining macroeconomic stabilization and bringing about the structural change required to advance with turning the degenerative administratively planned system into a market-based economy. And, finally, the global community is concerned about the potential collapse of trade among the successor Soviet republics and is, hence, keen on maintaining the ruble as a common currency for the largest number of republics, hoping perhaps that this, in and of itself, will create the ambience to maintain comparatively buoyant trade and payment flows among the republics; this is at best a mistaken notion, as argued in Brabant 1992b. Whether useful headway can be carved out with the other two goals forms the topic of this paper.

Without addressing the general subject of convertibility (Brabant 1987, pp. 357–82; 1991a, b; 1992c), I first restate the most common definition of convertibility, simply to keep perspective on the confused way in which the topic has been dealt with in the burgeoning transition literature. Then I look at the various alternative paths toward convertibility as well as the normative requirements and prevailing opportunities for convertibility. Thereafter I contrast the starting conditions for the transition in Russia with the fundamental requirements for exploiting convertibility as a means of ensuring market-oriented resource allocation at relatively high levels of employment. The paper concludes with a discussion of the pros and cons of current efforts to underpin a ruble stabilization fund and other options that could help to advance the transition in Russia.

## The Concept of Convertibility

Convertibility is one of those topics in economics and politics about which much has been written but conceptual and practical confusion continues. With the revolutions currently grinding slowly forward in the eastern part of Europe, the issue has become quite prominent in laying out the architecture of the transition. Most observers agree that it is important to anchor the restructuring of the planned economies in transition—PETs, no pun intended—as early and comprehensively as possible in the transformation's sequence by moving at least to weak currency convertibility. The more market-oriented gurus of the transition argue that a credible step forward toward market systems can be set only if all degrees of autonomy over monetary affairs are removed from PET policy makers, for example, by tying their policies to the European monetary system (Bofinger 1991a, b). Others caution against a precipitate dash toward convertibility as dangerous policymaking. But a judicious jump-start may well be desirable *under some conditions*, but only as one step of a sequence of liberalization measures. I am skeptical about several of the claimed virtues of the "convertibility soonest" approach, basically because the conditions for those gratifications to materialize quickly in the PET are unlikely to emerge soon. Hasty convertibility is more likely to lead to a protracted depression—a sort of low-level equilibrium trap (Newbery 1991), from which it will be very hard to emerge. But that begs the question of what is so difficult about reaching convertibility.

Recent analyses of PET policies have been rather lax in equating an easing of access to foreign exchange with convertibility. Though arguably sound public relations, this obfuscation of the multiple issues at stake by twisting meanings of fairly well-established terms can hardly contribute to a dispassionate discourse. Convertibility has become synonymous with several intrinsically different measures that should be kept separate if only for heuristic purposes. True, convertibility can be a very powerful tool in the swift formulation and expeditious implementation of a cohesive stabilization and structural-adjustment policy under proper conditions. Because most commentators on the subject generally fail to specify all key parameters when they endorse such a policy stance, their advocacy gives rise to multiple interpretations, all legitimate but none authoritative. Unwary Western enthusiasts spuriously infuse their own hopes for change in PETs or, worse, their ideological convictions drawn from the simplicity of the stylized, even if sophisticated, textbook into the interpretation of these vague statements. Such a lack of clarity in policy perceptions and their rationalizations yields a muddled approach that is best avoided.

This uncertainty is especially pronounced when the objectives of ongoing policy discussions, feasible long-term policy goals, or emerging institutions are being comprehensively reassessed or when they are already in considerable flux. To avoid erroneous evaluations, observers should not entertain unrealistic policy options for eradicating the legacies of the *anciens régimes* overnight. It is as meaningful to affirm that convertibility for any currency is impossible as it is to assert the converse. Rhetoric aside (Colombatto 1983, p. 488), there has never been any structural or systemic impossibility of establishing a highly circumscribed form of convertibility even under very orthodox planning (Altman 1962, p. 367). But it is very hard to transform it into a coherent framework within which convertibility can be meaningfully applied and supported over time.

Efficient relations in support as well as in emanation of domestic and foreign economic reforms cannot be secured without moving decisively toward currency convertibility. For operational purposes, I use as guideline the Articles of Agreement of the International Monetary Fund (IMF). Article VIII limits the meaning of currency convertibility simply to the ability of some class of holders of a currency—essentially nonresident current-account and some related transactions [1]—to exchange it for another currency or into goods on demand. I have specified on purpose "some class" without further restrictions. Let me explain this qualifier.

For most countries since World War II convertibility essentially means that, as stated in Article VIII, section 2 of the Fund's statutes: "no member shall, without the approval of the Fund, impose restrictions on the making of payments and transfers for current international transactions" (IMF 1978, p. 29). This is the notion

[1] Though capital convertibility will eventually be useful too, I do not subscribe to the call of simpleminded monetarism (Bofinger 1991a, b) to do everything at once. Capital convertibility without first mastering current-transaction convertibility is likely to entail a premature appreciation of the exchange rate as foreign investment moves in. Questions referring to the repatriation of profit and investment capital can be handled through the pragmatic allocation of currency (see Brabant 1991a).

usually embraced by mainstream economists. Before the second amendment of the Articles of Agreement in 1976, the Fund considered a currency to be totally convertible if: (i) it could be used without restriction of a currency character for any reason whatsoever; (ii) exchanged for any other currency without restriction of a currency character; and (iii) used or exchanged at its par value, or at a rate of exchange based on the par value, or at some legal rate of exchange defined in any other way considered desirable (Gold 1971, pp. 1–2). This still holds, except for par values (Gianviti 1990).[2]

The above quotation has three operative qualifiers that need to be interpreted (Gianviti 1989, p. 270). "International transactions" are those among residents of different countries. "Restrictions" on payments are present when a country by administrative decision denies or curtails the request for foreign exchange for a proper international transaction (Edwards 1985, pp. 390–1). Such restrictions may, however, be imposed with the Fund's concurrence, in which case the Fund as a rule still classifies the currency as "convertible." Finally, "current" refers to payments for foreign trade, other current business, and normal short-term banking and credit facilities; for interest on loans and as net income from other investments; for moderate amounts representing amortization of loans or depreciation of direct investments; and for moderate remittances to cover family living expenses (Gianviti 1989, p. 271). The precise meaning of "moderate" is, however, left unspecified. In practice, especially with reference to section 4 of Article VIII, convertibility has been understood to apply mainly to current-account transactions by nonresidents in consequence of the regulation of relations between member banks of the Fund (IMF 1978, p. 30). Restrictions on current-account transactions of residents are condoned provided the banking system does not unduly inhibit payments (Edwards 1985, pp. 390–1). But the precise meaning of a current transaction and which magnitude is "acceptable" are not clearly spelled out, not even legally.

At the end of 1990, out of 155 members of the IMF 72 adhered to Article VIII's regime, although some used a de facto multiple exchange-rate system (IMF 1991, pp. 580–4).[3] Many countries apply convertibility to residents too: 65 members subscribing to Article VIII do not have current-account and 30 capital-account restrictions (for resident-owned funds) as defined by the Fund. In addition, there are two countries (Lebanon and Maldives) that come under Article XIV, although they impose neither capital- nor current-account restrictions, and 12 out of the 83 coming under that regime do not maintain current-account restrictions for resident-owned funds. In other words, there are comparatively few countries that allow their currency to be converted on demand for whatever purpose a holder may entertain; there are a few more, but still an

[2] I thank Jacques J. Polak for extracting for my edification a contemporary interpretation of the IMF's rules, as done earlier by J. Gold (1971), through the good offices of Mr. François Gianviti (1989, 1990), legal counsel at the IMF.

[3] Mr. Festus L. Osunsade of the IMF's external relations department, who was once editor of the cited publication, has cautioned me against using these data because they allegedly embody a downward bias. Though I find his position rather odd, I am willing to contemplate alternative data. But until they materialize, I do not contest the Fund's authority over IMF 1991.

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absolute minority, that maintain current-account convertibility without restrictions.

Seen against the above backdrop, one cannot term the koruna or zloty convertible because only merchandise and related transactions by duly registered resident businesses other than those conducted on clearing account can be settled through the limited convertibility commitment and then frequently only after passing administrative hurdles. In Poland, private individuals as well as foreign-owned entities have access to a parallel market, which is linked to the official one but the intermediation is neither instantaneous nor complete. A similar regime, but with more restrictions on accessing foreign currency, was introduced in Czechoslovakia on 1 January 1991. It does not, however, have a parallel market, and citizens have the right to obtain at most 5,000 korunas (circa $180) per year. In early 1990, Yugoslavia introduced an even more liberal regime than Poland. By mid-year, however, dinar convertibility was heading for a spectacular collapse with access to foreign exchange becoming pathetic: everyone for him/herself. Bulgaria, Romania (since suspended), and Russia at some point adopted de facto floating rates for duly authorized agents (but not individuals) without access to official channels.

## Possible Roads to Convertibility

Even when the concept is limited to the economics of goods' convertibility, there are multiple paths to reaching a stage that permits the anonymous and automatic conversion of currency balances held by some class of economic agents into goods or another currency on demand. As such, convertibility provides a mechanism through which information about relative scarcities in world markets is funneled into the domestic economy. Not only that, it also enables economic agents to compete with minimal interference in whatever market offers the best profit opportunities. To create a flexible home market, PETs must liberalize foreign trade and exchange rapidly and with determination. Basically four alternative paths have recently been explored. [4]

Most discussed has been the approach adopted by Poland in early 1990 and Czechoslovakia in early 1991; Yugoslavia did likewise in December 1989, but its dash was abortive. The measures taken were primarily meant to stabilize the economy. As such, policymakers in Poland and Yugoslavia aimed at stifling hyperinflation through Draconian monetary control and budget slashing. As far as convertibility is concerned, the goal was to unleash most market forces all at once, including through rapid trade liberalization, primarily *vis-à-vis* mature market economies. It also freed up most domestic prices and removed the majority of price subsidies. Yugoslavia proceeded in the same way, although it had for years laid piecemeal foundations of market-type behavior.

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[4] I shall not discuss the proposals that irrevocably link the currencies of the PETs to the European monetary system or that recommend managing them through Currency Board arrangements. The first would not be credible (or very costly for partners) given the prevailing uncertainty. The other would be too deflationary, given the comparatively small volume of foreign exchange available in the PETs.

In some of its interpretations, the big bang is associated with the expectation that both demand and supply will be sufficiently elastic to respond appropriately to the newly created market incentives. This assumption tends to be validated, and expectations are consequently rather quickly met, for demand. But swift action on the supply side simply does not spontaneously emanate for a variety of reasons. Unfortunately, big-bang stabilization programs ignore the primordial need for structural and institutional change to cement in the microeconomic foundations of macroeconomic stability with growth. Without them, the desired supply response will simply not come to the fore, owing to profound rigidities in the economic structures inherited from the planning environment.

Certainly, Poland chose this route. It was able to do so because of the unique circumstances prevailing in early 1990. Unlike Yugoslavia, which was forced formally to devalue the dinar in December 1990, and again in April 1991, and indeed to suspend convertibility in a wholly confused manner well before the outbreak of armed hostilities in late June 1991, Poland succeeded in maintaining convertibility at a stable exchange rate until 13 May 1991, when the zloty was devalued by a modest 17 percent. It has since changed to basket pegging with a crawling peg devaluation, although occasionally (as in February 1992) larger corrections have proved necessary simply to reverse too steep an appreciation of the local currency. There may have been specific conditions at work.

For one thing, Poland in January 1990 and Yugoslavia in December 1989 found themselves in a highly unusual conjuncture. Especially in Poland, key were the runaway inflation of 1989, the crisis of confidence in the political leadership, and all but completely destabilized economic and, more broadly, societal relations. Furthermore, this action was taken after decades of tinkering with tepid reforms that encompassed some liberalization of prices, trade, and foreign-exchange allocation, as well as some competition. Moreover, the move was made with substantial external support for convertibility, and domestic agents in both countries were then holding sizable foreign-exchange reserves. The cost of the adjustment program (not just because of limited convertibility, of course) such as in terms of unemployment, idled capacity, a burst of high inflation followed by a tenuous subsidence with periodic flare-ups yielding a high underlying trend, a sharp recession turning into a severe depression, destruction of liquid wealth held in local currency, and defensively inelastic supply behavior has been appalling and, in my view, not warranted by the admittedly important gains made in improving internal and external balances. And these "gains" were achieved under extraordinary circumstances [5] detailed elsewhere (Brabant 1992c) that are not present in most other PETs, including Russia.

In expressing my skepticism, I do not wish to belittle the courage of Polish policymakers or ignore the useful lessons of this laborato-

[5] Thus, the sharp recession severely pruned import demand,state firms were allowed to run down their assets, nominal wages could be controlled with workers' acquiescence, there was substantial savings in convertible currency that could be mobilized to make up for the loss in real incomes, and confidence in policymakers devolved from the nature of the Polish revolution, the convertibility loans extended by Western institutions, and the fairly substantial Western assistance proffered in other forms.

ry-like experiment. Rather, I want to portray the "unique" Polish decisions in a more realistic perspective and to point out that the "big bang" approach to convertibility is not feasible for the majority of PETs. Even so, there is now broad agreement that the initial devaluation of 1990 was much too strong, thus debilitating industrial activity, and exchange-rate policy too inflexible to maintain proper macroeconomic management.[6] Simply jettisoning what is in place essentially overnight would infuse the region with even greater chaos than prevails at present.

The second path encompasses moving gradually toward current-account convertibility, in the first instance for authorized merchandise and related transactions through domestic policies (as in Hungary). The strategy consists of putting in place genuine wholesale trading at flexible prices and liberalizing the trade regime so that competition can be openly waged in an orderly manner. Monetary control of a sort is a prerequisite for such a successful transition to hold without inducing a sharp recession, and Hungary's experience has shown that this is by no means an easy task. Usually also privatization in various forms (Brabant 1992a), competition, regulation of natural monopolies, and other measures that effectively promote profit-maximizing behavior by management in place must precede moving orderly toward convertibility.

A specific variant of this second route, which at one point was seriously proposed for the Soviet Union, is the creation of a parallel currency in one sheltered segment of the economy, where "hard" economic conditions prevail (Kazmin and Tsimaylo 1991). Many variants of such a parallel currency have been entertained (Williamson 1991). The link ("internal exchange rate") between the hard- and soft-currency sectors would be comparatively flexible to enable policymakers to guide resource reallocation under impulse of currency convertibility according to a set schedule. This dual regime can be adhered to only by tolerating a depreciating internal exchange rate. The speed at which it erodes the value of the soft currency depends chiefly on the degree of stability that the authorities are willing—and able—to enforce for it. As such, it affords an alternative to rapid inflation or outright monetary confiscation before macroeconomic stabilization, provided delicate macroeconomic balancing can be successfully undertaken. Experience shows, however, that a parallel currency is not likely to delay those events for very long or to mitigate their costs. One might, therefore, expeditiously tackle the convoluted domestic-currency issues head-on, especially monetary and fiscal stabilization, rather than await the erosion of the domestic currency by losing control over the internal rate.

Finally, one can entertain a cooperative solution, which necessarily takes the form of a payment facility. There are many possible variants. The ideal one comprises nearly universal membership, as in the IMF. In the case of the PETs, old as well as new, it would have been useful to explore such a solution in unison, such as through a payments union (Brabant 1991a). This is a monetary ar-

[6] In many respects, the Mazowiecki and Bielecki Governments, in general, and Leszek Balcerowicz as finance minister, in particular, exhibited less policy flexibility than was tolerated during the darkest days of central planning!

rangement in which transactions are cleared in a uniform currency but surpluses are not fully available to finance transactions with outsiders, and deficits need not be fully settled in convertible currency by transferring outside earnings to the union. Such a facility combines elements of the three preceding approaches, although its core is cooperative gradualism. It multilateralizes trade through the big bang and, thus, seeks to facilitate commerce among the participants. It also creates a dual market for foreign exchange, namely by settling commercial transactions through some combination of currency payments and claims on the clearing agency. The specific proportions vary over time and for creditors and debitors. Finally, a payments union gradually shifts domestic resources and seeks to modify macroeconomic policies by holding countries to certain rules on payments that have implications for macroeconomic management.

## REQUIREMENTS OF AND OPPORTUNITIES FOR CONVERTIBILITY

To steer resource allocation, convertibility is inalienably linked to the existence of fairly integrated markets in which economic agents operate with considerable discretion, subject to the overall macroeconomic framework with its multiple institutions, policies, and policy instruments. From an economic perspective, then, convertibility makes sense only when it is associated with the automatic and anonymous clearing of at least some class of transactions in a predictable, reliable, and sustainable, near-stable manner (Shafei 1990, p. 335). For that, some fundamental conditions—not necessarily *pre*conditions—must be met. It does not appear reasonable to declare convertibility, perhaps with external assistance, when anonymous and automatic access to markets cannot yet be ensured. This is the case when fundamental policy agreement on a realistic transformation package, particularly price flexibility and competition through genuine wholesale trade, has not yet been achieved; this can only be done through domestic policy consensus. Why is convertibility such a hot topic?

A convertible currency can be sustained if the authorities succeed in maintaining approximate current-account balance with the reserves on hand as well as foreign loans that can be readily obtained and serviced. That is, the demand for and supply of foreign exchange, including that for servicing debt and conducting some capital-account transactions, must balance at least over the medium term. If foreign exchange is allocated by other means than markets, external convertibility can be guaranteed, but the country loses the critical contribution of such an instrument to enhancing the efficiency of domestic and foreign-resource allocation. For that to emerge, economic agents must be able to acquire and dispose of foreign exchange in a predictable manner. In other words, there must be a genuine foreign-exchange market, which in turn is linked to competitive markets for goods and services.

There has been little disagreement about the preferred transitional trade and payment systems for PETs: disengage from the inherited trade and payment systems and integrate into the international economy with quite a liberal trade regime with few, if any, nontariff barriers and low, preferably uniform, tariffs. Internation-

al competition is required, it is argued, to usher into the PETs the necessary competitive discipline on monopolies. This is achieved by utilizing relative world prices via an effective exchange rate to transform the rules at which economic agents will henceforth be held responsible for their economic performance.

The case for such trade liberalization has been based on the impeccable credentials of economic theory. But their practical realization is not self-evident until the liberalizing economy will have gained an environment conducive to comparatively flexible adjustments to new demand and supply schedules, that is, *after* erecting an ambient market environment. Because the gap between pre-transition and "world" prices is considerable, no single variation of the exchange rate will obviate the need to adjust demand and supply. And because future export and import schedules are uncertain, it is unknown by how much the home currency should be devalued to enable policymakers to sustain external balance at near-full employment. Yet, the advice prepared for PET managers and carried out by many has been to adopt a palpably undervalued fixed-parity ostensibly to weather the "corrective inflation" likely to ensue from price liberalization. Early during the transition foreign competition may indeed eliminate domestic production, perhaps inadvertently and inordinately through shifts in demand for new goods, without the freed-up resources being mobilized for growth-promoting activities. The outcome may then be a potentially sharp cutback in aggregate economic activity, which cannot but compress sustainable levels of welfare (see Brabant 1992b). This is hardly apt to infuse credibility into the reform package. Whether it might be better to maintain a higher parity, particularly if there is a presumption that the extent and nature of structural change are likely to exert upward pressure on the exchange rate after some transition phase has not received much attention. Yet, it would seem desirable to avoid underdevaluation and, thus, preserve economic activities that, under normal market conditions, would have been able to survive on their own.

Whatever the justification for using the nominal exchange rate as anchor for some period of time, insufficient attention appears to have been paid to the potentially destabilizing effects of a fluctuating real exchange rate. Domestic inflation is bound to quickly hollow out the comparative advantage afforded by the marked devaluation of the nominal exchange rate. Yet, an unstable real exchange rate adds to the hazards of restructuring economic activities by focusing on expanding exports to new markets, which is extremely important in the case of the PETs, given their lost markets and geopolitical preferences.

Often when discussing convertibility in PETs, reference is in fact to promoting fast and far-reaching liberalization of access to foreign exchange rather than convertibility as defined. Circumstances may be such that it might be advisable to pursue this generalization of the foreign-exchange market over some period of time (months rather than years, of course) through open auctions accessible to all duly authorized agents (such as licensed traders), if only to minimize capital flight. This is a distinct option in economies that still are governable. Critical in advocating such auctions is the flexibility of the nominal exchange rate for liberalized transactions

without establishing a freely fluctuating exchange rate for all foreign transactions. Surely, if all foreign exchange can be earmarked for currency auctions, the authorities may just as well move to a convertible regime for duly authorized agents (capital flight still being inhibited to the extent circumstances permit). Controlled access to foreign exchange for the procurement of essentials (such as foodstuffs and fuels) is warranted if prudent management can be afforded. Through such "monitored" auctions, managers of the PETs can obtain a more solid grasp of the proper equilibrium exchange rate in the short to medium run. The PET should declare convertibility as defined once it can confidently set a reasonable exchange rate and, barring untoward events, maintain it over some period of time (perhaps 6 to 12 months), and has in place the institutions and policy instruments necessary to manage the exchange regime, preferably according to a crawling peg or an otherwise adjustable exchange rate. The outcome of this discussion, then, is the desirability of moving to a regime where the nominal and real exchange rates move in tandem, even though they are not necessarily fully synchronized. A managed nominal exchange rate would seem to be preferable to a commitment to a heavily undervalued fixed rate, as explored in several PETs since 1989.

Moving toward convertibility should be coupled with liberalizing the foreign trade regime. I sympathize with the recommendation to translate as many quotas and related nontariff barriers to straight ad valorem tariffs. Whereas some protection of existing economic structures could usefully be entertained under precisely defined conditions, it would be counterproductive to erect formidable trade barriers for the PETs. Certainly, this would permit policymakers to alter economic structures gradually, hence avoid sudden dislocations with all attendant consequences. But it would also inhibit competition and the transfer of an effective system of relative prices for traded goods. And in view of the weak central actors in the PETs, credibility for the phasing-out of barriers would be rather low.

Rather than aggravating price distortions and introducing levies that may be hard to repeal later on according to a set schedule, the PETs could resort to temporary income transfers. This would permit sectors potentially threatened by bankruptcy to operate below real cost, yet the government would not have to support full unemployment claims. Such a policy choice could also enable valuable assets to survive the rigors of the transition, provided they will be profitable once this comprehensive policy of structural change is well advanced. There is, of course, little hope that policymakers in PETs can neatly separate the potentially profitable firms most deserving of subsidies from others that in any case have to be fundamentally restructured or eliminated. But some guidance can be taken from firms able to cover their variable costs under sharply fluctuating circumstances. Credibility for such a phasing-out policy could measurably be enhanced through a comprehensive effort to assist the PETs.

In appraising what the foreign sectors can and cannot do it is important to bear in mind four factors: the relatively limited role of trade in some PETs; the impact will initially be limited to prices of traded goods; the transmission will be dampened, particularly at a

time of a marked deflationary policy stance; and it would be counterproductive to emulate the distorted prices of goods whose trade is managed. Competition will provide at best broad indications of how to correct relative prices of those manufactures whose imports were previously artificially compressed. Certainly in countries such as Russia and Ukraine, obstacles to domestic competition and price flexibility will need to be corrected mainly through domestic policies. These arguments should not be read as an advocacy of protection. On the contrary, trade liberalization deserves to be avidly promoted but only to the extent that its advantages are not hollowed out by the trade-related costs of the transition, which are far from zero. Shifting domestic structures through trade incentives in relatively autarkic economies is bound to be very painful.

Even once the basic steps toward the establishment of market systems have been completed, introducing a full-fledged convertible currency in the PETs makes sense only if certain other criteria are fulfilled. Obviously, there must be adequate reserves to cover any unexpected demand for foreign exchange. This can be secured through foreign assistance, as in Central Europe, or by running a current-account surplus, which is likely to be the case for Russia and Ukraine. Note that this requires "investing" in foreign exchange, something that may be expensive under prevailing circumstances. Moreover, some measure of economic buoyancy must be ensured with an appropriate amount of competitive exportables. Perhaps foremost, the foreign-exchange and trade regimes must be loosened up to take advantage of the demand pull of a convertible currency and to change domestic economic structures according to real comparative advantages. But for the latter to obtain, the microeconomic sphere must be thoroughly reformed. To get a better grasp on this, a clear picture of the starting conditions is required.

## The Starting Conditions for Economic Transformation

To fully understand what is required to make functional use of a convertible currency in a manageable economic environment, the inherited trade and payment regimes and their ramifications for PETs must be crystal clear. Without going into the details (see Brabant 1987, 1989), it may be useful to identify their core peculiarities. Trade decisions under planning did not derive from scarcity calculations, but from the adopted economic model and development strategy, both of which sought to focus on industrialization in breadth while maintaining substantial domestic policy autonomy. This was enhanced through extensive reliance on bilateralism, notably in trade with Eastern partners. As a result, trade did not form a coherent component of the planned macroeconomy and was all but extraneous to the planned microeconomy.

Moving away from this reality to the market environment has been a slow process in the successor republics, in spite of bold ambitions. Even with courageous policies, the incipient changes under way constitute only the first building blocks of effective market systems. This suggests that the kind of adversities engendered through shock therapy are likely to be substantially larger than experienced in Czechoslovakia, Poland, or Yugoslavia, even after ad-

justing for differences in size and type of economies, as well as assuming that a sociopolitical consensus on the transformation exists; but the latter is not yet in sight. One reason is that these economies are pervasively destabilized and riddled with physical and human imbalances. Effective corrective measures in the larger republics can hold only through domestic policy stances in any case. Assistance from abroad can help on the margin, but be no more than that, given the nature of external links and the importance of trade in overall economic activity. All this has implications for the type of convertibility that should be considered in any broad-based package of assistance with reforms for the successor republics.

These pointers are not meant to argue against ruble convertibility. Rather, they suggest that the "plunge and learn to swim" approach may well be an erroneous label for "plunge and drown." Tying the hands of reformers by taking away all autonomy over monetary sectors is bound to take the country into a deep depression from which it may find it extremely difficult to extricate itself. Armchair economists may argue that the overall cost of such short-term pains, as compared to the discounted cost of moving more guardedly toward convertibility, is likely to be smaller. Leaving the precise calculation to others, I would argue the maxim: "better safe than sorry."

What, then, could usefully be done to pave the way as quickly as possible toward convertibility? As argued, cohesive domestic economic policies targeted at greater economic stabilization and the rudiments of market behavior must be put together and well under way. First and foremost, domestic stability has to be regained by controlling money supply and the budget, and indeed by beheading the party and industrial ministries, including all of their paraphernalia. Decisive steps with eradicating party affiliation have been ongoing, but large remnants of the monoparty system (such as the power of the bureaucracy, albeit now at the republican level, and management in state firms) remain to be tackled. A consensus on the cost of transition, as well as how quickly it should be absorbed and by whom, will have to be formed. Price liberalization as such is a cornerstone of this policy, but it can be no more than that. Without acting on the supply side through clear property rights, divesting state property, taking political decision makers out of the decision making about the allocation of capital resources, making the bulk of foreign exchange gradually available through monitored auctions for duly authorized agents (not capital transfers), and encouraging better intermediation between savings and investing, a broad economic depression [7] and lethargic policymaking offer the worst environment for credible convertibility. This certainly does not provide a worthwhile basis for committing substantial external resources in whatever form. It is even less desirable when, as in many successor Soviet republics, the prime impetus to change cannot possibly emanate from trade. This recommends a more evo-

[7] Admittedly, there is plenty of grey- and black-market activity going on that is preventing complete economic collapse. However useful as a short-term prop and palliative, such transactions based mostly on arbitrage and the questionable withholding of supplies from official channels does not strike me as the stuff that will enhance genuine markets.

lutionary approach to transition than the shock treatment championed by many observers.

Of course, opening up these economies and infusing them with greater rationality in the allocation of foreign exchange will be important contributors to the transition. Until near-paralysis through destabilization, I argued (Brabant 1990, 1991a, 1992c) the case for a four-stage transformation process, during which much greater transparency in the allocation of foreign exchange would have been essential. After putting in place measures to come to grips with the inherited imbalances through monetary reform and tight monetary and fiscal policies to steer the transition, auctions would have been held frequently and openly, with most of the foreign-exchange earnings earmarked for such allocation. The resulting exchange rate would not have been a true shadow exchange rate. But with some experience, as gathered earlier in Eastern Europe, [8] it would have infused greater certainty in foreign-exchange availability and buttress some measure of stability.

## Support for Ruble Convertibility?

The approach that is now widely advocated by the international community seeks to provide general financial and other support for the transition, while not meddling in domestic economic policymaking beyond ensuring that policy targets agreed upon in programs with the IMF are 'somewhat' adhered to. The mixed experiences gathered in Eastern Europe with this approach since 1989 should have induced a shift in emphasis in dealing with the successor Soviet republics, but that does not appear to have transpired to date.

Policymakers of Russia, following in the steps set earlier notably by Czechoslovak and Polish transition managers, have repeatedly emphasized the need for a sizable ruble stabilization fund to make solid progress with domestic transition on the basis of a stabilized ruble at a realistic exchange rate defined with available reserves. Details of the magnitude of the fund and the conditions for its use are still being debated. A support fund of around $6 billion would now appear to be in the offing, but precise burden sharing is yet to be worked out. It would be more of a psychological crutch than a reserve upon which Russia might wish to draw should the initial reaction to monetary stabilization be adverse (that is, beyond its own reserves). Its merits would largely derive from bestowing credibility onto Russia's unprecedented liberalization policies and, one would assume, further assuring tight macroeconomic policies while moving ahead with structural reforms. And the latter will be more critical for domestic liberalization, notably of prices and trading, than for foreign-trade liberalization for the reasons noted earlier.

What should then be expected as far as economic transactions are concerned? Well, if the correct exchange rate were chosen and some modicum of confidence instilled in domestic (and perhaps even foreign) economic agents, presumably the fund would not be touched, own reserves being adequate to blot up the short-term

[8] Rejecting the usefulness of this experience, as for Poland by Asselain (1991), confounds the environment in which the auctions were organized, as well as the restrictions placed on them, with the beneficial effects that were, and even more that could have been, reaped in this way.

excess demand for foreign exchange. But can a correct exchange rate be chosen under the prevailing circumstances and subsequently defended in the medium run so that current-account can be maintained, given the disarray engendered in the process of liberalization in any case? The first is doubtful. The latter depends on whether policymakers will commit to the nominal or real exchange rate, or at least manage the latter in such a way that it is not much eroded by "corrective inflation." The latter may be quite considerable for Russia, owing to the still prevailing imbalances, the highly monopolized industrial structures, nearly chaotic conditions, and no fiscal and monetary policy to speak of. Under those conditions, it seems rather implausible that the authorities could choose *the* correct exchange rate. The dispersion of the plausible range is such that, for the time being at least, there simply is no proper magnitude that can be defended in open foreign-exchange markets without substantial mobilizable reserves. Could the currency fund then be activated to defend the chosen rate, whatever its rationale may be?[9] If I am skeptical about this course for Russia, I am even more doubtful about the wisdom of emulating it for each of the other republics (Brabant 1992b). If Russia is going to find it hard to maintain convertibility with economic stability (hopefully at near full employment), it would seem even less plausible that most of the other republics can innovate domestic policies that will be open and based on some modicum of current-account convertibility for merchandise transactions. How, then, will the successor republics conduct their foreign economic relations?

Barring sufficient foreign-exchange reserves to weather the initial adversities of the transition and given that a rapid transition to currency convertibility (ruble or new republican ones) is rather implausible, the only alternative would seem to be a cutback in aggregate demand to levels that will permit a sustainable foreign-exchange situation. That compression may be very steep indeed, certainly more marked than experienced in Central Europe and really required in the end as present economic activity is squeezed out by the enormous devaluation either for lack of demand or for inability to afford the sharply risen cost of necessary imported inputs.

Is the situation, then, hopeless? Not really for as long as some semblance of orderly trade and payment relations among the former Soviet republics can be maintained, while making steady progress with structural reforms without inhibiting macroeconomic stability too egregiously. These tasks could best be fulfilled by providing international credibility to reforms and indeed participation in the reform process as innovated domestically and to do so in a coherent fashion for all successor republics, and perhaps other PETs, willing to move forward with the establishment of market-based decisions. This could be achieved through a substantial global effort aimed at providing jointly committed assistance to bolster the transformation under international surveillance (UNECE 1991). As far as trade is concerned, it should earmark some funds

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[9] The latest news is that sometime in July Russia will adopt a "floating rate," but that the central bank will attempt to stabilize it within a band of some 7.5 percent either way around some R80 per dollar (*The New York Times*, 6 May 1992, p. 8) or R60–80 per dollar (*Financial Times*, 15 May 1992, p. 2).

for a facility to ensure current payments within broadly agreed-upon guidelines. Supervision would be required, in the narrow sense, to reconcile payment requirements with available funding and, in the broad sense, to ensure that foreign-trade adjustment policies are conceived as much as possible within the context of broader transition policies. This in and of itself should be only one component of a broader assistance program whose principal tasks should be providing technical assistance to manage demand, but also to forge expeditiously ahead with supply measures. Certainly, some foreign-assistance funds (loans as well as grants) would be required and these must initially be appropriated through official multilateral or bilateral channels. Every effort should be made to gear the program toward infusing greater certainty in the socioeconomic environment, provided the politics are ambient as well, and thus to lure private capital into the successor Soviet republics.

An essential component of such a dovetailed international effort must be mobilizing the PETs for generating as much self-help as circumstances allow and economic rationality justifies. Thus, there is no point in these countries' artificially obstructing their intragroup trade, yet persuading Western policymakers to provide ample assistance. Reinforcing mutual commercial ties would be very helpful in shoring up the rebuilding of trade in conjunction with industrial restructuring. Not only would it support the reform trends from within, such a strategy would also transfer Western assistance in a form that least interferes with the emerging economic incentives for microeconomic actors. And it would stave off either the pressure on Western markets to accommodate significant trade diversion or the contraction in levels of domestic economic activity in the PETs during the restructuring process for reasons discussed earlier.

## Conclusions

This paper has taken two positions that bear directly on desirable movement toward ruble convertibility. One is that the tail cannot wag the dog, and hence that successful transformation of the PETs in general and the successor Soviet republics in particular will primarily depend on the comprehensiveness and speed of domestic reforms. But moving toward currency convertibility, if it could be done at a comparatively small cost, would certainly impart a greater degree of commitment—hence credibility—to transformation. I fear that this is not likely to be met for many reasons, but basically because of the disarray in domestic economic policies and latent meta-economic antagonisms that are inhibiting intragroup cooperation. In my view, little can be gained from currency convertibility as defined when there is not even a semblance or promise of macroeconomic stability, competition, firm property rights, full microeconomic autonomy, loosened labor relations, effective intermediation, and the like. One element of this agenda should be arranging for more flexible access to foreign exchange, not necessarily moving to limited convertibility, until the conditions for sustainable convertibility at comparatively high levels of employment can be met (Brabant 1992c). I just do not see how a proper (credible and sustainable) ruble exchange rate could be se-

lected at this stage. The auction market might impart some guidance, as it did at some point in the three cases that now have had experience with 'limited convertibility.'

I have also argued the case *for* providing substantial Western assistance to the transitions in the PETs, but of a fundamentally different character than what has thus far been mooted. It would call for a much more involved, comprehensive approach to managing global economic interdependence in general and how the transition economies can be brought into that regime in a constructive manner. This would require fuller commitment to jointly shape the transitions on the basis of domestically innovated programs. Whether this task can best be entrusted to the Fund without fundamentally changing its mandate—managing demand to ensure short-term current-account balances—is doubtful. Gaining current convertibility for the ruble and other currencies of PETs—new and old—should then form but one element of a much more demanding transformation agenda.

## Bibliography

Altman, Oscar L., "L'or russe et le rouble," *Economie Appliquée*, 1962:3/4, 354–72.

Asselain, Jean-Claude, "Convertibility and economic transformation," *European Economy*, 1991, special issue No. 2, pp. 215–41.

Bofinger, Peter, "The transition to convertibility in Eastern Europe: a monetary view," in *Convertibility in Eastern Europe*, edited by John Williamson (Washington, DC: Institute for International Economics, 1991a), forthcoming.

———, "Options for a payments and exchange-rate system in Eastern Europe," *European Economy*, 1991b, special issue No. 2, pp. 243–61.

Brabant, Jozef M. van, *Adjustment, structural change, and economic efficiency—aspects of monetary cooperation in Eastern Europe* (Cambridge and New York: Cambridge University Press, 1987).

———, *Economic integration in Eastern Europe—a handbook* (Hemel Hempstead: Harvester Wheatsheaf and New York: Routledge, 1989).

———, *Remaking Eastern Europe—on the political economy of transition* (Dordrecht-Boston-London: Kluwer Academic Publishers, 1990).

———, *Integrating Eastern Europe into the global economy—convertibility through a payments union* (Dordrecht-Boston-London: Kluwer Academic Publishers, 1991a).

———, "Convertibility in Eastern Europe through a payments union," in *Convertibility in Eastern Europe*, edited by John Williamson (Washington, DC: Institute for International Economics, 1991b), pp. 63–95.

———, *Privatizing Eastern Europe—the role of markets and ownership in the transition* (Dordrecht-Boston-London: Kluwer Academic Publishers, 1992a), forthcoming.

———, "The new East and its preferred trade regime—the impact of Soviet disintegration," in this volume (1992b).

———, *Ruble convertibility, external and internal equilibrium, and perestroyka* (Cologne, Berichte des Bundesinstitut für ostwissenschaftliche und internationale Studien, 1992c:6).

Colombatto, Enrico, "CMEA, money and ruble convertibility," *Applied Economics*, 1983:4, 479–506.

Edwards, Richard W., Jr., *International monetary collaboration* (Dobbs Ferry, NY: Transnational Publishers, 1985).

Gianviti, François, "The International Monetary Fund and external debt," *Recueil des Cours*, 1989:3, 213–86.

———, "Convertibility" (Washington, DC: The International Monetary Fund, office memorandum of 23 October 1990).

Gold, Joseph, "The Fund's concept of convertibility," *IMF Pamphlet Series*, No. 14 (1971).

IMF, *Articles of agreement* (Washington, DC: International Monetary Fund, 1978).

———, *Yearbook of foreign exchange restrictions* (Washington, DC: International Monetary Fund, 1991).

Indjikian, Ruben, "Rouble convertibility and the Soviet economic reform: an interdependent paradigm," *The Amex Bank Review*, 1991:4, 41–61.

Kazmin, Andrey I. and Andrey V. Tsimaylo, "Towards the convertible rouble: the case for a parallel currency," in *Convertibility in Eastern Europe*, edited by John Williamson (Washington, DC: Institute for International Economics, 1991), forthcoming.

Kornai, János, *The road to a free economy—shifting from a socialist system: the example of Hungary* (New York: W.W. Norton & Company, 1990).

Murrell, Peter, "'Big bang' versus evolution: East European economic reforms in the light of recent economic history," *PlanEcon Report*, 1990:26.

Newbery, David M., "Reform in Hungary - sequencing and privatisation," *European Economic Review*, 1991:3, 571–80.

Shafei, Kurosch, "Der Weg in die Konvertibilität für die sowjetische Währung," *Osteuropa-Wirtschaft*, 1990:4, 327–51.

UNECE, *Economic Bulletin for Europe*, Vol. 43 (1991) (New York: United Nations).

Williamson, John, *The economic opening of Eastern Europe* (Washington, DC: Institute for International Economics, 1991).

# U.S. COMMERCIAL RELATIONS WITH RUSSIA AND THE OTHER SUCCESSOR STATES: OPPORTUNITIES AND OBSTACLES

By William H. Cooper *

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## SUMMARY

Commercial ties played a relatively insignificant part in the history of U.S.-Soviet relations. They were a function of the climate in the overall U.S.-Soviet relationship that was heavily dominated by national security and foreign policy considerations. Furthermore, the Soviet economic structure and policies that were based on achieving autarky, impeded foreign commerce.

The radical reshaping of the U.S.-Soviet relationship in the last few years from one of confrontation to one of cooperation and the efforts by the Soviet Union and, later, by some of the successor states, to shed the legacies of a Stalinist, centrally planned economy and a Communist political system have produced the most positive political environment for U.S. commercial relations in the region since the end of World War II. Russia and the other successor states need investment and imports in a broad range of sectors, especially energy production, agriculture, telecommunications, computers, and electronics. However, economic and structural impediments remain that will likely limit the expansion of U.S. trade and investment with the former Soviet Union, at least in the near term.

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## Historical Context

Commercial ties played a relatively insignificant part in the history of U.S.-Soviet relations. They were a function of the climate in the overall U.S.-Soviet relationship that was heavily dominated by national security and foreign policy considerations—the Soviet military threat to the United States and its allies; Soviet military and other activities in third countries; and the lack of Soviet adherence to internationally recognized standards of human rights.

Perhaps no policy symbolized the political foundation of the U.S.-Soviet commercial relationship more than the U.S. denial of most-favored-nation (MFN) status for the U.S.S.R. Although this policy probably had little effect on U.S.-Soviet trade flows, it cast a shadow over the bilateral commercial relationship.

The United States denied MFN status to the Soviet Union under various statutory authorities since 1951. Most recently, under the so-called Jackson-Vanik amendment (section 402) of the Trade Act of 1974, the President has been prohibited from extending MFN status to the Soviet Union (and other Communist countries, except Poland and Yugoslavia) unless it granted its citizens the right of free emigration and concluded a trade agreement with the United States.

The Jackson-Vanik amendment also denied Soviet access to U.S. official trade and investment financing—from the Export-Import Bank, Commodity Credit Corporation (CCC), and the Overseas Private Investment Corporation (OPIC). In addition to the Jackson-Vanik amendment, other U.S. statutes restricted U.S. financing to the Soviet Union. The so-called Byrd amendment (section 613) to the Trade Act of 1974 placed a $300 million ceiling on loans, guarantees, insurance, or combinations of these to the U.S.S.R. by the U.S. Export-Import Bank. The Stevenson amendment (section 7(b)) of the Export-Import Bank Act of 1945 also imposed a $300 million ceiling and also placed a $40 million subceiling on financing of exports related to the research or exploration of fossil fuel energy resources and completely prohibited financing of exports for the production, processing, or distribution of such resources. Section 2(b)(3) prohibited transactions of more than $25 million for the export of goods and services involving research, exploration, or production of fossil fuel energy resources unless the Export-Import Bank submitted to Congress, 25 continuous session days before such approval, a detailed statement describing and explaining the transaction.

Furthermore, Section 2(b)(2) of the Export-Import Bank Act prohibited Bank financing for exports to any Marxist-Leninist country, including the Soviet Union. However, President Nixon issued a determination in October 1972, as stipulated under the statute, that it was in the U.S. national interest to carry on such transactions. This determination remains in effect. Separate determinations were required for any transaction over $50 million.

Throughout the Cold War period, the United States and its allies strictly controlled exports of dual-use goods and technologies, that is, high-technology items for civilian use that could also have military applications, so as not to enhance the military capabilities of the Soviet Union and its Warsaw Pact allies. The United States, at various times, imposed unilateral foreign policy controls on exports

of goods and technologies critical to the Soviet economy, in response to Soviet actions or policies deemed threats to U.S. national interests. [1]

U.S. national security and foreign policy export controls and the other restrictions on economic activities with the Soviet Union put commercial relations in the context of overall U.S. national interests which were dominated by national security and foreign policy concerns. However, this approach was criticized at times by some members of the American business community, as well as others, as preventing them from building a solid foundation for developing a long-term commercial relationship with the Soviet Union. They also asserted that U.S. policy placed American exporters at a commercial disadvantage vis-á-vis their West European competitors, whose governments were less inclined to use export controls. During the Cold War, bilateral commercial relations picked up during "thaws" in tensions, such as the brief period of detente in the early 1970s. But relations froze again and with them any moves towards a positive commercial relationship.

Even without the basic mistrust that was symptomatic of the Cold War period, it is unlikely that U.S.-Soviet trade would have reached high levels. The Soviet economic structure and policies, that were based on achieving autarky, impeded foreign commerce. Under this economic model, foreign trade was relegated to being a residual factor in the Soviet economy. Imports were to be used to relieve bottlenecks, and exports were used to pay for imports.

Other Soviet laws and practices restricted foreign commercial activity. From the 1920s and until the mid-1980s, Soviet law prohibited foreign investment in the Soviet Union. The inconvertibility of the ruble restricted multilateral trade with Western countries and encouraged the use of less efficient barter or countertrade arrangements. Until the late 1980s, all foreign trade transactions were conducted through the Soviet Ministry of Foreign Trade, impeding Western foreign suppliers' contacts with Soviet customers.

Perhaps the largest economic impediment has been the inability of Soviet producers to manufacture goods of a sufficient quality for export to the West. Therefore, Soviet imports have been constrained by the hard currency that the Soviet Union could earn in the West through the sale of oil, natural gas, other petroleum products, and various raw materials.

Because of the political and economic impediments, the United States and the Soviet Union remained unimportant to each other as trade partners. At its peak in 1989, exports to the Soviet Union accounted for only 1.2 percent of total U.S. exports, and imports from the Soviet Union accounted for less than 0.5 percent of total U.S. imports. U.S. exports to the Soviet Union accounted for about 4 percent of total Soviet imports, and U.S. imports accounted for 0.7 percent of Soviet exports in 1989. [2] The United States has also accounted for a small portion of Soviet trade with the West. In 1989, (West) Germany was the leading trader accounting for 18 per-

[1] U.S. export controls are discussed in more detail below.

[2] USSR Ministry of Foreign Economic Relations. *Foreign Economic Relations of the USSR in 1989.* Moscow. 1990. Translated by Foreign Broadcast Information Service. Washington. October 26, 1990. p. 17.

cent of Soviet Western trade, while the United States was fifth with 9 percent.[3]

TABLE 1. U.S. Trade with the Soviet Union, 1986–91

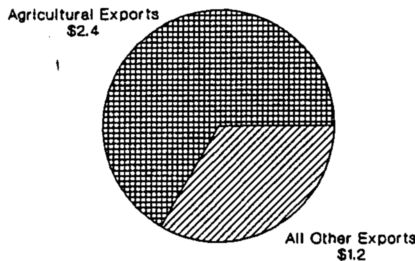
(billions of U.S. dollars)

| | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|---|
| U.S. Exports | $1.2 | $1.5 | $2.8 | $4.3 | $3.1 | $3.6 |
| U.S. Imports | 0.6 | 0.4 | 0.6 | 0.7 | 1.1 | 0.8 |
| U.S. Balances | 0.7 | 1.1 | 2.2 | 3.6 | 2.0 | 2.8 |

Source: U.S. Department of Commerce

Furthermore, the range of commodities traded has been very narrow. About two-thirds of U.S. exports have consisted of wheat, corn, and other agricultural goods much of it traded under a bilateral agricultural agreement. (See figure 1.) U.S. nonagricultural exports to the Soviet Union have included civil engineering plant and equipment, automatic data processing equipment, and industrial machinery.

Figure 1. US Exports to the USSR, 1991
(Billions of Dollars)

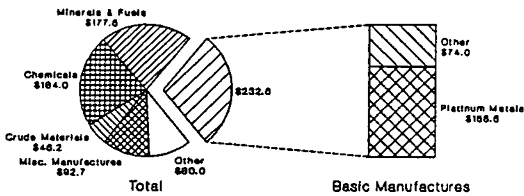



Source: U.S. Department of Commerce

U.S. imports from the U.S.S.R. have largely consisted of raw materials and semi-processed goods such as chemicals and metals. (See figure 2.) Among the top U.S. imports from the U.S.S.R. have been noncrude oil, platinum group metals, radioactive and associated materials, vodka, and fertilizers.

[3] Ibid., p. 7, 11, 16.

Figure 2. US Imports From the USSR, 1991
(Millions of Dollars)




Source: U.S. Department of Commerce

## THE POLITICAL AND ECONOMIC ENVIRONMENT CHANGES

The radical reshaping of the U.S.-Soviet relationship in the last few years from one of confrontation to one of cooperation and the efforts by the Soviet Union and, later, by some of the successor states, to shed the legacies of a Stalinist, centrally planned economy and a Communist political system have produced the most positive political environment for U.S. commercial relations in the region since the end of World War II. From the mid-1980s to the early 1990s, U.S. policy shifted from discouraging to openly encouraging commercial relations with the Soviet Union in order to support the development of fundamental political and economic reforms.

In January 1985, three months before Gorbachev attained leadership of the Soviet Union and ushered in his policies of *glasnost'*, *perestroika*, and new thinking in foreign policy, a subcabinet-level meeting of a U.S.-Soviet Experts Group met to discuss ways to improve trade relations. This group, established under the 1974 bilateral Economic, Industrial, and Technical Cooperation agreement, was to meet annually, but had not met since 1978, a victim of increased U.S.-Soviet tensions in the wake of the Soviet invasion of Afghanistan. In May 1985, the U.S.-U.S.S.R. Joint Commercial Commission, a cabinet-level, bilateral body first established in 1972, met for the first time since 1978 and agreed to reestablish some channels of trade promotion and access that had broken down during the previous seven years.

From the mid-1980s and into the 1990s, the United States and the Soviet Union made progress in reducing the mutual military threat. In addition, the Soviet Union decreased or eliminated its military presence in southern Africa, Afghanistan, Eastern Europe,

and other countries. In response, the United States reduced the policy measures that had discouraged bilateral trade and introduced policies and programs to boost trade and investment in the Soviet Union.

### U.S. EXPORT CONTROLS [4]

During the post-World War II period, U.S. export control policy has been directed at protecting the strategic interests of the United States and promoting U.S. foreign policy interests. The U.S. Government coordinates export controls with its major Western Allies through the Coordinating Committee on Multilateral Export Controls (CoCom). CoCom members include Japan, Australia, and all members of NATO except Iceland.

National security export controls on "dual-use" items (i.e., civilian technologies or goods with potential military application) have been used primarily to restrict exports to the former Soviet Union and other Communist countries. Foreign policy controls relate to the broad issues of human rights, anti-terrorism, regional stability, chemical and biological warfare, missile technology, and nuclear non-proliferation. Although the Export Administration Act of 1979, the principal vehicle for imposing export controls, distinguishes between national security and foreign policy controls, the executive branch has sometimes blurred the distinction between these two types of controls.

#### *National Security Export Controls*

The first major postwar export control law, the Export Control Act of 1949, authorized a virtual embargo on exports to Communist countries. Controls were gradually relaxed in the late 1950s and throughout the 1960s. The enactment of the Export Administration Act of 1969 represented a major shift in U.S. export control policy. Although national security export controls were maintained, the 1969 Act called for the removal of controls on goods and technologies freely available to Communist countries from non-U.S. sources and on items that did not contribute significantly to the military strength of potential adversaries. The Export Administration Act of 1979 and subsequent amendments have maintained the basic emphasis on export expansion first introduced by the 1969 Act.

Despite the 1979 Act's emphasis on the importance of exports, U.S. export controls became more restrictive in the early 1980s. The Carter administration imposed significant foreign policy controls on the Soviet Union in response to the Soviet invasion of Afghanistan, and the Reagan administration subsequently tightened controls on national security grounds. On a number of occasions, Reagan administration spokesmen expressed concern about the contribution of Western technology to Soviet military power. The administration implemented more restrictive licensing procedures and increased the government's resources for enforcing export control regulations. It strengthened the role of the Defense Depart-

[4] This section was written by Glennon J. Harrison, Specialist in International Trade and Finance, Economics Division, Congressional Research Service.

ment in reviewing applications for exports of sensitive technologies to some Western countries, as well as to Communist countries, and pressured Allied governments to adopt more restrictive export control policies.

In January 1990, the Bush Administration announced that it would conduct a strategic review of U.S. export control policies to assess the changing nature of the strategic threat posed by the Soviet Union and its Warsaw Pact allies. On May 2, 1990, the Administration announced that it had completed its evaluation and, based on its findings, would make a number of recommendations to its CoCom allies for modernizing CoCom, including replacing the existing commodity control list with a new "core list." On June 6 and 7, 1990, a High Level Meeting of CoCom considered U.S. and other proposals for the liberalization of export controls, and agreed to the most sweeping reforms ever made by that organization. Agreement was reached to work toward the development of the proposed Core List by December 1990. In late 1990, the Administration formally presented its proposal for the new Core List at CoCom. Disagreements between the United States and other CoCom members, largely over the degree to which telecommunications and computer technologies could be relaxed, prolonged the negotiations. At the May 1991 CoCom meeting, the members adopted the Core List and agreed to implement it by September 1991. On September 1, 1991, the U.S. Commodity Control List (CCL) was modified to reflect the CoCom Core List. In early June 1992, CoCom members agreed to loosen restrictions on exports of telecommunications equipment to Russia and the other republics of the former Soviet Union in order to facilitate the development of a modern telecommunications infrastructure in those countries. The agreement on telecommunications equipment was largely viewed by the U.S. telecommunications industry as a significant step forward.

The conditions that led the United States and its western allies to adopt comprehensive controls on exports to the East bloc during the post-World War II period have changed profoundly since the 1989 revolution in Eastern Europe. The failed coup of August 1991 brought to an end not just Communist control of the Soviet Union, but the Soviet Union as well. The threat assessment that justified export control regimes in the past has radically changed. In January 1992, the director of the Defense Intelligence Agency, Lieutenant General James Clapper, testified to the Senate Armed Services Committee:

> Last month's formal end to the U.S.S.R. fundamentally changed the national security environment. The elimination of communist rule in the former U.S.S.R., and the emergence of independent successor states have removed, for at least the near term, the potential for a unified military challenge and threat to the West. I see virtually no likelihood of premeditated Russian or Commonwealth military aggression against the U.S. and its allies. The intentions of the new Commonwealth states towards the West have clearly changed, and, overall, the military capabilities of Russia and the successor states are in profound decline.

In response, U.S. and multilateral export control policies have gradually shifted from a focus on the Soviet threat to the uncertainties and risks associated with former Soviet republics that continue to possess nuclear weapons. Because of these uncertainties and risks, national security export control policies continue to focus on the Russian Republic and the other new republics of the former Soviet Union, as well as some of the former Soviet client states in Eastern Europe. (In May, Hungary was removed from the CoCom list of proscribed countries—the first country to be formally removed from the list; other East European countries may also eventually be removed from the list). At the June 1-2, 1992, CoCom meeting, members agreed to establish an informal CoCom Cooperation Forum on Export Controls. Russia and the other republics of the former Soviet Union will be invited to participate in the new group, which is viewed as a means of establishing a dialogue and cooperation in the area of export controls. The goals of the Forum include establishing: "significantly wider access by those countries to advanced Western goods and technologies; procedures for ensuring against diversion of these sensitive items to military or other unauthorized users; and further cooperation on matters of common concern on export controls." [5]

Even as the "Soviet threat" has receded, however, other threats and challenges to the international order, as well as to U.S. national security, have achieved greater prominence. The growing proliferation of technologies of mass destruction—missile, chemical, biological, and nuclear—has raised concern that export controls have been inadequate to safeguard important foreign policy and national security interests. The chaotic conditions in the republics of the former Soviet Union have caused some to worry that the sale of weapons of mass destruction may pose a serious threat to U.S. and Western security interests. In May 1992, the United States imposed trade sanctions against the Russian space agency Glavkosmos and India's Space Research Organization over the proposed sale by Glavkosmos of missile technology covered by Annex 1 of the Missile Technology Control Regime (MTCR). [6] The State Department determined that Glavkosmos is engaged in missile technology proliferation activities. [7] Although Russia is not a member of the MTCR, it has agreed to abide by its provisions.

*Foreign Policy Export Controls*

During the Cold War, U.S. Presidents used foreign policy controls to signal U.S. displeasure at Soviet policies and actions. In August 1978, the Carter Administration imposed restrictions on exports of certain equipment and technology used in the exploration of oil and natural gas in response to Soviet and Cuban activities in southern Africa and to the trials of Soviet dissidents. At the end of 1979 and the beginning of 1980, the Carter Administration imposed

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[5] The White House. Office of the Press Secretary. *CoCom Issues*. June 17, 1992.

[6] MTCR members include the members of NATO, Australia, Japan, New Zealand, Sweden, Austria, and Finland. Bureau of National Affairs. *International Trade Reporter*. May 13, 1992. p. 828.

[7] Department of State. Office of the Undersecretary for International Security Affairs. Determination Regarding Missile Technology Proliferation Activities of Foreign Persons. *Federal Register*. May 18, 1992. p. 21143.

additional foreign policy export controls, including restrictions on the export of agricultural products, to protest the Soviet invasion of Afghanistan. At the end of 1981 and the beginning of 1982, the Reagan Administration imposed export controls to show U.S. displeasure at Soviet complicity in the Polish government's imposition of martial law.

Improving U.S.-Soviet relations were reflected in reductions in foreign policy export controls. In January 1987, the Commerce Department removed foreign policy controls imposed in 1978 on non-strategic oil and gas equipment and technology exports to the Soviet Union. The then-Secretary of Commerce, Malcolm Baldrige, indicated that the availability of similar equipment and technology from other sources undermined the unilateral controls and harmed the American gas and oil industry. In May of 1989, President Bush lifted the "no exceptions" policy to granting licenses for technology exports to the Soviet Union through CoCom, a policy that had been in effect since the Soviet invasion of Afghanistan. And in February 1990, the Commerce Department removed restrictions on exports of U.S. equipment and technology for the Kama River and Zil truck plants imposed after the invasion of Afghanistan.

THE BILATERAL TRADE AGREEMENT AND MFN

Under the Jackson-Vanik amendment, two conditions must be fulfilled for the Soviet Union to receive MFN. First, the President must waive the requirement of the country's compliance with the Jackson-Vanik restrictions. He did so in December 1990, to permit the Soviet Union to receive agricultural credit guarantees. In June 1991, he extended the waiver for one year. After the dissolution of the U.S.S.R., President Bush waived the restrictions for 12 of the former republics until July 1993. [8]

Under the second condition, the United States must conclude a trade agreement with the Soviet Union, subject to congressional approval by a joint resolution, that includes mutual MFN and other conditions. On December 9, 1991, President Bush signed into law H.J. Res. 346 (P.L. 102-197) enacting a bilateral trade agreement that he and Soviet President Gorbachev signed in June 1990. [9] This agreement was the second U.S.-Soviet bilateral trade pact since the onset of the Cold War. [10]

However, the Supreme Soviet, the parliament of the U.S.S.R., never ratified the agreement before it voted itself and the U.S.S.R. out of existence on December 26, 1991. The Bush Administration, in consultation with congressional leaders, has been seeking ratifi-

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[8] The former Soviet Baltic Republics of Estonia, Latvia, and Lithuania were removed from Jackson-Vanik amendment's coverage with the enactment of H.R. 1724 (P.L. 102-182).

[9] President Bush delayed submission of the signed trade agreement to the Congress for approval until after the USSR Supreme Soviet enacted into law free emigration guarantees.

[10] In 1972, during the period of detente, the two countries concluded a similar agreement, but the Soviet Union would not accept the conditions of the Jackson-Vanik and Byrd amendments to the Trade Act of 1974 and the Stevenson amendment to the Export-Import Bank Act that were subsequently enacted. It refused to let the trade agreement enter into force. For more information on the 1972 agreement, see Heiss, Hertha W., Allen J. Lenz, and Jack Brougher. *United States-Soviet Commercial Relations Since 1972.* in U.S. Congress. Joint Economic Committee. *Soviet Economy in a Time of Change, Volume 2.* A Compendium of Papers. Committee Print, 96th Cong., 1st Sess. Washington, U.S. Govt. Print. Off., October 10, 1979. p. 193-196.

cation of the trade agreement by Russia and the other successor states individually.[11]

The agreement requires the two countries to extend mutual MFN, that is, the products of each receive nondiscriminatory tariff treatment by the other.[12] However, MFN is not expected to change patterns of U.S. trade with the former Soviet Union much in the near term. The countries of the former Soviet Union export mostly raw materials and semi-processed goods the tariffs on which are low or zero on both a MFN and non-MFN basis. In a July 1990 study, the GAO calculated the average imputed U.S. tariff on the top 35 leading Soviet exports to the world in 1986-89 on a MFN and non-MFN basis. GAO concluded that the average tariff for all imports from the Soviet Union would decrease less than 1 percent and that extending MFN would have little effect on the volume and composition of U.S. imports from the Soviet Union.[13] This would change in the longer term if the higher valued-added industries in the former Soviet states become more competitive.

In addition to MFN, the trade agreement contains provisions to improve conditions for trade and business in the former Soviet republics that might have a greater impact than MFN in the near term. One provision, for example, would speed up the process for American companies to receive accreditation to establish an office in the former Soviet states. It would also improve access to office space for American companies and would eliminate restrictions on hiring and paying local nationals. Another provision would require repatriation of hard currency income and the establishment of local bank accounts in domestic and foreign currencies. Still another would commit both countries to protect the intellectual property rights, that is, the copyrights, patents, and trademarks, of the nationals of the other state from infringements, and to adhere to the international agreements that govern intellectual property rights—the Paris Convention, the Universal Copyright Convention, and the Berne Convention.

Attached to the agreement are ten side letters that have equal force of the agreement. One side letter reconfirms arrangements that were set down in 1972 for the settlement of the Soviet Lend-Lease Debt to the United States. At that time, the Soviet Union agreed that it would pay off the outstanding balance of $722 million by the year 2001. As agreed, the Soviet Union made initial, unconditional payments of $48 million. The balance of $674 million was to be paid in equal installments upon the Soviet Union receiving MFN treatment from the United States. But the Soviet Union ceased making payments when the 1972 trade agreement, and along with it Soviet MFN, fell through. The other side letters cover such issues as trade in textiles and wearing apparel, the accessibility of commercial information by American companies, and bilateral trade in tourism.

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[11] As of July 1992, Russia, Armenia, Ukraine, and Moldova had ratified the agreement.

[12] References to the U.S.-Soviet trade agreement are from U.S. President, 1989- (Bush). *Extending Nondiscriminatory Treatment to the Products of the Union of Soviet Socialist Republics.* House Document No. 102-127, 102d Cong., 1st Sess. Washington, U.S. Govt. Print. Off., 1991. 48 p.

[13] U.S. General Accounting Office. *International Trade: Soviet Export Data.* Briefing Report to the Chairman, Committee on Finance, U.S. Senate. GAO/NSIAD-90-209BR. July 1990. p. 14.

In addition to the trade agreement, the United States has been negotiating bilateral investment and taxation treaties with the former Soviet republics. These treaties would protect American investors from double taxation on income earned in the former Soviet states and would provide for repatriation of profits, compensation in the case of expropriation, and a dispute settlement process. [14]

U.S. OFFICIAL TRADE AND INVESTMENT FINANCING

The Presidential waivers of the Jackson-Vanik restrictions since December 1990 have made Russia and the other successor states eligible for U.S. official trade financing assistance from the Commodity Credit Corporation and the U.S. Export-Import Bank. Furthermore, on April 4, 1992, H.J. Res. 456 was enacted that repealed the Byrd amendment of the Trade Act of 1974 and the Stevenson amendment of the U.S. Export-Import Bank Act. This measure removes the $300 million ceiling on Export-Import Bank financing to the former Soviet Union. Particularly important to near term U.S. trade and investment prospects, the measure lifts the restrictions on Export-Import Bank financial assistance for the oil and natural gas industries in the former Soviet Union.

The Export-Import Bank was founded in 1934 to encourage exports to the Soviet Union but no loans were made because the Soviet Union failed to repay pre-revolutionary debts to the U.S. Government and U.S. citizens. The bank's mission was later broadened to promote exports to other countries. [15] Its objective is to encourage U.S. exports by providing credits and credit guarantees to foreign customers at commercial or concessionary rates, depending on the borrower. From February 1973 to May 1974, before the enactment of the Jackson-Vanik amendment, the Bank extended $469 million in credits that the Soviet Union paid back on time. As of March 1992, the Bank had applications for financial assistance for $2 billion in exports to the former Soviet Union. [16]

Through the CCC, the U.S. Department of Agriculture promotes U.S. exports of agricultural products by extending credit guarantees to foreign customers. These credit guarantees had become important in the late 1980s and into the 1990s as Soviet hard currency reserves became constrained and the Soviets found it difficult to comply with their usual practice of paying for agricultural imports in cash or with short-term supplier commercial trade credits. [17]

On September 15, 1991, Secretary of State Baker issued a determination that waived the restrictions of section 620(f) of the Foreign Assistance Act of 1961, as amended, on the Soviet Union. Among other things, this measure allows the Overseas Private Investment Corporation (OPIC) to offer its programs in the Soviet

[14] As of June 1992, the United States had concluded bilateral investment treaties with Russia and Kazakhstan and a double taxation treaty with Russia. These treaties require Senate approval and the approval of the Russian and Kazakhstan parliaments.

[15] Hillman, Jordan Jay. *The Export-Import Bank at Work.* Wesport, Quorum Books, 1982. p. 4.

[16] Lawson, Eugene. *Statement Before the Subcommittee on Foreign Operations of the House Committee on Appropriations.* March 19, 1992. p. 3. (Unpublished).

[17] For more information on U.S. agricultural trade programs for the former Soviet Union, see U.S. Library of Congress. Congressional Research Service. *U.S. Agricultural Assistance to the Former Soviet Union: Policy Issues.* Issue Brief No. IB90139, by Remy Jurenas, May 4, 1992 (continually updated). Washington, 1992.

Union. OPIC is a financially self-sustaining agency that sells investment political-risk insurance against currency inconvertibility, expropriation, and war. It also provides direct loans for foreign investments made by American small business and investments loan guarantees for firms of any size. In addition, OPIC will provide assistance for funding pre-investment feasibility studies.

In the fall of 1991, OPIC had negotiated bilateral agreements with Estonia, Latvia, and Lithuania to set up programs and is expected to have similar agreements with the other former Soviet republics.[18] According to one recent OPIC estimate, U.S. investors have registered over 200 projects for OPIC insurance consideration in the former Soviet Union reflecting some $12 billion in potential investments in a wide range of sectors—energy, agriculture, telecommunications, manufacturing, and tourism. However, registration does not mean that the projects will necessarily come to fruition.

In addition to the Export-Import Bank, the CCC, and OPIC, the U.S. Government has opened up the Trade and Development Program (TDP) to the former Soviet states. The TDP is a government agency that provides funding for studies and consultation to determine the feasibility of major projects in developing countries. In doing so, it works with American firms to encourage exports as the major projects proceed.

## CHANGES IN THE (FORMER) SOVIET UNION

A central tenet of Gorbachev's economic *perestroika* efforts was to promote the integration of the Soviet Union with the world economy. To do so, Gorbachev instituted economic reforms that, at the time, were significant. He permitted, for the first time since the 1920s, foreign investment in the Soviet Union in the form of joint ventures, with a joint venture law enacted in January 1987. He eliminated the Ministry of Foreign Trade's (MFT) monopoly on foreign trade operations by permitting state enterprises and other entities to conduct business directly with foreign partners without having to go through the MFT's foreign trade organizations. He also permitted the business entities to retain a portion of their hard currency earnings rather than having to sell it to the foreign trade bank. In addition, Gorbachev introduced a limited role for the private sector through a law on cooperatives in May 1987.

During the Gorbachev era, the Soviet Union shed its long-held taboo on participating in international economic organizations. It sought and obtained observer status in the General Agreement on Tariffs and Trade (GATT) and obtained special status in the International Monetary Fund (IMF) and the World Bank.[19]

The Gorbachev economic reforms proved grossly insufficient in addressing the Soviet Union's economic problems. It also has been argued that they led to the rapid deterioration of the economy that contributed to the breakup of the Soviet Union. Nevertheless, the reforms launched the Soviet Union on a course of growing econom-

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[18] Berg, James D. *Statement Before the House Appropriations Subcommittee on Foreign Operations.* March 19, 1992. p. 10, 12. (unpublished)

[19] In 1992, all of the former Soviet republics had either achieved full membership or were in the process of receiving full membership in the IMF and the World Bank.

ic interdependence with the rest of the world by opening up to foreign trade.

With the demise of the Soviet Union, President Yeltsin is attempting to push Russia, and perhaps the other former Soviet states with it, toward becoming a market economy. On October 28, 1991, Yeltsin announced a program of radical economic reforms—lifting price controls and basing wages on productivity; balancing the government budget; constructing a viable banking system; establishing a social safety net; privatizing assets; breaking up state-run monopolies; and making the ruble convertible. In January 1992, Russia began implementing the program by removing price controls on most products. The other former Soviet states have enacted economic reforms more slowly if at all. If these countries become market economies, their industries should become more competitive and open up to foreign trade.

## U.S. Trade and Investment Opportunities

U.S. commercial relations in the future will probably be more closely tied with Russia than with any of the other former Soviet republics. Russia is the largest market with 51 percent of the population (Ukraine is second with 18 percent), with over 76 percent of the landmass (Kazakhstan is second with 12 percent), and with over 60 percent of the net material product (Ukraine is second with 16 percent.[20]) Furthermore, Russia is less dependent on trade within the former Soviet Union, than the other former republics. Russia conducts around 58 percent of its foreign trade within the former Soviet Union, while Ukraine, the next least dependent, conducts 79 percent.[21] In addition, with its endowment of natural resources such as oil and gas, precious metals, gold and diamonds, Russia is in a better position to earn hard currency than most of the other former republics.

The Stalinist economic model of central planning and autarky left a legacy of a broad range of economic sectors that are largely uncompetitive and in need of imports and investments. Russia's leaders have placed a high priority on modernizing the energy sector that will require equipment, technology, and capital. Some large American oil companies have already concluded or are exploring business arrangements in the energy sector in Russia, Kazakhstan and Azerbaijan.[22] Trade and investment in these sectors would seem to offer the best opportunities for returns in hard currency.

American companies and firms are presented with investment and trade opportunities in many other sectors—agriculture, especially with harvesting and storage equipment; food processing; medical equipment and technology; pharmaceuticals; the auto industry and other transportation sectors; computers and electronics; housing and other types of construction; and telecommunications.

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[20] Business International. The Economist Intelligence Unit. *Commonwealth of Independent States Country Report,* No. 1. 1992. p. 8,9.

[21] International Monetary Fund. *Economic Review: Common Issues and Interrepublic Relations in the Former U.S.S.R.*. Washington. 1992. p. 37.

[22] Tanner, James. Conoco Reaches Oil Agreement with Russia. *The Wall Street Journal,* June 19, 1992. p. A2.

The old Soviet Union also left a legacy of severe environmental problems that will require Western equipment and technology to clean up the air, water, and land, and pollution-control technologies for emerging industries. Furthermore, the Soviet Union under Gorbachev launched efforts to convert defense-related industries to civilian production. Russia and some of the other former Soviet republics have maintained these efforts and are seeking Western assistance in doing so.

## Obstacles to Trade and Investment Expansion

The changes in the bilateral foreign policy and political environment, the efforts of the former Soviet republics to build market economies, and the seemingly endless list of material needs of these emerging countries would appear to pave the way towards a massive expansion in commercial relations with the United States. However, economic and structural impediments remain, especially within Russia and the other successor states, that will likely constrain any expansion, at least in the near term.

### ECONOMIC AND FINANCIAL PROBLEMS

During its last two years, the economy of the Soviet Union was in the midst of a tailspin. According to the IMF, Soviet GDP dropped 2.0 percent in 1990, and 17.0 percent in 1991. [23] PlanEcon expects GNP in Russia and the other former Soviet republics to continue to decline as radical economic reforms hit and does not expect the economy to begin to recover until 1994. [24]

In 1990, the Soviet economy entered into an inflationary spiral as depressed revenues and increased expenditures forced the government to print increasing amounts of rubles. According to the CIA, retail prices rose 140 percent on average from December 1990 to December 1991, and industrial wholesale prices rose 230 percent. [25] At this writing, indications were that inflation was accelerating in Russia and the other former Soviet republics. Such macroeconomic instability creates social dislocation and discourages foreign investment and trade.

Furthermore, hard currency constraints will act as a brake on imports into the former Soviet Union from the United States. The Soviet hard currency position declined significantly in the late 1980s and into the 1990s. Soviet hard currency deposits in Western banks dropped from about $15 billion at the end of 1989 to slightly under $8 billion by the third quarter 1991. Furthermore, by September 1991, Soviet gold reserves reportedly stood as low as 240 metric tons (or $2.8 billion at market value) with the Soviet government having sold off two-thirds of its reserves for debt service and

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[23] International Monetary Fund. p. 41.

[24] PlanEcon, Inc. *Review and Outlook: Analysis and Forecasts to 1996 of Economic Developments in the Former Soviet Republics*. Washington. April 1992. p. xiv.

[25] Central Intelligence Agency and the Defense Intelligence Agency. *The New Russian Revolution: The Transition to Markets in Russia and the Other Commonwealth States*. A Paper Presented to the Joint Economic Committee's Subcommittee on Technology and National Security. June 8, 1992. (unpublished) p. 6. See also U.S. Library of Congress. Congressional Research Service. *The Russian Federation: Potential for Hyperinflation*. CRS Report No. 92-560 E, by Gail Makinen. Washington, June 22, 1992. 20 p.

imports the previous year.[26] The diminished hard currency position has placed the former Soviet Union in a much less favorable position to import than it traditionally has been.

At the time of its demise, the Soviet Union had a hard currency debt of $65.9 billion that Russia and the successor states are obligated to repay. Although the debt is moderate, the Soviet Union faced large payments on principal and interest coming due in 1990 and 1991 resulting in liquidity problems. While Russia will likely be in a favorable position to service the debt, most of the other former Soviet republics will face financial difficulties.[27]

POLICIES AND PRACTICES AS OBSTACLES

In March 1992, the Department of Commerce's International Trade Administration (ITA) published a report on the obstacles to trade and investment in the new countries of the former Soviet Union. ITA based the report on roundtable discussions with American business community representatives familiar with doing business in the area. Many of these obstacles are legacies of the Stalinist system or are symptoms of economies undergoing fundamental changes.[28] Therefore, they are not necessarily permanent.

The report identified a number of practices and policies:

- Poor infrastructure—communications, transportation, housing, and office space—makes it difficult to conduct business;
- Regulations and directives are promulgated daily, with many of them contravening those announced only weeks earlier. This makes long-term and even short-term business planning virtually impossible;
- Laws that are on the books are ignored or implemented inconsistently causing foreign companies to feel uneasy about the business environment within which they must operate;
- Taxes are introduced and applied many times without warning and in such as way as to discourage foreign business activity;
- Ownership of assets, particularly natural resources, remain unsettled leading to jurisdictional disputes among governing entities and to confusion for foreign partners over with whom they should be dealing;
- Intellectual property rights are not adequately protected making U.S. companies reluctant to introduce new ideas into these countries for fear of piracy;
- Sufficient commercial information on potential markets and on business partners does not exist making it difficult for American companies to evaluate their opportunities and potential business clients;
- The lack of adequate office space and the red tape involved in getting visas make doing business in the former Soviet Union time-consuming and expensive.

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[26] U.S. Library of Congress. Congressional Research Service. *The International Reserve Position of the Former Soviet Republics: Is the Cupboard Bare?* CRS Report 92-351 E, by Patricia A. Wertman. Washington, April 10, 1992. p. 6,9.

[27] See Wertman, Patricia A. *The External Financial Situation of the Former Soviet Union: From Riches to Rags* in this volume.

[28] U.S. Department of Commerce. International Trade Administration. *Obstacles to Trade and Investment in the New Republics of the Former Soviet Union.* Washington. March 1992. 49 p.

The report also identified some U.S. obstacles, including the lack of sufficient U.S. Government financial and informational support and the use of export controls. A Russian trade official in Washington also suggested that many American companies are not willing to work with partners in the former Soviet Union to overcome some of the obstacles and are losing out to European companies in establishing a presence there.[29]

Some progress is being made in removing these obstacles. President Yeltsin and his government are making some efforts to make the tax structure more conducive to foreign investment and trade and have made a priority of improving the infrastructure. The United States has made efforts to remove export controls on trade with the former Soviet Union.

## CONCLUSIONS AND PROSPECTS

U.S. economic relations with the former Soviet Union have entered a new era. For the first time since the Bolshevik Revolution of 1917, economic relations can be conducted on a commercial basis without the encumbrances of the Cold War rivalry. Most of the policy restrictions on trade and investment have been removed. The overall political climate with most of the former republics of the Soviet Union and the United States is one of cooperation rather than confrontation. The U.S. Government actively promotes U.S. trade and investment with the newly independent states of the former Soviet Union. And these countries, especially Russia, present trade and investment opportunities in a broad range of sectors.

Yet, economic and structural obstacles exist that will likely inhibit growth in U.S. economic relations with these countries in the near term. For the foreseeable future, the firms and investors with the best possibilities are those who can afford the time and money to invest in developing a long-term relationship with customers. In the past, these have been the large, multinational companies. Firms that offer products and services on which Russia or the other successor states place a high priority, such as in the energy, agribusiness, or medical fields, or firms that can develop alternative methods of receiving payment, such as countertrade, may also be able to make inroads into the markets. In the longer term, U.S. trade and investment could expand greatly, if economic reforms successfully lead to more efficient and open markets in Russia and in the other former republics.

[29] Interview with Alexander I. Yakovlev, Deputy Trade Representative for Russia in the United States. June 10, 1992.

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