

ECONOMIC ADJUSTMENT AFTER THE COLD WAR

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

ONE HUNDRED FIRST CONGRESS

FIRST AND SECOND SESSIONS

DECEMBER 12 AND 19, 1989, AND MARCH 20, 1990

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

35-140

WASHINGTON : 1990

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[Created pursuant to sec. 5(a) of Public Law 304, 79th Cong.]

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ECONOMIC ADJUSTMENT AFTER THE COLD WAR

TUESDAY, DECEMBER 12, 1989

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room 2359, Rayburn House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representatives Hamilton and Scheuer.

Also present: Richard F Kaufman, general counsel.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

Representative HAMILTON. The meeting of the Joint Economic Committee will come to order.

The purpose of this hearing is to examine the possible economic consequences of substantial reductions in defense spending.

Defense appropriations have been declining since 1985 when Congress effectively capped the military buildup initiated by President Reagan; actual outlays adjusted for inflation have been declining gradually for the past 3 fiscal years and will decline again in the current year.

Many are describing the current period of lessened superpower and East-West tensions as a winding down of the cold war. The recent actions by the Soviet Union to unilaterally withdraw some forces from Eastern Europe and its border with China, and the apparent evidence that Soviet defense spending is being cut back, are encouraging signs that it may be possible to reduce expenditures to something like peacetime levels.

But what are peacetime levels of defense spending in the present era, and if there are to be further and perhaps steeper reductions, how might they effect the economy? Obviously, the effects on the Federal budget and on the economy will vary depending upon the size, the rate, and the composition of the reductions. These factors will also influence how particular segments of society and individual communities and regions might be effected.

A central issue to be resolved is, what portion of the budgetary savings should be used to reduce the budget deficit, and how should the remainder be allocated? Equally important questions are, what should the Federal Government do to facilitate economic adjustment from defense cutbacks, and when should we do it?

It seems clear to me that the administration, the Defense Department, and Congress share responsibilities for making important decisions and for managing change in an orderly and constructive way.

The first order of business is to think about the changes taking place and how the economy is likely to respond. Today, we begin a new series of hearings on Economic Adjustment After the Cold War, and we are fortunate to have with us a panel of three widely respected experts on the defense budget to help us think about these matters.

Gordon Adams is the director of the Defense Budget Project, a nonprofit research organization that provides analyses of defense budget and policy issues. This organization has established itself as a nonpartisan and objective source of information and analysis since it was founded in 1983. Mr. Adams has written numerous studies on defense budget issues.

Jacques S. Gansler is senior vice president and director of The Analytic Sciences Corp., TASC, a defense consulting organization. He was formerly the Deputy Assistant Secretary of Defense for Material Acquisition, and prior to that, Assistant Director of Defense Research and Engineering. He has also held executive positions within the defense industry. Mr. Gansler is the author of two books about the defense sector, including "Affording Defense," published by the MIT press this year.

L. Douglas Lee is well known within the financial community, to the media, and to this committee where he served as a member of the staff from 1970 to 1980. Mr. Lee is vice president and chief economist of County Natwest USA, a financial consulting organization for institutional investors. Before that, he was a senior economist with Data Resources, Inc., where he managed DRI's Defense Information Services.

Doug, we are always very pleased to see our former staff alumni and you are especially welcome.

We would like each of you to spend about 10 minutes summarizing your views, and the rest of the time will be spent on questions from the committee.

Mr. Adams, we will proceed alphabetically, so you may proceed first.

STATEMENT OF GORDON ADAMS, DIRECTOR, DEFENSE BUDGET PROJECT, WASHINGTON, DC

Mr. ADAMS. I am grateful for the opportunity to testify on this subject, one that has evoked deep concern in recent weeks; that is, the impact of impending budget reductions on the Nation's economy and on local defense-related economies.

Let me summarize my statement briefly and then elaborate on each point in turn. First, although we lack final details on the proposed changes in the defense budget, the cuts currently under discussion are likely to be smaller and slower than suggested in recent public discussions and are likely to reduce force structure more heavily than weapons modernizations.

Second, because they are likely to be more limited and gradual than sometimes discussed, and because the defense industry cur-

rently has a considerable backlog of appropriated but unspent funds, the macroeconomic impact of defense budget cuts is likely to be small.

Third, the defense planning preference apparently being given to military hardware spending could mitigate site-specific, local economic impacts, making the adjustment process more manageable.

Finally, we have sufficient time before such changes take effect to define appropriate adjustment efforts, using America's experience of past economic adjustments. Even with defense spending cuts deeper than those under discussion in the executive branch, the transition for the defense sector of the economy would be complex, but manageable.

THE DEPTH OF THE PROPOSED BUDGET CUTS

Although there are no official documents, Secretary of Defense Richard Cheney has reportedly instructed the military services to respond to cuts in the defense budget of between \$125 and \$180 billion from Defense Department budget projections for fiscal years 1992 through 1994. Secretary Cheney's action is important since it is, I think, the first time since the early 1970's that a Secretary of Defense has informed the services that the outyears of the budget plan are unrealistic and need to be significantly reduced. This return to "fiscal realism" is to be commended.

The Cheney reductions, however, should not be overstated. They are not reductions from the current fiscal year 1990 budget level, but rather from Defense Department projections made earlier this year. The earlier projects would have increased fiscal year 1991 defense spending by 2.3 percent above inflation—above the fiscal year 1990 level agreed upon at the budget summit between the White House and Congress—followed by a 1 percent real—above inflation—increase in fiscal year 1992, and 2 percent real growth in both fiscal year 1993 and fiscal year 1994. Moreover, DOD appears to have adjusted this baseline to reflect higher inflation rates than were originally projected for fiscal year 1991 through fiscal year 1994 and to include slightly higher internal planning estimates.

Even reductions as deep as \$180 billion would leave U.S. defense funding in fiscal year 1994 at roughly a "nominal freeze," meaning defense budgets would remain at approximately the fiscal year 1990 level, with no increase for inflation. U.S. defense funding would still be higher, in constant dollars, than the budget levels typical in peacetime between 1954 and 1980. Moreover, were the top end of the range of Cheney cuts to be enacted by the Congress, the average annual decline in the defense budget, after inflation, would be only slightly faster than the budget reductions which began in fiscal year 1986, as you pointed out, Mr. Chairman.

The defense budget project calculates that budgets have fallen 2.8 percent per year after inflation since 1985; under the deepest Cheney proposal, they would fall roughly 3.5 percent after inflation. Were the Secretary to propose budget changes at the lower end—minus \$125 billion—average annual reductions would be closer to 2 percent, slightly slower than the declines of the past 5 years.¹

¹ See graph I, p. 22.

These numbers are consistent, moreover, with the reported changes in the fiscal year 1991 defense budget. Defense Department budget authority may be set at roughly \$295 billion, which would represent a slight, nominal increase over the fiscal year 1990 level, while outlay targets of \$292 to \$300 billion would represent roughly 2 percent nominal growth over the 1990 level. The real budget or spending reduction would be on the order of 2.5 percent, consistent with the fiscal years 1986–1990 budgets.

Of course, budgets may be cut further by the Congress, and it is unrealistic to assume that the Secretary's figures will prevail. Congressional cuts are more difficult to estimate, however, since there are likely to be a variety of proposals. I would not expect that Congress would go deeper than a nominal freeze in fiscal year 1991, which would represent a cut of roughly 4 percent after inflation. Even a cut of this magnitude, however, would not be significantly out of line with the rate since 1986.

THE ECONOMIC IMPACT OF DEFENSE CUTS: RECESSION OR DIVIDEND?

Reductions in the defense budget are frequently either feared as a potential cause of recession, or seen as an opportunity to reap a "peace dividend" to the benefits of the national economy. The Cheney reductions under discussion, even deeper cuts, are not likely to be a source of major disaster nor of significant benefit; their impact will depend on the state of the wider economy and on Federal policy, which I will get to in a moment.

It is important to note, at the start, that the defense share of major economic aggregates has declined significantly over the past 40 years. Choosing only peacetime years, the defense share of GNP fell from 11.1 percent in 1955 to 7.5 percent in 1965 and 5.0 percent in 1980. After increasing to 6.5 percent in 1986 at the peak of the Reagan buildup, the defense share of GNP fell to an estimated 5.8 percent in 1989. Defense employment—public and industry—as a share of national employment has also fallen from 10.6 percent in 1965 to an estimated 5.3 percent in 1989.¹

In other words, the role defense spending plays in the national economy has diminished since the 1950's. The kind of change under discussion today—an annual real decline of 2 to 4 percent—would have only a small effect on these measures. The quality of that impact depends greatly on the overall state of the economy at the time the changes occur, as well as on the nature of Federal macroeconomic policy. There has been considerable discussion in recent weeks of the possibility that cuts in defense spending might lead to lower interest rates, increased nondefense investment and economic growth.

A recent DRI analysis, for example, suggested that real cuts of as much as 5 percent in defense spending through 1994 "appear certain to bring an eventual 'peace dividend' to the United States in the form of lower inflation and interest rates, a declining budget deficit and faster growth." Though the details of the DRI model's assumptions were not made clear, the results seem to depend on their assumption about the uses made of the "savings" from lower

¹ See graph II, p. 23.

defense spending. I infer that in the near term DRI applied those savings to deficit reduction, with positive consequences for real interest rates.

In our judgment, the historical evidence of the link between deficits and interest rates does not demonstrate that lower deficits lead necessarily to lower real interest rates. A recent Congressional Budget Office review of more than 20 empirical studies on this question failed to find any consensus on how deficits affect interest rates. Some saw them as positive, some saw them as negative, but no consensus. Moreover, Federal monetary policy is more likely to have a major impact on rates in the 1990's than the kind of small Federal spending changes we are discussing here.

Beyond this question of relationship, it is important to look at the impact of deficit reduction in the wider economic context. Lower interest rates may not automatically stimulate increased investment in the economy; they were quite low in the 1930's, while the economy was stagnant. Rather, economic growth itself may be the key to increased investment. The question then arises, what is crucial to economic growth? There is some risk that sharp deficit reduction in the 1990's could fuel an economic slowdown, rather than growth, leading to stagnant or declining investment.

Deficit reduction is obviously, as you suggested, only one scenario for the uses made of a "peace dividend." Alternative spending may be an appropriate use of the funds, especially if the economy is weak, in order to deal with the "down side" of deficit reduction and keep up the level of aggregate demand during the transition. Some of the projections being made in recent models track such an impact with positive results. DRI notes, for example, that spending on infrastructure and job training, funded by the "peace dividend," could have positive impacts on the economy.

There is no guarantee that such a spending scenario will be adopted. The ambitious plans for an infrastructure program after the end of the Vietnam war, for example, were never fulfilled and much of the "peace dividend" at that time found its way into transfer payments.

Clearly one of the major debates Congress will face in the next few years will be how to allocate a "peace dividend," especially if it is smaller than the DRI estimate. In fiscal year 1991, for example, defense outlays may be \$6 to \$7 billion lower than previous DOD projections. In all likelihood, this reduction will be applied to the administration's effort to reach the \$64 billion Gramm-Rudman deficit target, leaving few resources for other spending programs.

Congress will have to grapple with the difficult question of how to allocate the dividend, small as it may be, between the deficit and a large, demanding set of claimants: drug programs, education, infrastructure, child care, nuclear production plant cleanup, environmental protection, and savings and loan bailouts, not to speak of increasing demands for aid to the Soviet Union and Europe that will put stress on a very small package of funds. Depending on the choices made, the actual experience of the next 10 years may prove quite different from the forecasts of economic models. The impact of these decisions over the next decade are hard to forecast and imply the need to deal with a much larger policy issue facing the Congress: how to formulate social and economic development strat-

egies—research and development job training and infrastructure investments, among others—which will prepare the U.S. economy for the 21st century. Defense dollars may play a role in these new policies simply by being one source of funds to help meet their fiscal requirements.

THE EFFECT OF CUTS ON INDUSTRY, EMPLOYMENT, AND LOCAL ECONOMIES

These may be the most significant issues, rather than the macroeconomics effects. We should avoid this “sky is falling” scenario, although such thinking may be too often typical of the way that we deal with public policy problems. If the macroeconomics effects of the projected defense cuts—and even of cuts that are deeper than those under discussion—are likely to be small, then the most significant issue for the Congress may be consequences of such cuts for the macroeconomic—for the industries, work force, and communities where defense production takes place.

Here, too, the impact of the pending cuts should not be inflated to a “sky is falling” scenario, though such thinking seems to be typical of the way we deal with many public policy problems. Several features of the reductions under discussion should be noted:

Although there is little detail, as yet, from the services, preference in budget adjustments over the next 5 years may be being given to cutting force structure rather than military hardware. This trend could mean major reductions over the next 5 years in Army divisions—as many as three cut—Air Force air wings—as many as five cut—naval forces—as many as two carrier battle groups cut and 62 ships retired—and military personnel—as many as 250,000 fewer, or 12 percent of the current active duty forces.

By contrast, there has been relatively little discussion of military hardware, especially of the cuts that might be considered in hardware programs that constitute the next generation of military weaponry: LHX helicopter, FAADS air defense programs, ATACMS missile [Army]; A-12, Seawolf submarine, Arleigh Burke destroyers, LRAACA antisubmarine warfare plane [Navy]; B-2 bomber, AFT fighter, Advanced Cruise Missile, C-17 cargo aircraft, AMRAAM missile [Air Force]. One might still expect some cuts or stretch outs in current hardware programs, such as those proposed in the fiscal year budget. However, to the degree that the services draw their budgetary wagons in a circle around the military hardware, especially the next generation, the local, specific impacts of cuts could be smaller than expected.

The direction of current arms control negotiations appears to reinforce this trend toward cuts in force structure, rather than hardware. From what we know of the current status of the START negotiations, the forthcoming treaty is likely to have a minimal impact on strategic hardware production, cutting perhaps only \$8 billion from anticipated hardware plans of over \$140 billion.

The current negotiations on conventional force reductions could result in marginal reductions in U.S. forces deployed in Europe, with deeper cuts in a second round. However, these cuts are unlikely to lead to the termination of current service hardware modern-

ization programs any time soon, since they will likely involve the withdrawal of existing, older hardware.

It is also important to keep in mind that, according to DOD projections, the Defense Department continues to carry a significant backlog of appropriated but unexpended funds, projected at \$260 billion as of the end of fiscal year 1989. This backlog has risen considerably over the 1980's—from \$92.1 billion in fiscal year 1980—due in large part to the emphasis in the defense buildup on hardware procurement and R&D. I noted in this morning's Times that the Grumman Corp. is said to carry a \$7 billion backlog, which is nearly 2 years of Grumman's total column of sales.

Much larger is the aerospace sales. For at least the next 2 years, the impact of slowly declining defense budgets is likely to be marginal on firms with existing contracts. Thus, for example, a highly-dependent firm such as Northrup would probably carry at least 2 years of production backlog from current obligations for the B-2 bomber, were the Congress to cancel the program.

There may be time to plan for and deal with the local impacts of such cuts or deeper cuts as they occur in the 1990's. The local impact of defense cuts is likely to vary, depending on which systems are eliminated, what part of the defense industry is affected and where the work is located.

Rather than being monolithic, the defense market is complex and diversified. Only a few large contractors depend heavily on defense and nothing else—principally Lockheed, Northrop, General Dynamics, McDonnell Douglas, and Grumman. Each of these contractors is developing its own strategy for a transition, including diversification inside and outside the defense market and down sizing of the company. None of them is likely to go belly-up because of the kind of cuts under discussion, especially given their importance as national production assets. Others, such as Boeing, Tenneco, Litton, Textron, Martin-Marietta, and Raytheon, are more diversified, with substantial commercial business to cushion the impact of a decline in anticipated defense business. Boeing may be the limiting case, having a current \$85 billion backlog of aircraft orders, of which 90 percent is for commercial transports.

Still others, such as General Electric, IBM, or Texas Instruments depend only minimally on defense and have a significant corporate capacity to adjust, while companies like Hewlett Packard, Royal Dutch Shell, Exxon, ARGO, Chevron, and Pan sell essentially the same products to the Defense Department as they do to commercial markets.

Effects on the subcontracting markets are harder to project. Subcontractor companies, such as those making machine tools or bearings, could feel some effect, though most are in commercial markets and, if a recent study by the Center for Strategic and International Studies is correct, many may have left the defense market over the past decade. There is room here for more research, since the amount of subcontractor dependency on defense is unknown. It is known that as defense business shrinks, many prime contractors tend to pull subcontracting business back into their own plants, creating a more serious problem for the subcontractors.

The impact of defense cuts on communities, as opposed to contractors, will also vary. The prime contracting defense industry is

concentrated around the rim of the United States: from Bath Iron Works in Maine, down through Electric Boat in Connecticut, through Gumman on Long Island, Martin Marietta in Maryland, Lockheed in Georgia, the space industry in Florida, Litton's Ingalls Shipyards in Mississippi, General Dynamics, Bell, and LTV in Dallas-Ft. Worth, Hughes in Arizona, and the numerous companies in California and Boeing in Seattle. Depending on the type of budget changes or cancellation, initial impacts would be felt in some of these areas.

Defense geography is also another important area for further research. Unsystematic data indicate that virtually all local economies heavily involved in defense production are to some degree less dependent on such production today than they were 20 years ago. Local economies in Long Island, Maryland, Florida, Texas, California, and Washington are significantly more diversified than they were in the 1960's, making the adjustment problem different and perhaps more tolerable now than it would have been. For many localities, the days may be gone when contractor closings meant turning out the city lights. The Sacramento area has seen the defense share of its labor force fall from 15 percent in 1965 to 5 percent in 1985, suggesting a different resonance of the issue of adjustment in the community. Although defense accounted for 40 percent of manufacturing employment on Long Island in early 1987, one study has noted that manufacturing overall, as a share of the Long Island economy, has fallen from 18 percent of total nonagricultural employment in 1976 to 15 percent in 1988.

THE EFFECT OF CUTS ON INDUSTRY, EMPLOYMENT, AND LOCAL ECONOMIES

The impact of cuts on the defense work force will also vary, depending on the location and nature of the cuts. Some changes have already occurred. DOD estimates that industry employment, for example, fell 140,000 between fiscal year 1986 and fiscal year 1989, a drop of 4.1 percent, with very little public discussion of the adjustments this might have required.

The defense work force is not monolithic; it contains a higher proportion of scientific and technical talent and skilled production workers than the national labor force, making parts highly reemployable, depending on the overall state of the economy. The exact distribution of these workers can differ dramatically between shipbuilding, aerospace, and electronics, for example, making predictions about employment effects dependent on the specific cuts being made.

The impact of cuts on the labor force will also depend on the speed with which they take place; attrition in the overall labor force may absorb some share of the decline.

And the final thing I will talk about this morning, Mr. Chairman, is let's look at the elements of adjustment policy.

Though they may be less dramatic than current rhetoric suggests, cuts in defense over the next decade will have an effect on specific contractors, workers, and communities. In assessing the requirements for private sector and public sector response, it is important to keep in mind that our economy has been through many

defense-related and nondefense-related economic adjustments, suggesting some lessons to be learned and tools with which we can work. I emphasize it is important not to reinvent the wheel.

After World War II, the economy went through reconversion. The key to successful adjustment was the broader state of the economy, rather than Federal planning: pent-up wartime consumer savings, available capital, a tax cut, and relief programs for Europe, all of which stimulated demand.

After Korea, the adjustment met a slight economic dip, but the economy remained basically strong.

After Vietnam, there was a considerable increase in unemployment and some difficulties that were hardly noted at the time in the aerospace sector. There were few Federal policies adopted for the transition, unemployment rose, the economy had difficulties, but changes in the national and international economic context, including such events as the end of the stable dollar, the Nixon price freeze, the start of stagflation, a sharp decline in commercial aircraft purchasing, the decline in space program procurement and the 1973 oil price increase, may have all had a greater impact than did the end of the war.

There are continuous defense-related adjustments throughout wartime and peacetime, moreover, as new defense programs begin, contracts end and plants and bases close. Though such transitions are not easy, there are a number of significant examples of community, work force, and industry response to such changes, based largely on using the community as the focus of the adjustment effort. A survey of such transitions by the Defense Department's Office of Economic Adjustment suggests that the reuse of military bases closed between 1961 and 1986 led to a net gain of nearly 44,000 jobs—a loss of 94,424 civilian jobs followed by the creation of 138,138 new jobs.

Moreover, defense is not the only area in which the U.S. economy adjusts to change. The impact of declining defense budgets, base closings or contract terminations is not especially different from the impact of other economic dislocations, such as plant closings, loss of private sector contracts, the decline of an industry or foreign competition. Because such adjustments have occurred before, local, State and Federal Governments have developed policy tools to deal with the transitions. These experiences have also provided tools and lessons for the adjustment effort that might accompany the coming defense build down.

The process of economic adjustment is not an easy one, nor does it happen swiftly. Above all, in considering the adjustment efforts that might be required in the 1990's, the Congress needs to emphasize the flexible use of existing tools. Beyond the need for a growing economy, a successful adjustment requires cooperation between the corporation, work force, and community with adequate Federal, State, and local support for worker adjustment and community development. This effort needs to be geared to the specific needs of the locality; there is no single national policy which can fix every situation.

Let me run through some of these items, in turn. First, the state of the local and national economy when the adjustment occurs is critical. A well-laid plan and strong community efforts can easily

be frustrated by a weak economy; a poor plan or no planning at all might actually succeed if the economy were healthy, creating new jobs and investment opportunities. Policymakers should consider the possible need for demand stimulation as an element of Federal macroeconomic policy which could create a positive economic context for such spending changes.

Though we tend to assume a public sector response is the most important dimension of adjustment efforts, the corporate response to economic change is absolutely critical. We should not neglect the role of the private sector, but should encourage the use of corporate capabilities for research and planning. In my prepared statement, I talk about several examples of that kind of thing.

In terms of the work force, training and research suggests that relocation assistance and job support are probably the most critical elements of adjustment efforts directed at the work force. We might, for example, require the Congress to give consideration to increasing the resources under title III of the Job Training Partnership Act and some special responsibilities, perhaps, of that program for adjustment in the defense sector.

With respect to community issues, the community is probably the most critical focus for adjustment efforts. Local economic development activities in the past 15 years have assisted the diversification of many local economies, making them less vulnerable to the termination of one kind of production. This is an area where there are existing tools. The office of Economic Adjustment in DOD has considerable experience in facilitating working relations between Federal, State, and local authorities involved in defense-related adjustments. States should be encouraged to mobilize their resources and efforts early in the process.

With respect to Federal funding, as I have suggested, the Job Training Partnership Act and the Economic Development Administration may be too critical of additional Federal activity.

Finally, with respect to civilian research and development—which I have separated out here—to date, the strongest Federal commitment of R&D in the national economy has been through the Department of Defense and a small, but significant share of the Nation's technical talent is involved in defense-related pursuits. A strong defense R&D effort, I think, is likely to continue.

The time may have come, however, to review public sector policies with respect to commercial R&D, since that is what promotes the competitiveness of American industry most directly. A major nondefense public sector program for R&D, including appropriate industry incentives, ought to be in our near-term future. Not only is such a program an important policy tool, it would have the additional payoff of involving some part of the technical talent which may no longer be necessary for the defense efforts.

Our experience in the United States with economic adjustment indicates that successful transitions in the economy, whether in response to defense or nondefense changes, are possible, provided there is a good mix of public and private initiative, appropriate Federal support State and community cooperation early in the effort. Warning, anticipation and flexibility in approach, above all, are key. We do not need an entirely new Federal approach to adjustment so much as we need an enhancement of existing tools and

strongly stated national commitment to the public and private effort needed to make the transition succeed.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Adams follows:]

PREPARED STATEMENT OF GORDON ADAMS

Mr. Chairman, I am Dr. Gordon Adams, Director of the Defense Budget Project, a non-profit research organization here in Washington, DC working on defense budget and economic issues. I am grateful for the opportunity to testify on a subject which has evoked deep concern in recent weeks: the impact of pending defense budget reductions on the nation's economy and on local defense-related economies.

Let me summarize my statement briefly and then elaborate on each point in turn. First, although we lack final details on proposed changes in the defense budget, the cuts currently under discussion are likely to be smaller and slower than suggested in recent public discussions and are likely to reduce force structure more heavily than weapons modernizations. Second, because they are likely to be more limited and gradual than sometimes discussed, and because the defense industry currently has a considerable backlog of appropriated but unspent funds, the macroeconomic impact of defense budget cuts is likely to be small. Third, the defense planning preference apparently being given to military hardware spending could mitigate site-specific, local economic impacts, making the adjustment process more manageable. Finally, we have sufficient time before such changes take effect to define appropriate adjustment efforts, using America's experience of past economic adjustments. Even with defense spending cuts deeper than those under discussion in the Executive Branch, the transition for the defense sector of the economy would be complex, but manageable.

THE DEPTH OF THE PROPOSED BUDGET CUTS

Although there are no official documents, Secretary of Defense Richard Cheney has reportedly instructed the military services to respond to cuts in the defense budget of between \$125 and \$180 billion from Defense Department budget projections for fiscal years 1992 through 1994. Secretary Cheney's action is important since it is, I think, the first time since the early 1970s that a Secretary of Defense has informed the services that the out-years of the budget plan are unrealistic and need to be significantly reduced. This return to "fiscal realism" is to be commended.

The Cheney reductions, however, should not be overstated. They are not reductions from the current FY 1990 budget level, but rather from Defense Department projections made earlier this year. The earlier projections would have increased FY 1991 defense funding by 2.3 percent above inflation (above the FY 1990 level agreed upon at the budget summit between the White House and Congress), followed by a one percent real (above inflation) increase in FY 1992, and two percent real growth in both FY 1993 and FY 1994. Moreover, DoD appears to have adjusted this baseline to reflect higher inflation rates than were originally projected for FY 1991 through FY 1994 and to include slightly higher internal planning estimates.

Even reductions as deep as \$180 billion would leave U.S. defense funding in FY 1994 at roughly a "nominal freeze", meaning defense budgets would remain at approximately the FY 1990 level, with no increase for inflation. U.S. defense funding would still be higher, in constant dollars, than the budget levels typical in peacetime between 1954 and 1980. Moreover, were the top end of the range of Cheney cuts to be enacted by the Congress, the average annual decline in the defense budget, after inflation, would be only slightly faster than the budget reductions which began in FY 1986. The Defense Budget Project calculates that budgets have fallen 2.8 percent per

year after inflation since 1985; under the deepest Cheney proposal, they would fall roughly 3.5 percent after inflation. Were the Secretary to propose budget changes at the lower end (minus \$125 billion), average annual reductions would be closer to 2 percent, slightly slower than the declines of the past five years. [See Graph I]

These numbers are consistent, moreover, with the reported changes in the FY 1991 defense budget. Defense Department budget authority may be set at roughly \$295 billion, which would represent a slight, nominal increase over the FY 1990 level, while outlay targets of \$292-3 billion would represent roughly 2 percent nominal growth over the 1990 level. The real budget or spending reduction would be on the order of 2.5%, consistent with the FY 1986-90 budgets.

Of course, budgets may be cut further by the Congress, and it is unrealistic to assume that the Secretary's figures will prevail:--Congressional cuts are more difficult to estimate, however, since there are likely to be a variety of proposals. I would not expect that Congress would go deeper than a nominal freeze in FY 1991, which would represent a cut of roughly 4 percent after inflation. Even a cut of this magnitude, however, would not be significantly out of line with the rate since 1986.

THE ECONOMIC IMPACT OF DEFENSE CUTS: RECESSION OR DIVIDEND?

Reductions in the defense budget are frequently either feared as a potential cause of recession, or seen as an opportunity to reap a "peace dividend" to the benefit of the national economy. The Cheney reductions under discussion, even deeper cuts, are not likely to be a source of major disaster nor of significant benefit; their impact will depend on the state of the wider economy and on federal policy.

It is important to note, at the start, that the defense share of major economic aggregates has declined significantly over the past forty years. Choosing only peacetime years, the defense share of GNP fell from 11.1 percent in 1955 to 7.5 percent in 1965 and 5.0 percent in 1980. After increasing to 6.5 percent in 1986 at the peak of the Reagan buildup, the defense share of GNP fell to an estimated 5.8 percent in 1989. Defense employment (public and industry) as a share of national employment has also fallen from 10.6 percent in 1965 to an estimated 5.3 percent in 1989 [See Graph II].

In other words, the role defense spending plays in the national economy has diminished since the 1950s. The kind of changes under discussion today (an annual real decline of two to four percent) would have only a small effect on these measures. The quality of that impact depends greatly on the overall state of the economy at the time the changes occur, as well as on the nature of federal macroeconomic policy. There has been considerable discussion in recent weeks of the possibility that cuts in defense spending might lead to lower interest rates, increased non-defense investment and economic growth. A recent DRI analysis, for example, suggested that real cuts of as much as 5% in defense spending through 1994 "appear certain to bring an eventual 'peace dividend' to the U.S. in the form of lower inflation and interest rates, a declining

budget deficit and faster growth."¹ Though the details of the DRI model's assumptions were not made clear, the results seem to depend on their assumption about the uses made of the "savings" from lower defense spending. I infer that in the near term DRI applied those savings to deficit reduction, with positive consequences for real interest rates.

The historical evidence of the link between deficits and interest rates does not demonstrate that lower deficits lead necessarily to lower real interest rates. A recent Congressional Budget Office review of more than 20 empirical studies on this question failed to find any consensus on how deficits affect interest rates.² Moreover, federal monetary policy is more likely to have a major impact on rates in the 1990s than the kind of small federal spending change we are discussing here.

Beyond this question of relationship, it is important to look at the impact of deficit reduction in the wider economic context. Lower interest rates may not automatically stimulate increased investment in the economy; they were quite low in the 1930s, while the economy was stagnant. Rather, economic growth itself may be key to increased investment. The question then arises, what is crucial to economic growth? There is some risk that sharp deficit reduction in the 1990s could fuel an economic slowdown, rather than growth, leading to stagnant or declining investment.

Deficit reduction is only one scenario for the uses made of a "peace dividend." Alternative spending may be an appropriate use of the funds, especially if the economy is weak, in order to deal with the "down side" of deficit reduction and keep up the level of aggregate demand during the transition. Some of the projections being made in recent models track such an impact, with positive results. DRI notes, for example, that spending on infrastructure and job training, funded by the "peace dividend", could have positive impacts on the economy. There is no guarantee that such a spending scenario will be adopted. The ambitious plans for an infrastructure program after the end of the Vietnam War, for example, were never fulfilled and much of the "peace dividend" at that time found its way into transfer payments.

Clearly one of the major debates of the next few years will be how to allocate a "peace dividend", especially if it is smaller than the DRI estimate. In FY 1991, for example, defense outlays may be \$6-7 billion lower than previous DoD projections. In all likelihood, this reduction will be applied to the Administration's effort to reach the \$64 billion Gramm-Rudman deficit target, leaving few resources for other spending programs.

Congress will have to grapple with the difficult question of how to allocate the dividend, small as it may be, between the deficit and a large, demanding set of claimants: drug programs, education, infrastructure, child care, nuclear production plant cleanup, environmental protection, and savings and loan bailouts. Depending on the

¹ "The Peace Economy," *Business Week*, December 11, 1989, pp. 50-55.

² Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1988-1992, Part I*, (Washington, DC: Government Printing Office, January 1987), pp. 97-102.

choices made, the actual experience of the next ten years may prove quite different from the forecasts of economic models. The impact of these decisions over the next decade are hard to forecast and imply the need to deal with a much larger policy issue facing the Congress: how to formulate social and economic development strategies (research and development, job training and infrastructure investment, among others) which will prepare the U.S. economy for the 21st century. Defense dollars may play a role in these new policies simply by being one source of funds to help meet their fiscal requirements.

THE EFFECT OF CUTS ON INDUSTRY, EMPLOYMENT AND LOCAL ECONOMIES

If the macroeconomic effects of the projected defense cuts (and even of cuts that are deeper than those under discussion) are likely to be small, then the most significant issue for the Congress may be the consequences of such cuts for the microeconomy -- for the industries, work force and communities where defense production takes place.

Here, too, the impact of the pending cuts should not be inflated to a "sky is falling" scenario, though such thinking seems to be typical of the way we deal with many public policy problems. Several features of the reductions under discussion should be noted:

- Although there is little detail, as yet, from the services, preference in budget adjustments over the next five years may be being given to cutting force structure rather than military hardware. This trend could mean major reductions over the next five years in Army divisions (as many as 3 cut), Air Force air wings (as many as five cut), naval forces (as many as two carrier battle groups cut and 62 ships retired), and military personnel (as many as 250,000 fewer, or 12 percent of the current active duty forces). By contrast, there has been relatively little discussion of military hardware, especially of the cuts that might be considered in hardware programs that constitute the next generation of military weaponry: LHX helicopter, FAADS air defense programs, ATACMS missile (Army); A-12, Seawolf submarine, Arleigh Burke destroyers, LRAACA anti-submarine warfare plane (Navy); B-2 bomber, ATF fighter, Advanced Cruise Missile, C-17 cargo aircraft, AMRAAM missile (Air Force). One might still expect some cuts or stretchouts in current hardware programs, such as those proposed in the FY 1990 budget. However, to the degree that the services draw their budgetary wagons in a circle around the military hardware, especially the next generation, the local, specific impacts of cuts could be smaller than expected.
- The direction of current arms control negotiations appears to reinforce this trend toward cuts in force structure, rather than hardware. From what we know of the current status of the START negotiations, the forthcoming treaty is likely to have only a minimal impact on strategic hardware production, cutting perhaps only \$8 billion from anticipated hardware plans of over \$140 billion.³ The

³ See Stephen Alexis Cain, *The START Agreement: Strategic Options and Budgetary Savings* (Washington, DC: Defense Budget Project (DBP), July 1988) and Cain, *Strategic Forces Funding in the 1990s: A Renewed Buildup?* (Washington, DC: DBP, April 1989).

current negotiations on conventional force reductions could result in marginal reductions in U.S. forces deployed in Europe, with deeper cuts in a second round. However, these cuts are unlikely to lead to the termination of current service hardware modernization programs any time soon, since they will likely involve the withdrawal of existing, older hardware.

- It is also important to keep in mind that, according to DoD projections, the Defense Department continues to carry a significant backlog of appropriated but unexpended funds, projected at \$260 billion as of the end of FY 1989. This backlog has risen considerably over the 1980s (from \$92.1 billion in FY 1980), due in large part to the emphasis in the defense buildup on hardware procurement and R&D. For at least the next two years, the impact of slowly declining defense budgets is likely to be marginal on firms with existing contracts. Thus, for example, a highly defense-dependent firm such as Northrop would probably carry at least two years of production backlog from current obligations for the B-2 bomber, were the Congress to cancel the program.

There may be time to plan for and deal with the local impacts of such cuts or deeper cuts as they occur in the 1990s. The local impact of defense cuts is likely to vary, depending on which systems are eliminated, what part of the defense industry is affected and where the work is located.

Rather than being monolithic, the defense market is complex and diversified. Only a few large contractors depend heavily on defense and nothing else – principally Lockheed, Northrop, General Dynamics, McDonnell Douglas and Grumman. Each of these contractors is developing its own strategy for a transition, including diversification inside and outside the defense market and down-sizing of the company. None of them is likely to go belly-up because of the kind of cuts under discussion, especially given their importance as national production assets. Others, such as Boeing, Tenneco, Litton, Textron, Martin-Marietta and Raytheon, are more diversified, with substantial commercial business to cushion the impact of a decline in anticipated defense business. Boeing may be the limiting case, having a current \$85 billion backlog of aircraft orders, of which 90 percent is for commercial transports.

Still others, such as General Electric, IBM or Texas Instruments depend only minimally on defense and have a significant corporate capacity to adjust, while companies like Hewlett Packard, Royal Dutch Shell, Exxon, ARCO, Chevron and Pan Am sell essentially the same products to the Defense Department as they do to commercial markets.

Effects on the subcontracting markets are harder to project. Subcontractor companies, such as those making machine tools or bearings, could feel some effect, though most are in commercial markets and, if a recent study by the Center for Strategic and International Studies is correct, many may have left the defense market over the past decade.⁴ There is room here for more research, since the amount of subcontractor

⁴ Center for Strategic and International Studies, *Deterrence in Decay: The Future of the U.S. Defense Industrial Base*, (Washington, DC: CSIS, May 1989).

dependency on defense is unknown. It is known that as defense business shrinks, many prime contractors tend to pull subcontracting business back into their own plants, creating a more serious problem for the subcontractors.

The impact of defense cuts on communities will also vary. The prime contracting defense industry is concentrated around the rim of the United States: from Bath Iron Works in Maine, down through Electric Boat in Connecticut, through Grumman on Long Island, Martin Marietta in Maryland, Lockheed in Georgia, the space industry in Florida, Litton's Ingalls Shipyards in Mississippi, General Dynamics, Bell, and LTV in Dallas/Ft. Worth, Hughes in Arizona, the numerous companies in California and Boeing in Seattle. Depending on the type of budget changes or cancellation, initial impacts would be felt in some of these areas.

Defense geography is also another important area for further research.

Unsystematic data indicate that virtually all local economies heavily involved in defense production are to some degree less dependent on such production today than they were 20 years ago. Local economies in Long Island, Maryland, Florida, Texas, California and Washington are significantly more diversified than they were in the 1960s, making the adjustment problem different and perhaps more tolerable now than it would have been. For many localities, the days may be gone when contractor closings meant turning out the city lights. The Sacramento area, for example, with four major bases and a major prime contractor in the region, has seen the defense share of its labor force fall from 15% in 1965 to 5% in 1985. Although defense accounted for 40% of manufacturing employment on Long Island in early 1987, one study has noted that manufacturing overall, as a share of the Long Island economy has fallen from 18% of total non-agricultural employment in 1976 to 15% in 1988.⁵

Finally, the impact of cuts on the defense work force will also vary, depending on the location and nature of the cuts. Some changes have already occurred. DoD estimates that industry employment, for example, fell 140,000 between FY 1986 and FY 1989, a drop of 4.1 percent, with very little public discussion of the adjustments this might have required. The defense work force is not monolithic; it contains a higher proportion of scientific and technical talent and skilled production workers than the national labor force, making parts highly reemployable, depending on the overall state of the economy. The exact distribution of these workers can differ dramatically between shipbuilding, aerospace and electronics, for example, making predictions about employment effects dependent on the specific cuts being made.⁶ The impact of cuts on the labor force will also depend on the speed with which they take place; attrition in the overall labor force may absorb some share of the decline.

⁵ Of course, there may be other vulnerabilities introduced in a local economy by significant growth in service industries with a shrinking manufacturing base. Long Island Regional Planning Board, *Maximizing the Potential of Long Island's Defense Sector in an Era of Change*, (Hauppauge, NY: Long Island Regional Planning Board, 1988).

⁶ See Congressional Budget Office, *Defense Spending and the Economy* (Washington, DC: CBO, February 1983), Table A-11.

THE ELEMENTS OF ADJUSTMENT POLICY

Though they may be less dramatic than current rhetoric suggests, cuts in defense over the next decade will have an effect on specific contractors, workers and communities. In assessing the requirements for private sector and public sector response, it is important to keep in mind that our economy has been through many defense- and non-defense-related economic adjustments, suggesting some lessons to be learned and tools with which we can work. We should learn from that experience and not reinvent the economic adjustment process.

Defense spending fell from 38.7 percent of GNP in 1944 to 3.2 percent in 1948, with 10 million people leaving the military services, 1.7 million people leaving civilian employment in the defense public sector and 12.4 million workers leaving the defense industry. This demobilization was the only major experience the U.S. has had with what was then called "reconversion." For the veterans, programs included the G.I. bill, counseling, a readjustment allowance and several loan programs. For industry workers there was no planning for retraining or reemployment, but unemployment insurance benefits existed. For the companies, contracts were terminated promptly, with termination payments. Industry adjusted its activity using these payments, the saved capital from war profits and low interest rate loans. The key to successful adjustment was the broader state of the economy: pent-up wartime consumer savings, available capital, a tax cut, and relief programs for Europe all stimulated demand.

The military buildup for the Korean War was not followed by as dramatic a shift: 800,000 left the military, 300,000 left the civilian Defense Department payroll and the share of GNP spent on defense fell from 13.4 percent in 1953 to 9.4 percent by 1956. There was a slight economic dip, but the economy remained basically strong and the adjustment took place without special mechanisms or plans.

After the Vietnam War, 1.5 million people left the military, 1.2 million people left DoD civilian employment and the defense share of GNP fell from 9.6 percent in 1967 to 5.6 percent in 1974. There was some active governmental thinking about the transition, including a report on the transition from the Council of Economic Advisors to the president.⁷ Few policies were developed or implemented for the transition, however. Unemployment rose and the economy experienced difficulties, but changes in the national and international economic context -- the end of a stable dollar, the Nixon price freeze, the start of stagflation, a sharp decline in the commercial aircraft market and the 1973 oil price increase -- may have had a greater impact than did the end of the war.

There are continuous defense-related adjustments throughout wartime and peacetime, moreover, as new defense programs begin, contracts end and plants and bases close. Though such transitions are not easy, there are a number of significant examples of community, work force and industry response to such changes, based largely on using the community as the focus of the adjustment effort. A survey of such

⁷ U.S. Executive Office of the President, *Report of the Committee on the Economic Impact of Defense and Disarmament*, Gardner Ackley, Chairman (Washington, DC: Government Printing Office, 1965).

transitions by the Defense Department's Office of Economic Adjustment suggests that the reuse of military bases closed between 1961 and 1986 led to a net gain of nearly 44,000 jobs (a loss of 94,424 civilian jobs followed by the creation of 138,138 new jobs).⁸

Moreover, defense is not the only area in which the U.S. economy adjusts to change. The impact of declining defense budgets, base closings or contract terminations is not especially different from the impact of other economic dislocations, such as plant closings, loss of private sector contracts, the decline of an industry or foreign competition. Because such adjustments have occurred before, local, state and federal governments have developed policy tools to deal with the transitions. These experiences have also provided tools and lessons for the adjustment effort that might accompany the coming defense build-down.

The process of economic adjustment is not an easy one, nor does it happen swiftly. Above all, in considering the adjustment efforts that might be required in the 1990s, the Congress needs to emphasize the flexible use of existing tools. Beyond the need for a growing economy, a successful adjustment requires cooperation between the corporation, work force and community with adequate federal, state and local support for worker adjustment and community development. This effort needs to be geared to the specific needs of the locality; there is no single national policy which can fix every situation.

The Economy

The state of the local and national economy when the adjustment occurs is critical. A well-laid plan and strong community efforts can easily be frustrated by a weak economy; a poor plan or no planning at all might actually succeed if the economy were healthy, creating new job and investment opportunities. Policy-makers should consider the possible need for demand stimulation as an element of federal macroeconomic policy which could create a positive economic context for such spending changes.

Corporate Response

Though we tend to assume a public sector response is the most important dimension of adjustment efforts, the corporate response to economic change is absolutely critical. We should not neglect the role of the private sector, but should encourage the use of corporate capabilities for research and planning. Corporate actions can be helpful or harmful, ranging from plant relocation to corporate diversification through acquisition (United Technologies), internal corporate product development (Kaman Corp.), the investigation of new markets for existing products and corporate support for benefits, relocation aid and employment advice to an affected work force (Rockwell International, Mack Truck). Studies by the Battelle Memorial Institute and Fantus Corporation show mixed success in efforts across the different areas

⁸ Department of Defense, Office of Economic Adjustment, *25 Years of Civilian Reuse: Summary of Completed Military Base Economic Adjustment Projects, 1961-1986* (Washington, DC: OSD/OEA, May 1986).

of production.⁹ Such efforts depend on the company recognizing that it has a stake in a planned change, taking the time to implement it, and cooperating with local authorities. The existence of consistent federal, state and local support for the corporation's role is also important. More broadly, effective corporate strategies for long-term investment and commercialization of research will play an important role in enhancing their competitiveness, which should, in turn, improve the health of the U.S. economy.

Work Force Issues

Experience suggests that work force adjustment efforts need to focus on assistance for worker retraining, counseling and job search support and relocation. The government has undertaken such programs, with mixed results, for adjustments to railroad consolidation, airline deregulation and trade shifts. Consideration might be given to increasing the resources for Title-III of the Jobs-Training-Partnership Act and, perhaps, underlining special responsibilities of this program for defense workers. Direct income support during the transition has been considered in such cases, although a study by Abt Associates for the DoD Office of Economic Adjustment suggests that such support (above and beyond unemployment insurance) actually slows down the adjustment process.¹⁰

Community Issues

The community is the most critical focus for adjustment efforts. When effects are felt, it is at the community level. Local economic development activities in the past 15 years have assisted the diversification of many local economies, making them less vulnerable to the termination or decline of one type of production. Many states are more active than ever in the economic development process, including creating retraining and employment programs. What is most important is the early knowledge of a change and an early state and community response. This area is one where it makes little sense to create new federal coordination structures. The Office of Economic Adjustment in DoD has considerable experience in facilitating working relations between federal, state and local authorities involved in defense-related adjustment efforts. Moreover, states should be encouraged to engage their time and resources early in the process, helping bring together the local resources necessary for adjustment efforts. It is important to plan for the adjustment, as the California State Department of Employment did in assisting the transition for the work force affected by the termination of the B-1 bomber program in Palmdale.

Federal Funding

Federal resources can play an important role in such adjustments. Beyond the facilitating role noted above, federal funds are probably most critical in three areas: labor force adjustment assistance (JTPA), economic development and diversification

⁹ See John E. Lynch, ed., *Economic Adjustment and Conversion of Defense Industries*, (Boulder, CO: Westview Press, 1987), especially Chapters 9-10.

¹⁰ See Lynch, ed., Chapter 13.

labor force adjustment assistance (JTPA), economic development and diversification planning (Economic Development Administration) and research and development. In earlier adjustments, federal funding through the now defunct Urban Development Action Grants and Community Development Block Grants was useful. Resources through Title IX of the Economic Development Administration's program have been used in more recent adjustments and consideration might be given by the Congress to enhancing EDA's resources for defense-impacted communities. Here, relatively small amounts of federal funding can provide a catalyst for greater state and local efforts.

Civilian Research and Development

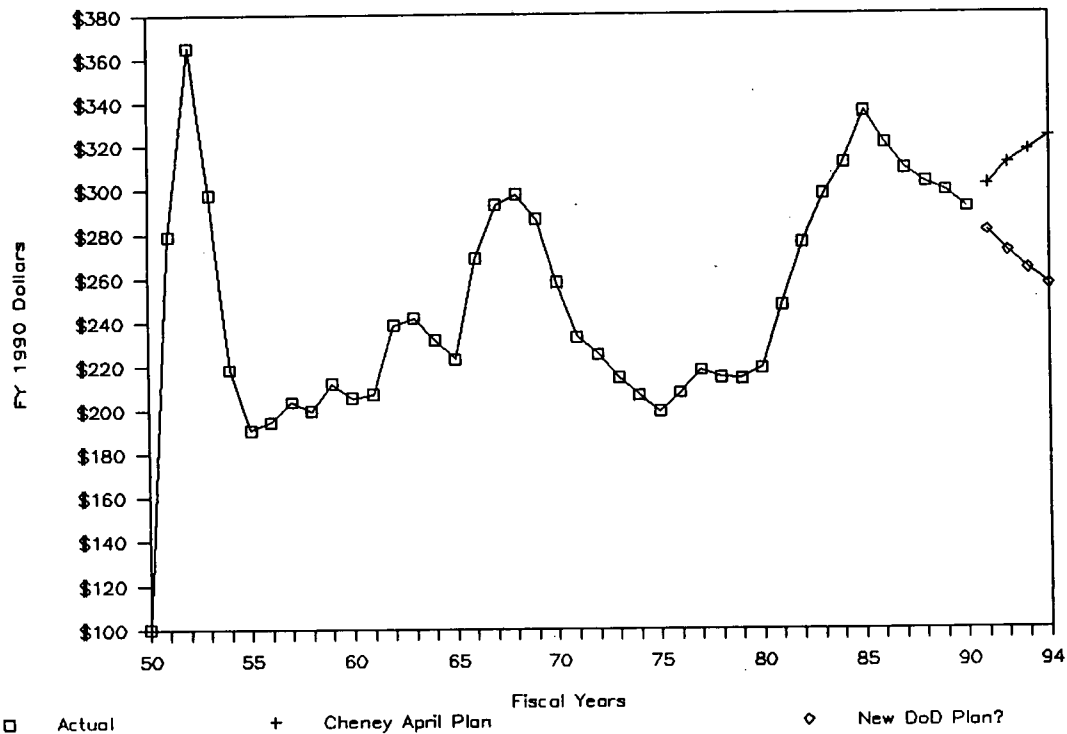
The question of research and development support deserves separate discussion. To date, the strongest federal commitment to R&D in the national economy has been through the Department of Defense and a small, but significant share of the nation's technical talent is involved in defense-related pursuits. I expect that a strong defense R&D effort will continue, even in the framework of declining defense budgets, since R&D is one of our principle hedges against negative international changes. The time may have come, however, to review public sector policies with respect to commercial R&D, since it promotes the competitiveness of American industry. Defense R&D, as the Office of Technology Assessment recently pointed out, is no longer a driving force behind U.S. technology.¹¹ A major non-defense public sector program for R&D, including appropriate industry incentives ought to be in our near-term future. Not only is such a program an important policy tool, it would have the additional pay-off of involving some of the technical talent which may no longer be necessary for the defense effort.

Our experience with economic adjustment indicates that successful transitions in the economy, whether in response to defense or non-defense changes, are possible, provided there is a good mix of public and private initiative, appropriate federal support and state and community cooperation early in the effort. Warning, anticipation and flexibility in approach are key. We do not need an entirely new federal approach to adjustment so much as we need an enhancement of existing tools and a strongly stated national commitment to the public and private effort needed to make the transition succeed.

¹¹ See Congress of the United States, Office of Technology Assessment, *Holding the Edge: Maintaining the Defense Technology Base*, OTA-ISC-420 (Washington, DC: Government Printing Office, 1989).

GRAPH I

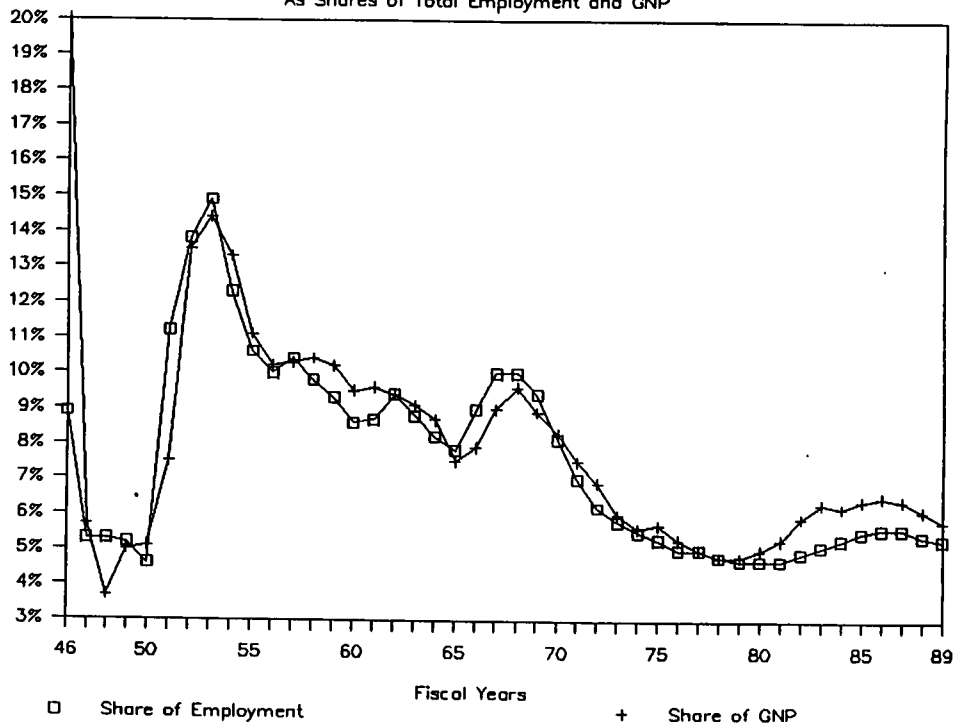
DOD FUNDING, FY 1950 - FY 1994



GRAPH II

DEFENSE EMPLOYMENT AND SPENDING

As Shares of Total Employment and GNP



SOURCES FOR GRAPHS

Graph 1: Actual DoD budget data from Office of the Assistant Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 1990/1991* (Department of Defense, March 1989), Table 6-8. Projections for fiscal years 1990 through 1994 are based on press reports, data acquired from the Defense Department, and conversations with congressional staff.

Graph 2: All figures are from *National Defense Budget Estimates for FY 1990/1991*, Table 7-8.

Representative HAMILTON. Thank you very much, Mr. Adams. Mr. Lee, please proceed.

STATEMENT OF L. DOUGLAS LEE, VICE PRESIDENT AND CHIEF ECONOMIST, COUNTY NATWEST, WASHINGTON ANALYSIS CORP.

Mr. LEE. Thank you, Mr. Chairman. It is a pleasure to be here today. I would like to focus my remarks on three broad areas. First, some general remarks on the nature of defense spending and its relationship to the economy. Second, some remarks on the timing and structure of the defense cuts that I believe reasonable. And finally, some observations about how these interact with the greater economy.

I thought that it might be useful at first to try to remove some of the often-repeated errors of fact and logic that cloud discussions about defense spending. Defense spending is often considered non-productive and inflationary because there is no flow of useful goods and services. I don't think that is correct. From an economic perspective, the inflationary potential of defense spending has nothing to do with its usefulness.

In a private market transaction, the production and consumption of goods and services is a two-sided transaction. That is not true in a government transaction, however, as the Government pays for goods but it removes them from the private economy. So unless there is some other mechanism to soak up the purchasing power, such as taxes, it would result in inflation. The key fact here is that the inflationary impact depends on whether the aggregate purchasing power is being expanded more than the aggregate production of goods.

The second fallacy in this logic is that defense spending does not produce a stream of benefits. In fact, it provides something we call national security. An "adequate" amount of national security is difficult to define and more difficult to value, but that does not mean that it is worthless. Everyone will agree that without an adequate amount of national security, we would not be able to enjoy the other benefits of our economic system. It is this aspect that makes the changing cold war environment so exciting.

In the early 1980's, we believe that we had allowed our defense capabilities to run down during the decade following the Vietnam conflict and that rebuilding was required. Basically, this meant that we had not been providing an adequate amount of national security. To correct this imbalance, resources had to be shifted from the civilian to the defense sector. However, if you believe that a stream of benefits flows from providing an adequate amount of security, then you would conclude that this was a redistribution exercise with little net impact on the Nation's overall standard of living.

The situation today is different from the early 1980's. Today we believe that the nature of the Soviet threat has changed. The Soviets are less aggressive, less economically capable, and, due to opening the borders in Central Europe, less able to mount a surprise attack on Europe with short notice. Because the nature of the threat has declined, fewer resources are now required to provide an adequate amount of national security. This means that, rather

than simply redistributing resources as we did in the early 1980's, resources will be freed for other purposes. Whatever these other purposes are, because the benefits provided by an adequate security will continue, it should mean a substantial net addition to our standard of living as a nation.

Saying that there is nothing inherently nonproductive or inflationary about defense spending as long as we are willing to pay for it with lower levels of consumption, it not, however, the end of the story. For most defense goods there is only one market—military. This is not true for most other goods that the Government buys. A \$10 billion cut in defense spending will have a very important impact on industries such as small arms, ammunition, explosives, and nonferrous forgings where 15 to 25 percent of the industry output is purchased by the military. An equivalent \$10 billion cut in transfer or interest payments or expenses would be spread across all of the goods and services produced in the economy with no single industry feeling a large impact.

A feeling for the concentrated nature of defense spending is revealed in the charts in my prepared statement. Chart 1 is a typical picture of defense as a share of the total economy. Over the past few years, defense has declined from a post-Vietnam peak of about 6.5 percent in 1985 to about 5.5 percent today. The next three charts, however, are much more helpful in describing the relationship of defense to the economy.

Chart 2 shows defense capital goods shipments as a share of total capital goods. As you can see, during the mid- and late 1980's, defense goods became increasingly important for the capital goods sector.

Charts 3 and 4 show the goods and service parts of the economy separately. DOD currently buys about 8 percent of the services produced in our economy and just over 5 percent of the goods. While it may be somewhat surprising that defense is more important to services than to the goods sector, one must remember that the salaries of the 3.3 million people directly employed by DOD are counted in services. During the 1980-85 period, total employment in the United States grew about 9 percent while employment in the defense sector grew about 30 percent. The industrial and geographic concentration of defense production is explored in more detail later.

CUTTING THE DEFENSE BUDGET

The administration is currently in the process of putting its fiscal year 1991 budget proposal in final form. At this point there are many decisions that have not been made, but there is also some useful information that is flowing from this process. My first observation is that the administration's decisions are being driven at least as much by budgetary considerations as by national security needs.

The DOD's budget-making process, the final spending number is the result of many individual decisions made over several years about weapon systems, programs, and personnel. If a weapon needs to be purchased and Congress agrees to fund it, then the flow of spending occurs as the weapon is built. This means that any one

year's outlay number is the result of many past decisions about the national security. Looking at the fiscal year 1991 budget, almost 40 percent of the defense outlays that will occur are the result of decisions that have already been made, even though Congress has not yet seen or approved the fiscal year 1991 budget.

The administration's approach to the fiscal year 1991 budget has been to start with outlays rather than to end with them. The only reason for doing this is to force decisions about programs and weapon systems to produce a desired spending total. While this approach is most likely to achieve a spending and deficit target, there is no reason to expect it to yield the best national security posture. Often it also results in an outlay estimate that is inconsistent with the recommended level of budget authority and outlays that are higher than planned.

A second observation is that the outlay target approach to budgeting will force certain types of decisions to be made. With the decisions made in fiscal year 1991 affecting only 60 percent of fiscal year 1991's defense spending, Congress and the administration will be quite constrained in where they make cuts if the desired spending target is to be achieved. In fact, if you look at that part of the budget which can be changed by this year's decisions, that over 70 percent of the dollars are for pay. There is no practical way for Congress to make significant cuts in fiscal year 1991 defense spending without reducing the number of DOD's civilian and military employees.

The rate at which budget authority translates into spending is shown in table 1 of my prepared statement. As you can see, about 68 percent of the authority for pay is spent in the same year that it is provided. About 56 percent of the operations and maintenance authority and 40 percent of the research authority is spent in the first year. If you intend to reduce the defense budget and have it be reflected in lower spending in the same year, these are the areas where spending must be cut. Stated differently, a dollar cut from the weapons procurement budget will lower outlays by only 20 cents, while the same dollar cut from the pay budget will lower outlays by almost 70 cents. Understanding this structure is necessary both to anticipate where the administration's cuts are likely to be concentrated, and to understand how those cuts are likely to impact the industrial structure of the U.S. economy.

A third observation I would make is that the administration is trying to play the old baseline game. The game is simple. First you create a baseline spending path; then you measure all changes relative to that baseline. If the baseline is high enough, you can make substantial cuts from that baseline and still have a generous budget. When Mr. Weinberger was Secretary of Defense, he regularly presented baseline budgets that contained 5 percent real growth in real terms.

Congress, however, stopped providing real growth in 1985. The defense budgets for 1986-90 fell between 1 percent and 4.8 percent in real terms each year. Over the last few years, Defense Secretaries have steadily been bringing the baseline down closer to what Congress was providing, but chart 5 shows that Mr. Cheney's last official baseline path was still anticipating 2 percent real growth. Of course, no one—including Pentagon analysts—really expected

this baseline to materialize. The optimists expected Congress to provide zero real growth, most people expected about zero nominal growth, and the pessimists expected nominal spending cuts.

It is this baseline against which the \$180 billion cut proposal is being measured. To provide some perspective, I have calculated the amount of savings—relative to the same baseline—that would be produced by the zero real and zero nominal paths. To avoid worrying about the best forecast of inflation, I have simply used the assumption contained in the DOD baseline. Current, unpublished DOD estimates will vary slightly from the data I have used, but this will not change any conclusions of the analysis.

The calculations are shown in table 2 of my prepared statement. As you can see, zero real growth would reduce the baseline by about \$124 billion over the 1992-94 period, while zero nominal growth would reduce it by \$192 billion. Viewed in this context, Mr. Cheney's \$180 billion proposal would only bring the Pentagon's plan in line with what most observers had already expected to see. Considering that these expectations have been formed over the past few years, as we have watched congressional behavior, and did not reflect any of the recent events in Central Europe or the Soviet Union, Secretary Cheney's proposal seems quite modest. In fact, an analysis of what spending cuts of this magnitude would mean for the defense program has already been done by the Congressional Budget Office (CBO).

Last March, CBO published an analysis of the implications of a zero real growth defense budget and a budget that declines 2 percent in real terms. The new plan that the administration submits next year is likely to fall somewhere in this range. Broadly speaking, two conclusions result from this analysis:

One, Congress and the administration must decide whether the cuts are to be concentrated in military forces—people—or in investment spending—weapon systems—or to be divided among each.

Two, in a zero growth scenario, it is possible to concentrate the cuts in people while keeping the current weapons plans largely in tact. This would require a cut of about 14 percent or 462,000 people. In a budget that declines 2 percent in real terms, the cuts are too large for a realistic plan to achieve them with personnel cuts alone. Major weapon systems will also need to be reduced.

A cut of 462,000 people from the 3,300,000 military and civilian employees of DOD would be very large, but not unthinkable. A reduction of this magnitude would leave us with the smallest number of people in the military since the Korean war, but with more than we maintained between the end of World War II and Korea. President Bush has already proposed limits on troops stationed in Europe which would require the withdrawal and demobilization of about 30,000 U.S. troops. Under Bush's proposal, the total might grow to 40,000 if all support personnel are included, but it would still leave 275,000 air and ground personnel in Europe.

Even the relatively small personnel cut proposed by President Bush would result in corresponding weapon and operations expense cuts. For example, if the 30,000 troop cut were accomplished by eliminating one mechanized division and 1½ air wings, we would expect first, to save about \$2 billion per year in personnel and op-

erations costs, and second, to eliminate the need for about 110 F-16 aircraft, 520 M-1 tanks, and assorted other pieces of equipment.

In table 3 of my prepared statement, I have identified the weapon systems most likely to be canceled, postponed, or stretched out in the coming defense cuts. Obviously, if the cuts are at the smaller end of the range and more concentrated in personnel, then fewer of these systems will be affected. However, some weapon cuts are likely in any event. The decisions about the particular systems to be reduced will also be influenced by any agreements reached in the Strategic Arms Limitations Talks (SALT) and the Conventional Forces in Europe (CFE) negotiations. For example, one item under discussion is limiting the number of cruise missiles. To accomplish this, we may also need to limit the number of bombers and submarines used to launch those missiles.

In deciding where to make the defense cuts that will produce a desired spending total, there are only a few simple rules that the administration must keep in mind. First, go where the money is.

Chart 6 in my prepared statement shows how the typical defense budget is distributed among major accounts. When one starts to think about defense cuts, major weapon systems come quickly to mind. Chart 6 shows that this is not where DOD spends the bulk of its money in any given year. Certainly, cutting weapons results in large savings when cumulated over several years, but the same thing is even more true of personnel cuts, because this reduces training and equipment expense as well as pay.

The second rule, if you want to see the results of the cuts quickly, is to go to the accounts that spend out the fastest. These have already been identified in table 1 of my prepared statement. Closing unneeded military bases, for example, is a very intelligent policy. However, because of the costs of impact statements, environmental cleanup, adjustment assistance, and relocation of people and equipment, closing bases will actually add to defense spending for 2 to 3 years after the decision is made.

Finally, remember that if this approach to defense cuts provides the appropriate amount of national security, it will be a happy accident.

ECONOMIC IMPACTS

The economic effects of a declining defense budget should be examined from both a macro and a micro perspective. This should be done remembering that the adjustment process is not something that lies exclusively in the future. As mentioned earlier, defense budgets have been declining in real terms for the past 5 years. Thus, the real issue is not the direction of change, but the speed at which it is likely to occur.

MACROECONOMICS

Earlier I argued that there is nothing inherently inflationary in defense spending because other macroeconomic adjustments can fully offset any inflationary impact. This argument can be broadened to apply to economic measures other than inflation. The keys, of course, are the other macroeconomic adjustments and the time-frame examined. In the short term, if cuts in the defense budget

occur rapidly, there will be dislocations. In the longer term, and if the cuts are slower, there is no reason that the health of the economy need be negatively affected.

There seems to be some widespread assumption that defense spending cuts will be used to reduce the Federal budget deficit. If this happens, then eventually one would expect to see lower levels of demand, less Federal borrowing, fewer inflationary pressures, lower interest rates, a stronger currency, and higher levels of investment. Of course, all of this would not happen overnight, and if the spending cuts reduced demand at a time when the economy was already quite weak, we might see a recession before the positive benefits are achieved. Much would depend on how the monetary authorities responded to the more restrictive fiscal policy produced by lower defense spending and a smaller budget deficit. Since the incremental spending cuts are not likely to begin before the fall of next year, and since they are likely to be phased in over several years, there is plenty of time to minimize any negative impact that a more restrictive fiscal policy could produce.

The presumption that lower defense spending will result in a lower deficit may be totally wrong. The resources that were freed by the defense spending decline that followed the Vietnam conflict were used to fund more generous social benefits. There have been no major new Federal spending programs for many years, and we hear increasing demands for the Federal Government to provide funds for AIDS-related research, expanded child care and nutrition programs, drug enforcement and rehabilitation programs, improved education programs, and rebuilding roads, bridges, and other public infrastructure. In some cases the money has not been available; in others it is being held in trust funds so that the size of the Federal deficit will appear smaller.

If Congress decides to use the money to fund new or expanded Federal activity, then there may be no reduction in fiscal stimulus at all, simply a redistribution. This would produce microeconomic adjustments, but no particular macroeconomic impacts. Econometric studies have shown that there is virtually no difference between a dollar spent building highways versus a dollar spent building missiles, as far as the GNP is concerned.

I do think, however, that the greatest macroeconomic dislocations are likely to fall in the area of employment. Monetary policy is currently aimed at gradually lowering the inflation rate over the next several years. To achieve this, policies are being set so that economic growth is consistently below our potential growth rate. This means that over the next few years, the economy will not generate enough jobs to provide employment for all of the new workers entering the labor force.

If the Federal Government adds additional people to the civilian work force by discharging them from the Government payroll, this will raise the level of unemployment. With the economy generating 100,000 to 200,000 jobs per month, there will be plenty of room for individual adjustments. Nevertheless, some people will be forced to accept lower paying jobs and the aggregate level of unemployment will be higher. To the extent that the workers are being brought home from abroad, however, it will not result in lower income levels in the United States.

MICROECONOMICS

The most significant adjustments in the U.S. economy from lower defense spending will occur at the industry level. Between 1977 and 1985, the number of industries that depended directly or indirectly on the military for more than 10 percent of their total sales more than doubled from 21 to 45 industries. A number of industries that are not normally closely identified with the military, such as optical instruments and industrial trucks, greatly increased their dependence on the defense market.

Table 4 in my prepared statement shows the share of output going to defense for selected industries. It also shows the growth in defense output over the 1980-87 period. In the case of shipbuilding, it shows that there is no longer a commercial industry in this country; in the case of optical instruments, it shows that defense output more than doubled over this period.

As we cut back on defense spending, it will have a significant impact on the industries listed in table 4. This raises important questions about the adequacy of the U.S. industrial base to provide the defense production capabilities that we need. For example, defense output by the machine tool industry grew 52 percent over the 1980-87 period, yet shipments by that industry fell 48 percent. Defense output of electron tubes grew 53 percent while shipments fell 21 percent; defense output of steam turbines grew 52 percent while shipments fell 72 percent.

There are other industries, too, where the industry has contracted while defense demands were growing. The pressures on these industries will intensify as defense demands fall. While I believe that the dynamic adjustment process is an essential part of the strength of our economic system and must be allowed to work, there may also be legitimate national security reasons to explicitly subsidize certain industries that are an essential part of our defense industrial base.

With the concentration of defense output among the industries identified above, one might also expect that defense output would be concentrated geographically. This is true in the sense that States like California, New York, Texas, and Virginia are the largest producers of defense goods and services. However, these States also tend to be the largest producers of total goods and services.

Table 5 in my prepared statement shows that the defense share of total State output varies between a high of 10.8 percent—Virginia—and a low of 3.5 percent—Iowa. The largest defense producer, California, also has the largest economy so the defense share is just under 9 percent. The table also shows that some States which do not spring to mind when we think about the concentration of defense production such as Alaska, Hawaii, Maryland, and Washington are likely to be among those most affected because defense is a reasonably large share of the State economy.

The geographic distribution of the impact of defense cuts will depend on the specific cuts chosen. Cuts in personnel will have their largest impacts in Alaska, California, Hawaii, Maryland, and Virginia. Cuts in ordnance will affect Washington and California the most. Cuts in aircraft will have the largest impact on the economy of Connecticut. Mississippi will be most influenced by a reduc-

tion in transportation equipment. Without knowing the specific weapon systems Congress and the administration will choose to cut, it is not possible to say which parts of the country will be most influenced, but this analysis shows that the impacts will not be spread equally.

Let me summarize by reiterating three basic points.

First, defense policy decisions should be based first and foremost on national security considerations. They should not be driven by the stage of the business cycle, by the Gramm-Rudman deficit targets, or by pork barrel politics.

Second, our economy is large enough and flexible enough to adjust to any level of defense spending that we deem necessary. There will be temporary dislocations, particularly if changes are made rapidly, but the key word is temporary.

Finally, the ultimate impact of winding down the cold war will be very positive for the economy. As long as we can devote fewer resources to providing an adequate level of national defense, because the threat to our security has declined, we will be able to use those resources to raise our national standard of living.

Thank you.

[The prepared statement of Mr. Lee follows:]

PREPARED STATEMENT OF L. DOUGLAS LEE

It is a pleasure to be here today to assist the committee in exploring the economic adjustments that are sure to follow the winding down of the Cold War. Specifically, I will focus on the reductions in the defense budget that are likely to play a major role in next year's budget debate and the broader policy discussions of the next several years. I will divide my comments into three sections. First, some general remarks on the nature of defense spending and its relationship to the economy. Second, a discussion of the magnitude, timing and structure of defense spending cuts that are reasonable. Finally, some observations on how these changes will interact with the greater economy.

Nature of defense spending

A good way to begin this discussion is to remove some often repeated errors of fact and logic that frequently cloud these discussions. Defense spending is sometimes alleged to be inherently nonproductive and inflationary because there is no flow of useful goods or services that result from it. From an economic perspective, the inflationary potential of defense spending has nothing to do with its usefulness.

In a private market transaction, the production and consumption of goods and services is a two-sided transaction. Consumers give up income equal to the amount that producers receive in order to generate the exchange of goods. The production of income is matched by the production of goods. A government transaction, however, is one-sided. The government pays for goods, but it then removes them from the private economy. Since the goods have been absorbed by the government but the income has not, there must be some other mechanism to soak up the added income--such as taxes. Otherwise, this added income will simply generate inflation. It does not matter whether the goods purchased by the government are defense or nondefense, useful or useless, the inflationary impact depends on whether aggregate purchasing power is being expanded more than the aggregate production of goods.

The second fallacy in this logic is that defense spending does not produce a stream of benefits. In fact, it provides something we call national security. An "adequate" amount of national security is difficult to define and more difficult to value, but that does not mean that it is worthless. Everyone will agree that without an adequate amount of national security, we would not be able to enjoy the other benefits of our economic system. It is this aspect that makes the changing Cold War environment so exciting.

In the early 1980s, we believed that we had allowed our defense capabilities to run down during the decade following the Vietnam conflict and that rebuilding was required. Basically, this meant that we had not been providing an adequate amount of national security. To correct this imbalance, resources had to be shifted from the civilian to the defense sector. However, if you believe that a stream of benefits flows from providing an adequate amount of security, then you would conclude that this was a redistribution exercise with little net impact on the nation's overall standard of living.

The situation today is different from the early 1980s. Today we believe that the nature of the Soviet threat has changed. The Soviets are less aggressive, less economically capable, and, due to opening the borders in Central Europe, less able to mount a surprise attack on Europe with short notice. Because the nature of the threat has declined, fewer resources are now required to provide an adequate amount of national security. This means that, rather than simply redistributing resources as we did in the early 1980s, resources will be freed for other purposes. Whatever these other purposes are, because the benefits provided by an adequate security will continue, it should mean a substantial net addition to our standard of living as a nation.

Saying that there is nothing inherently nonproductive or inflationary about defense spending as long as we are willing to pay for it with lower levels of consumption, is not, however, the end of the story. For most defense goods there is only one market--the military. This is not true for most other goods that the government buys. A \$10 billion cut in defense spending will have a very important impact on industries such as small arms, ammunition, explosives, and nonferrous forgings where 15-25% of the industry output

is purchased by the military. An equivalent \$10 billion cut in transfer or interest payments would be spread across all of the goods and services produced in the economy with no single industry feeling a large impact.

A feeling for the concentrated nature of defense spending is revealed in the charts below. Chart 1 is a typical picture of defense as a share of the total economy. Over the past few years, defense has declined from a post Vietnam peak of about 6.5% in 1985 to about 5.5% today. The next three charts, however, are much more useful in describing the relationship of defense to the economy. Chart 2 shows defense capital goods shipments as a share of total capital goods. As you can see, during the mid and late 1980s, defense goods became increasingly important for the capital goods sector. Charts 3 and 4 show the goods and service parts of the economy separately. DoD currently buys about 8% of the services produced in our economy and just over 5% of the goods. While it may be somewhat surprising that defense is more important to services than to the goods sector, one must remember that the salaries of the 3.3 million people directly employed by DoD are counted in services. During the 1980-85 period, total employment in the US grew about 9% while employment in the defense sector grew over 30%. The industrial and geographic concentration of defense production is explored in more detail later.

Chart 1
Defense Purchases as a Percent of GNP

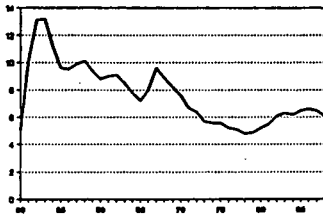


Chart 2
Capital Goods Shipments

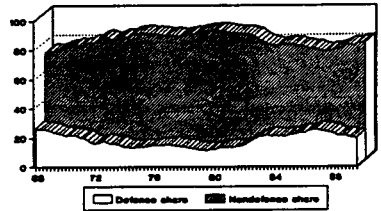


Chart 3
GNP Goods

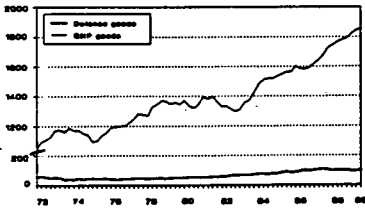
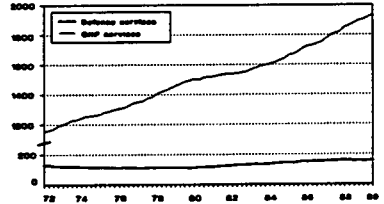


Chart 4
GNP Services



Cutting the Defense Budget

The administration is currently in the process of putting its FY91 budget proposal in final form. At this point there are many decisions that have not been made, but there is also some useful information that is flowing from this process. My first observation is that the administration's decisions are being driven at least as much by budgetary considerations as by national security needs. In the DoD's budget making process, the final spending number is the result of many individual decisions made over several years about weapon systems, programs and personnel. If a weapon needs to be purchased and Congress agrees to fund it, then the flow of spending occurs as the weapon is built. This means that any one year's outlay number is the result of many past decisions about national security. Looking at the FY91 budget, almost 40% of the defense outlays that will occur are the result of decisions that have already been made despite the fact that Congress has not yet seen or approved the FY91 budget.

The administration's approach to the FY91 budget has been to start with outlays rather than to end with them. The only reason for doing this is to force decisions about programs and weapon systems to produce a desired spending total. While this approach is most likely to achieve a spending and deficit target, there is no reason to expect it to yield the best national security posture. Often it also results in an outlay estimate that is inconsistent with the recommended level of budget authority resulting in higher than planned outlays.

A second observation is that the outlay target approach to budgeting will force certain types of decisions to be made. With the decisions made in FY91 affecting only 60% of FY91's defense spending, Congress and the administration will be quite constrained in where they make cuts if the desired spending target is to be achieved. In fact, an examination of that part of the budget which can be changed by this year's decisions shows that over 70% of the dollars are for pay. There is no practical way for Congress to make significant cuts in FY91 defense spending without reducing the number of DoD's civilian and military employees.

The rate at which budget authority provided by Congress translates into spending is shown in Table 1. As you can see, about 68% of the authority for pay is spent in the same year that it is provided. About 56% of the operations and maintenance authority and 40% of the research authority is spent in the first year. If you intend to reduce the defense budget and have it be reflected in lower spending in the same year, these are the areas where spending must be cut. Stated differently, a dollar cut from the weapons procurement budget will lower outlays by only 20 cents, while the same dollar cut from the personnel budget will lower outlays by almost 70 cents. Understanding this structure is necessary both to anticipate where the administration's cuts are likely to be concentrated, and to understand how those cuts are likely to impact the industrial structure of the US economy.

Table 1
Rate At Which Budget Authority
Translates Into Spending

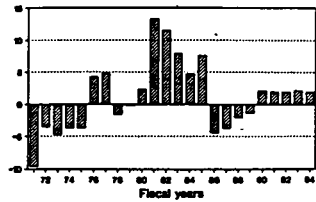
	1st Year	2nd Year
Military Personnel	68%	32%
Operations & Maintenance	56%	37%
Procurement	21%	32%
Research & Development	40%	42%

Source: Washington Analysis Corporation based on Department of Defense data

A third observation is that the administration is trying to play the old baseline game. The game is simple. First you create a baseline spending path; then you measure all changes relative to that baseline. If the baseline is high enough, you can make substantial cuts from that baseline and still have a generous budget. When Mr. Weinberger was Secretary of Defense, he regularly presented baseline budgets that contained 5% real growth. Congress, however, stopped providing real growth in 1985. The defense budgets for 1986-90 fell between 1% and 4.8% in real terms each year. Over the last

few years, defense secretaries have steadily been bringing the baseline down closer to a path Congress has been willing to fund, but Chart 5 shows that Mr. Cheney's last official baseline path was still anticipating 2% real growth. Of course no one (including Pentagon analysts) really expected this baseline to materialize. The optimists expected Congress to provide zero real growth, most observers expected about zero nominal growth and the pessimists expected nominal spending cuts.

Chart 5
Real Growth in Defense
Sec. Cheney's FY90/91 Plan



Secretary Cheney's much publicized suggestion that \$180 billion be eliminated from the defense budget over the 1992-94 period is measured relative to DoD's last official baseline projection. To provide some perspective, I have calculated the amount of savings (relative to the same baseline) that would be produced by the zero real and zero nominal paths. To avoid worrying about the best forecast of inflation, I have simply used the assumption contained in DoD's baseline. Current, unpublished DoD estimates will vary slightly from the data I have used, but this will not change any conclusions of the analysis. The calculations are shown in Table 2. As you can see, zero real growth would reduce the baseline by about \$124 billion over the 1992-94 period while zero nominal growth would reduce it by \$192 billion. Viewed in this context, Mr. Cheney's proposal would only bring the Pentagon's plan in line with what most observers had already expected to see. Considering that these expectations have been formed over the past few years, as we have watched Congressional behavior, and did not reflect any of the recent events in central Europe or the Soviet Union, Secretary Cheney's proposal seems quite modest. In fact, an analysis of what spending cuts of this magnitude would mean for the defense program has already been done by the Congressional Budget Office (CBO).

Table 2
Alternative Paths for Defense Budgets
Budget Authority, Billions of Dollars

	FY90	FY91	FY92	FY93	FY94	1992-94 Cumulative Total
DoD Baseline	287	321	336	351	366	
Zero Real Growth	287	295	303	310	316	
Zero Real Growth "Savings"			33	41	50	124
Zero Nominal Growth	287	287	287	287	287	
Zero Nominal Growth "Savings"			49	64	79	192
2% Real Decline	287	290	291	292	292	
2% Real Decline "Savings"			45	59	73	174

Source: Washington Analysis Corporation

Last March, CBO published an analysis of the implications of a zero real growth defense budget and a budget that declines 2% in real terms. The new plan that the administration submits next year is likely to fall somewhere in this range. Broadly speaking, two conclusions result from this analysis:

- 1) Congress and the administration must decide whether the cuts are to be concentrated in military forces (people) or in investment spending (weapon systems) or to be divided among each.
- 2) In a zero growth scenario, it is possible to concentrate the cuts in people while keeping the current weapons plans largely intact. This would require a cut of about 14% or 462,000 people. In a budget that declines 2% in real terms, the cuts are too large for a realistic plan to achieve them with personnel cuts alone. Major weapon systems will also need to be reduced and postponed.

A cut of 462,000 people from the 3,300,00 military and civilian employees of DoD would be very large, but not unthinkable. A reduction of this magnitude would leave us with the smallest number of people in the military since the Korean War, but with more than we maintained between the end of WWII and Korea. President Bush has already proposed limits on troops stationed in Europe which would require the withdrawal and demobilization of about 30,000 US troops. Under Bush's proposal the total might grow to 40,000 if all support personnel are included, but it would still leave 275,000 air and ground personnel in Europe.

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In Table 3 (see following page), I have identified the weapon systems most likely to be cancelled, postponed, or stretched out in the coming defense cuts. Obviously, if the cuts are at the smaller end of the range and more concentrated in personnel, then fewer of these systems will be affected. However, some weapon cuts are likely in any event. The decisions about the particular systems to be reduced will also be influenced by any agreements reached in the Strategic Arms Limitation Talks (SALT) and the Conventional Forces in Europe (CFE) negotiations. For example, one item under discussion is limiting the number of cruise missiles. To accomplish this, we may also need to limit the number of bombers and submarines used to launch those missiles, resulting in a disproportionate cutback in these particular systems.

In deciding where to make the defense cuts that will produce a desired spending total, there are only a few simple rules to remember. First, go where the money is. Chart 6 shows how the typical defense budget is distributed among major accounts. When we start to think about defense cuts, major weapon systems come quickly to mind. Chart 6 shows that this is not where DoD spends the bulk of its money in any given year. Certainly, cutting weapons results in large savings when cumulated over several years, but the same thing is even more true of personnel cuts, because this reduces training and equipment expense as well as pay. The second rule, if you want to see the results of the cuts quickly, is to go to the accounts that spend out the fastest. These have already been identified in Table 1. Closing unneeded military bases, for example, is a very intelligent policy. However, because of the costs of impact statements, environmental cleanup, adjustment assistance, and relocation of people and equipment, closing bases will actually add to defense spending for two to three years after the decision is made. Finally, remember that if this approach to defense cuts provides the appropriate amount of national security, it will be a happy accident.

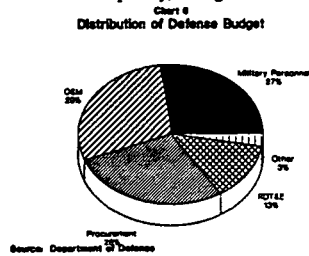


Table 3
Impact of Budget Cuts
On Major Weapons Programs

Program	Impact
Army	
M1 Tank (General Dynamics)	r,R
Bradley Fighting Vehicle (FMC)	r,R
AAWSM	r,R
LHX	r,C
Air Force	
F-15 (McDonnell Douglas)	c,C
F-16 (General Dynamics)	r,R
C-17 (McDonnell Douglas)	r,C
B-2 (Northrop)	r,C
ATF/ATA	r,R
Navy	
V-22 Osprey (Boeing, Bell Textron)	c,C
SSBN (General Dynamics)	r,R
SSN-21 (General Dynamics, Newport News)	r,R
DDG-51 (Litton Ingalls, Bath)	r,R
AOE (National Steel)	r,R
LHD (Litton Ingalls)	r,R
F-14 (Grumman)	c,C
F/A-18 (McDonnell Douglas, Northrop)	r,R
E-2C (Grumman)	r,R
ATF/ATA	r,R

Code: c = high probability of cancellation in zero growth budget
 C = high probability of cancellation in declining budget
 r = high probability of reductions and/or postponements in zero growth budget
 R = high probability of reductions and/or postponements in declining budget

Source: Washington Analysis Corporation

Economic Impacts

The economic impacts of a declining defense budget should be examined from both a macro and a micro perspective. This should be done remembering that the adjustment process is not something that lies exclusively in the future. As mentioned earlier, defense budgets have been declining in real terms for the past five years. Thus, the real issue is not the direction of change, but the speed at which it is likely to occur.

Macroeconomics

Earlier I argued that there is nothing inherently inflationary in defense spending because other macroeconomic adjustments can fully offset any inflationary impact. This argument can be broadened to apply to economic measures other than inflation. The keys, of course, are the other macroeconomic adjustments and the time frame examined. In the short term, if cuts in the defense budget occur rapidly, there will be dislocations. In the longer term, and if the cuts are slower, there is no reason that the health of the economy need be negatively affected.

There seems to be a widespread assumption that defense spending cuts will be used to reduce the federal budget deficit. If this happens, then eventually one would expect to see lower levels of demand, less federal borrowing, fewer inflationary pressures, lower interest rates, a stronger currency, and higher levels of investment. Of course, all of this would not happen overnight, and, if the spending cuts reduced demand at a time when the economy was already quite weak, they could result in a recession before the positive benefits are achieved. Much would depend on how the monetary authorities responded to the more restrictive fiscal policy produced by lower defense spending and a smaller budget deficit. Since the incremental spending cuts are not likely to begin before the fall of next year, and since they are likely to be phased in over several years, there is plenty of time to minimize any negative impact that a more restrictive fiscal policy could produce.

The presumption that lower defense spending will result in a lower deficit may be totally wrong. The resources that were freed by the defense spending decline that followed the Vietnam conflict were used to fund more generous social benefits. There have been no major new federal spending programs for many years, and we hear increasing demands for the federal government to provide funds for AIDS-related research, expanded child care and nutrition programs, drug enforcement and rehabilitation programs, improved education programs, and rebuilding roads, bridges and other public infrastructure. In some cases the money has not been available, in others it is being held in trust funds so that the size of the federal deficit will appear smaller. If Congress decides to use the money to fund new or expanded federal activity, then there may be no reduction in fiscal stimulus at all, simply a redistribution. This would produce microeconomic adjustments, but no particular macroeconomic impacts. Econometric studies have shown that there is virtually no difference between a dollar spent building highways versus a dollar spent building missiles, as far as the GNP is concerned.

The greatest macroeconomic dislocations are likely to fall in the area of employment. Monetary policy is currently aimed at gradually lowering the inflation rate over the next several years. To achieve this, policies are likely to be set so that economic growth is consistently below our potential growth rate. This means that over the next few years, the economy will not generate enough jobs to provide employment for all of the new workers entering the labor force. If the federal government adds additional people to the civilian workforce by discharging them from the government payroll, this will raise the level of unemployment. With the economy generating 100,000 to 200,000 jobs per month, there will be plenty of room for individual adjustments. Nevertheless, some people will be forced to accept lower paying jobs and the aggregate level of unemployment will be higher. To the extent that the workers are being brought home from abroad, however, it will not result in lower income levels in the US.

Microeconomics

The most significant adjustments in the US economy from lower defense spending will occur at the industry level. Between 1977 and 1985, the number of industries that depended directly or indirectly on the military for more than 10% of their total sales more than doubled from 21 to 45 industries. A number of industries that are not normally closely identified with the military—such as optical instruments and industrial trucks—greatly increased their dependence on the defense market. Table 4 shows the share of output going to defense for selected industries. It also shows the growth in defense output over the 1980-87 period. In the case of shipbuilding, it shows that there is no longer a commercial industry in this country; in the case of optical instruments, it shows that defense output more than doubled over this period.

Table 4
Defense Output for Selected Industries

Title	Defense Output - Growth 1980-87	(percent)	Defense Share of Output
Shipbuilding	27.3		99.9
Ordnance	57.9		94.0
Large ammunition	80.6		87.7
Tanks	78.2		72.0
Missiles	95.4		71.8
Aircraft engines	64.3		65.9
Explosives	7.0		65.0
Aircraft	74.9		52.7
Steam turbines	51.6		51.4
Small arms	85.5		47.0
Small ammunition	48.8		43.0
Communications equipment	65.6		41.5
Aircraft equipment	60.6		35.5
Machine tools	51.7		32.8
Nonferrous forgings	64.6		27.0
Truck trailers	91.8		26.9
Transmission equipment	74.6		26.0
Electronic components	86.4		25.0
Engineering equipment	47.2		23.8
Electron tubes	53.3		23.0
Industrial trucks	49.4		23.0
Aluminum	48.5		20.4
Zinc	37.6		19.1
Optical instruments	118.0		15.3

Source: *Washington Analysis Corporation, based on unpublished data from the U.S. Department of Commerce*

As we cut back on defense spending, it will have a significant impact on the industries listed in table 4. This raises important questions about the adequacy of the US industrial base to provide the defense production capabilities that we need. For example, defense output by the machine tool industry grew 52% over the 1980-87 period, yet shipments by that industry fell 48%. Defense output of electron tubes grew 53% while shipments fell 21%; defense output of steam turbines grew 52% while shipments fell 71%. There are other industries, too, where the industry has contracted while defense demands were growing. The pressures on these industries will intensify as defense demands fall. While I believe that the dynamic adjustment process is an essential part of the strength of our economic system and must be allowed to

work, there may also be legitimate national security reasons to explicitly subsidize certain industries that are an essential part of our defense industrial base.

With the concentration of defense output among the industries identified above, one might also expect that defense output would be concentrated geographically. This is true in the sense that states like California, New York, Texas, and Virginia are the largest producers of defense goods and services. However, these states also tend to be the largest producers of total goods and services. Table 5 shows that the defense share of total state output varies between a high of 10.8% (Virginia) and a low of 3.4% (Iowa). The largest defense producer, California, also has the largest economy so the defense share is just under 9%. The table also shows that some states which do not spring to mind when we think about the concentration of defense production such as Alaska, Hawaii, Maryland, and Washington are likely to be among those most affected because defense is a reasonably large share of the state economy.

The geographic distribution of the impact of defense cuts will depend on the specific cuts chosen. Cuts in personnel will have their largest impacts in Alaska, California, Hawaii, Maryland, and Virginia. Cuts in ordnance will affect Washington and California the most. Cuts in aircraft will have the largest impact on the economy of Connecticut. Mississippi will be most influenced by a reduction in transportation equipment. Without knowing the specific weapon systems Congress and the administration will choose to cut, it is not possible to say which parts of the country will be most influenced, but this analysis shows that the impacts will not be spread equally.

Summary and conclusions

Let me summarize by reiterating a few basic principles:

First, defense policy decisions should be based first and foremost on national security considerations. They should not be driven by the stage of the business cycle, by the Gramm-Rudman deficit targets, or by pork barrel politics.

Second, our economy is large enough and flexible enough to adjust to any level of defense spending that we deem necessary. There will be temporary dislocations, particularly if changes are made rapidly, but the key word is temporary.

Finally, the ultimate impact of winding down the Cold War will be very positive for the economy. As long as we can devote fewer resources to providing an adequate level of national defense, because the threat to our security has declined, we will be able to use those resources to raise our national standard of living.

Table 5
Output by State, 1989

	Defense	Nondefense	Defense Share (%)
	(Billions of Dollars)		
Alabama	7.6	115.4	6.2
Alaska	1.7	15.6	9.8
Arizona	7.5	109.4	6.4
Arkansas	3.5	74.4	4.5
California	90.1	922.0	8.9
Colorado	7.6	127.0	5.6
Connecticut	12.6	132.4	8.7
Delaware	1.4	32.2	4.2
Dist. of Columbia	3.3	48.2	6.4
Florida	22.9	374.9	5.8
Georgia	13.1	221.5	5.6
Hawaii	3.6	34.1	9.5
Idaho	1.1	29.9	3.6
Illinois	16.6	399.3	4.0
Indiana	11.1	188.6	5.6
Iowa	3.4	91.9	3.4
Kansas	6.2	181.1	7.1
Kentucky	4.9	101.6	4.6
Louisiana	7.2	126.6	5.4
Maine	2.7	35.6	7.0
Maryland	14.2	149.0	8.7
Massachusetts	17.7	227.5	7.2
Michigan	13.2	327.2	3.9
Minnesota	7.6	156.4	4.6
Mississippi	5.7	63.6	8.2
Missouri	13.4	173.3	7.1
Montana	0.8	21.2	3.6
Nebraska	2.3	53.5	4.1
Nevada	1.4	33.6	4.0
New Hampshire	2.6	39.4	6.2
New Jersey	15.5	288.7	5.1
New Mexico	2.8	39.1	6.7
New York	40.7	617.6	6.2
North Carolina	11.1	242.0	4.4
North Dakota	0.8	17.7	4.3
Ohio	19.7	373.7	5.0
Oklahoma	5.4	91.3	5.6
Oregon	3.0	83.4	3.5
Pennsylvania	20.2	391.7	4.9
Rhode Island	2.1	33.2	5.9
South Carolina	7.0	109.7	6.0
South Dakota	0.8	21.4	3.6
Tennessee	6.9	157.9	4.2
Texas	34.8	577.8	5.6
Utah	3.5	51.2	6.4
Vermont	1.0	17.4	5.4
Virginia	25.0	205.9	10.8
Washington	14.1	131.6	9.7
West Virginia	1.6	42.6	3.6
Wisconsin	6.7	173.3	3.7
Wyoming	0.7	16.2	4.1

Source: Washington Analysis Corporation based on data provided by Department of Defense

Representative HAMILTON. Thank you very much, Mr. Lee.
Mr. Gansler, please proceed.

**STATEMENT OF JACQUES S. GANSLER, SENIOR VICE PRESIDENT,
THE ANALYTIC SCIENCES CORP. [TASC]**

Mr. GANSLER. Thank you, Mr. Chairman.

There is little question that the Department of Defense's impact on the U.S. economy considerably exceeds its 6 percent of the gross national product. The fact that approximately one out of every three scientists and engineers is supported by the defense budget, one in five of the Nation's manufacturing workers, and a similarly large share of the Nation's domestic capital investment in plant and equipment are defense related, clearly indicate the significant impact of defense on the U.S. economy. Historically, however, public policy has tended to address America's national security issues and its economic issues as either largely independent considerations or as conflicting areas; that is, "money spent on defense hurts the economy"—with the advocates of this position citing such statistics as how many hospitals could be built for the cost of a B-2 bomber. Only in recent years have some people begun to explicitly address the reality that America's overall security is a combination of its military and economic strength, and—even more importantly, that these two issues in today's world are strongly interrelated. Specifically, America's military posture and its economic competitiveness are both highly dependent upon the Nation's technological leadership. What is needed—and missing today—is a national technology strategy; developed and implemented through a partnership of private and public leadership. This must be an integrated strategy, considering both military needs, particularly in the changing international environment, today, as well as our industrial needs; where the latter must satisfy both our international economic competitiveness as well as our domestic work force needs.

Consider, first, the military arena. Here, it is essential that the United States take full advantage of the period of reduced tensions, yet recognize that history has shown that the Nation must maintain its preparedness. This is especially true in today's world of intercontinental missiles and nuclear weapons, and also well-armed conventional capability in many industrialized, and even less developed, countries.

Thus, the United States has to change its military strategy and its weapons procurements to meet the challenges of the 1990's. Undoubtedly, this means a shift—within defense expenditure at any level—toward greater reliance on advanced intelligence systems—to provide the needed "warning" associated with a reduced state of readiness—and also a far greater emphasis on research and development—in order to position the Nation for potential future needs. It also allows you to eliminate any "technological surprises" by potential adversaries. It also undoubtedly means significant restructuring of the forces, in order to be able to handle the U.S. role in "likely" Third World conflicts, as well as to continue to deter the use of any nuclear weapons anywhere in the world.

One of the most critical issues for the Department of Defense is that of being able to develop lower cost, higher quality weapon sys-

tems so that, with its more limited resources, it can still afford to have a significant quantity of weapons to represent as viable deterrent and war-fighting posture.

Interestingly, it is this need for the DOD to have lower cost, higher quality weapon systems, combined with the fact that, today, the technology needs for defense greatly overlap those of the civilian world—in such areas as advanced electronics, supercomputers and associated software, new structural materials, and advanced manufacturing equipment—that leads to shifts toward civil/military integration. It is the combination of the overlap in the technology, plus the fact that DOD needs low cost, high tech systems that offer enormous potential for simultaneous benefits to the Nation if investments for defense can be effectively utilized by the civilian economy.

Historically, the Department of Defense has always been so “different”—in its way of doing business—from the civilian economy that the two industrial sectors have been totally separated—except on the accounting books of some corporations. However, the basis for these differences—such as unique military specifications and standards, specialized cost accounting requirements, excessive auditing, unique procurement regulations, et cetera—are no longer effective or affordable, and they all must be removed.

The Government must shift DOD business toward far more integration of defense and civilian operations—at the factory floor and engineering design levels. Were defense business to be shifted in this direction—a difficult step, requiring strong legislative and executive branch leadership—then the DOD could benefit from the cost and quality emphasis of the commercial world, as well as the “overhead absorption” associated with the large, integrated operations, while America’s commercial industry can benefit from the DOD’s large investments in R&D—about \$38 billion a year—capital equipment, and labor and management skills.

At the same time as defense procurements need to dramatically improve—in terms of reduced costs, higher quality, and faster developments—the United States needs to take active steps to improve its international, commercial competitiveness in these identical areas. Numerous studies have shown that the three major factors of industrial productivity growth are process innovation—manufacturing tools and techniques—product innovation—R&D on both old and new products—and management innovation—through the development and application of new management techniques.

While the DOD and U.S. industry, in general, have been extremely strong in the development of new products; however, they have been far weaker in the manufacturing area and in the rapid application of new management techniques—such as “concurrent engineering” and “total quality management.” Because of the DOD’s significant role in the overall U.S. economy, if it shifts its practices toward placing far greater emphasis on manufacturing technology and on improved management processes, then the DOD’s effect can significantly speed up the essential change in the U.S. industrial practices across the board. In the last few years, it has initiated some steps in this direction.

Additionally, because today there is so much overlap between the technologies used on the civilian side and those used on the mili-

tary side—referred to as “dual use” technologies—if the DOD does shift to the use of commercial standards and specifications, as well as the use of commercial components—steps which have been strongly recommended by numerous advisory groups—such as the Packard Commission and the Defense Science Board—then DOD investments made for reasons of national security can have a very positive effect on U.S. competitiveness as well. For example, recent DOD R&D investments in Sematech, superconductivity, advanced electronic devices, advanced display devices, and advanced manufacturing technology equipment, all fit into this category of “dual use” stimulation of advanced technology—first for national security, but clearly also applicable to civilian competitiveness.

Shifting now to macroeconomic considerations, because defense expenditures “play out” over a significant number of years—only 14 cents of every DOD procurement dollar is spent in the first year and only 38 cents of that dollar is expended in the second year. Because defense procurements are focused on a very small and highly skilled sector of the U.S. labor market—less than 3 percent of the workers are aerospace engineers, computer programmers, or skilled blue-collar workers, such as tool and dye makers and machinists—the large-scale effects of anticipated defense cutbacks will not be particularly dramatic. However, even if defense cutbacks are done properly—that is, to match a strategy of increased investment in intelligence, R&D, and the Third World area—there are bound to be some local employment problems due to the termination of some lower priority programs.

If planned out well enough in advance, efforts can be made—by both the Government and industry—to shift the labor force into these new product areas. However, if historical precedent continues; that is, if Congress attempts to keep all programs and simply stretch each of them out, then billions of dollars will be wasted and the individual cost of the equipment itself will skyrocket. The needed “structural adjustments” will simply not take place under these conditions, and both the Nation’s military security and its economic security will be significantly retarded.

In summary, it is up to the Government to take a leadership role in achieving the needed transformations—on both the military and economic sides—over the coming months. Three critical changes are required:

One, a new national security strategy, based upon reduced dollars, with a focus on intelligence, R&D, and Third World conflicts—while still maintaining the required nuclear deterrent posture worldwide.

Two, a shifting of DOD procurement practices, R&D investments, capital investments, specifications and standards, et cetera, all in the direction of greater use of commercial practices, standards and equipment; thus facilitating the integration of civil and military technologies and factories; in fact, achieving an “integrated” industrial base that is needed in terms of the defense in terms of crisis responsiveness.

Three, a clear recognition by the Nation’s government leaders that our long-term security depends on an integrated approach to both security and economics; which requires the development of strategies, organizations, policies, infrastructures, et cetera, that

focus on this recognition and with proactive, private and public partnership efforts aimed at this dual, integrated objective. Those do not exist today.

Congress, the executive branch, and U.S. industry are clearly going to be challenged in the coming months. The decisions made will either set us back significantly, or move us rapidly forward—on a new and positive path. I have full confidence that the Nation will respond appropriately.

Thank you.

THE PEACE DIVIDEND

Representative HAMILTON. Thank you very much, gentlemen.

Let's begin with just getting the reaction, a short answer to the question, which some of you, I guess all of you, have addressed in your statements. And that is, is there going to be a peace dividend and how much will it be?

Mr. ADAMS. If you cut defense, you have to make a decision about what you will do with the alternate uses of the funds. We had one attribute, as was suggested in other testimony, it was transferred—if that is the word—principally into transfer payment programs. As it happens, there was a plan to have that major infrastructure program that the Council of Economic Advisers had drawn up that was not in fact acted upon.

My sense is that if the cuts are on the order of what Secretary Cheney is talking about, at least in the first 3 or 4 years that we are talking about here, that dividend is not likely to be large. We may be \$3 billion to \$5 billion to \$7 billion below current outlay forecasts at current projected budget levels. For the Defense Department, \$6 billion or \$7 billion is not an enormous dividend. My suspicion is that the executive branch is likely to turn that into a deficit reduction package to try to meet the Gramm-Rudman-Hollings target.

Representative HAMILTON. When would we get a \$3 billion, \$5 billion, or \$7 billion peace dividend?

Mr. ADAMS. You would be talking about spending alternatives in the fiscal 1991 budget.

Representative HAMILTON. Next year?

Mr. ADAMS. Yes, the budget that would be next year.

Representative HAMILTON. How about the rest of you, how do you react to Mr. Adams' judgment on the peace dividend and how soon it will kick in?

Mr. LEE. I agree. It will likely be small because of a lot of the cutbacks were already occurring. I think Congress will make some cuts in the fiscal year 1991 budget. I would guess that they might be a little bit larger, may be as much as \$10 billion in nominal terms.

Representative HAMILTON. For 1991?

Mr. LEE. For fiscal 1991, that's right, below what was being planned earlier. And, of course, that cumulates over time if you continue to maintain it over a several year period, but we are not talking big numbers in terms of the macroeconomy.

Representative HAMILTON. You were talking about these figures, peace dividend, of this amount. You use the words, "as planned."

That makes all the difference of course what your baseline is where you start from.

Mr. LEE. That's right.

Mr. ADAMS. That's right.

Representative HAMILTON. Where are you fellows starting from?

Mr. ADAMS. When I talked about \$6 to \$7 billion worth of dividend, what I say is what we hear being discussed as the President's likely submission for the fiscal year 1991 defense budget. Outlays would be roughly \$6 to \$7 billion below the previous projection of the 1991 defense budget.

Representative HAMILTON. In actual dollar outlays, what would be the impact of that?

Mr. ADAMS. The \$6 or \$7 billion, that would be the outlay difference.

Representative HAMILTON. What would be the difference between, say, the level of defense spending and the preceding fiscal year?

Mr. ADAMS. I'm sorry, would you repeat the question. I didn't follow.

Representative HAMILTON. What would be the impact with respect to the actual outlays of the preceding fiscal year. You are still talking about a peace dividend, as I understand it based on projected spending.

Mr. ADAMS. That's right, as projected by the Defense Department.

Representative HAMILTON. Which includes an increase, doesn't it, the projection?

Mr. ADAMS. The 1991 figure did include an increase, that is correct.

Representative HAMILTON. It seems to me the figure that I at least understand better is what the impact is as compared to actual outlays of the preceding year.

Mr. ADAMS. With respect to comparing outlays to the previous year, the Cheney outlay figure, the one agreed on figure we heard reported, would be \$5 or \$6 billion nominal increase over the preceding year.

Representative HAMILTON. So the peace dividend would end up being an increase, is that it?

Mr. ADAMS. The expectation from one year to the next is, yes, the dollar spending in defense in outlay terms would go up.

Mr. GANSLER. Mr. Chairman, it seems the real issue isn't making assumptions of cost avoidance—that we might have spent—but actually making comparisons with what we did spend last year and what we will spend in subsequent years. And it seems to me that, contrary to what we are spending now, the impacts are likely to be extremely small in the short term, because even where you have cuts, your cost frequently, we find, will go up. Base closings cost money in the first few years. Also program terminations; you recall the B-1A termination cost about \$2 billion for termination liability. It was not a significant savings. As we stretch programs, the unit costs go up and you really don't make big savings in those costs.

Representative HAMILTON. Arms control agreements—

Mr. GANSLER. And, in fact, there are good and valid reasons for that. You have to increase your intelligence gathering, for exam-

ple, in the presence of arms control, so you shift your resources. If we're going to shift to drugs or to Third World conflicts, and I would hope that we do, then I think part of the answer in the long term depends upon what we use those resources for. A significant investment in R&D, for example, could have a significant productivity enhancement to the Nation, and therefore a positive effect as a peace dividend. It doesn't have to be just in dollars; it could be in new products and new manufacturing processes, or even management innovations, if it is done properly. The question is whether or not it will be done properly, or whether it will simply just be thrown away and wasted.

Mr. ADAMS. There is one thing I would add to what I said earlier on this, which is important. If you are looking at planning a fiscal 1991 budget, both measures may be relevant. You may be seeing an increase in nominal outlays over the prior year but in planning the new budget, you have seen an internal shift in the budget plan of \$6 to \$7 billion that is then going to be, as I suggested, probably used by the administration to reduce their estimate of the deficit and reach the Gramm-Rudman target, but would also be, as it were, available as a planning option for the Congress to direct in other ways.

DOD BUDGET PROJECTIONS

Representative HAMILTON. I saw an estimate that Mr. Kaufmann over at Brookings made about a 50-percent defense reduction in real terms by the year 2000. Do you see anything like that developing? That is a very long time to project, it seems to me, but how do you react to that kind of figure?

Mr. ADAMS. It could be possible. I have looked at Bill Kaufmann's numbers. And it is interesting to me that if you look at the constant dollar figure that Bill Kaufmann projects in his cuts for fiscal year 1994 for function of 5-0 in the budget and you look at where Secretary Cheney's projected \$180 billion cut over the 5-year plan leaves you in 1994 in constant dollars, those two numbers, Kaufmann's and Cheney's, aren't all that far apart. Where Kaufmann's numbers fall off the cliff is after 1997, and it is based on the presumption that we will make major gains in conventional arms control in the second round of the CFE talks. And if that did happen, it is entirely possible that what Bill Kaufmann is talking about is \$150 billion defense budget in constant dollars, which would leave us probably in the \$225 to \$250 billion current dollar range by the end of the decade. And I imagine that is possible. And at that level, \$150 billion, it would be underneath the bottom of average peacetime spending in constant dollars. It would be quite a reduction from where we've been over the last 40 years.

Representative HAMILTON. With that kind of projection, the real peace dividend kicks in quite a ways down the road.

Mr. ADAMS. In Kaufmann's numbers, you don't see anything significant in terms of a peace dividend, I would say, until after 1997.

Representative HAMILTON. Do the rest of you have any reaction to those numbers?

Mr. GANSLER. I basically agree with Gordon Adams. The level you would go down to would likely reach the low point in the mid-

1970's, and clearly the ability to get down to \$150 billion real dollars annual level is much more a function of world conditions, arms control, things of that sort, than it is "hope"—we cannot project 10 years ahead, we cannot project 2 months ahead nowadays.

DEFENSE SPENDING

Representative HAMILTON. There would be agreement among all of you on the panel that defense spending is not going to drop dramatically in the next 1, 2, or 3 years?

Mr. LEE. If defense spending is about \$290 billion, which is about what it is now, and if it stays there for the next 2 or 3 years, I think you will be doing quite well.

Representative HAMILTON. Several of you suggested that, in the period that we're now in with reduced tensions, we change our military strategy and restructure our defense budget. Do all of you agree with that, that we have to restructure this defense budget? I was impressed by several of you, I think, and some of the articles that I have seen, as well, indicating that we seem to approach this business of calculating the peace dividend and determining the defense budget on the basis of just figures, first, and then worry about defense strategy later.

Is that your view, too? Is that the way we go about things here, or we are going to go about it, as we try to proceed with peace dividend considerations?

Mr. GANSLER. Secretary Cheney has said that it is consciously his intent to try to change that approach. Simply continuing to stretch out programs and continuing to fund programs that we intended for a different environment and a different time is simply the wrong way to utilize the resources. And I know it is at least his intent to try to address that. Whether or not he will be successful is a challenging question.

Representative HAMILTON. I can remember similar statements from every Defense Secretary.

Mr. GANSLER. I guess the one thing that I would argue is that it is really different today in that the world is changing so rapidly that people cannot ignore it.

CHANGING DEFENSE STRATEGIES

Representative HAMILTON. It is going to force you to make strategy changes.

Mr. GANSLER. It is a combination of the world changing and the dollars changing. We have an almost incompatible mix of an old strategy and an old set of costs that have to change. And I think that there is a growing recognition of that need. It is going to be very slow. There's a lot of institutional resistance, industry, the military, and the Congress, and even some in labor will continue to resist it because it is politically more desirable in many ways to continue funding the old programs than to shift to the R&D emphasis or to the intelligence emphasis, or even a Third World emphasis. It does not have the big symbolic programs.

Mr. ADAMS. I agree. I think you're absolutely right, Mr. Chairman, that the felicitous relationship between strategy of budgets is

a holy ground of every Secretary of Defense, and frequently honored in the breach. I do think that conditions in the world and conditions in the budget are so changed now that there is an inevitable connection between the two, but that is not the same thing as saying that is how the Defense Department will manage it.

And what kind of concerns me at this point is, as we see this first round of really dealing with budgetary wealth being at the door, what we do see happening is a request to the services for adjustments in programs that may carry the figleaf of progress to be made in arms control and reduction in international tensions, but in fact will look like they tend to serve service agendas more directly in terms of bureaucratic requirements and the size of the force structure of the programs that are in the hardware pipeline. And then we don't get a close connection.

COMPOSITION OF DEFENSE REDUCTION

Representative HAMILTON. What about the composition of the defense reductions that we're going to have; manpower, weapons, force structure, and so forth? Several of you hit upon that in your statements, I noticed. But I would like you to speak to the question: What is going to be—where are the cuts going to come from; I guess, in your judgment? Is that the right place for them to come from?

Mr. ADAMS. It looks to me like you could sum it up, at least as far as we know about it because we do not have a budget submission at this point, is that you are talking for preference of hardware over people, the first rounds of cuts—

Representative HAMILTON. You will cut people and keep hardware?

Mr. ADAMS. That's right. The target will be—we have seen figures of as much as three army divisions, five air force air wings, 62 navy ships, and about 250,000 people.

Representative HAMILTON. Is that the right judgment?

Mr. ADAMS. I don't think it is the correct judgment. In my own judgment, you would want to balance those reductions more evenly between people of the force structure cuts and hardware structure cuts. I say that for two reasons. One, when you drive down the defense budget highway the next generation of hardware that we currently have projected, you are setting in motion a production process on things like LHX's, C-17's, B-2's, ATF's, and a series of other programs, A-12's, attack planes, all of which have liabilities for middecade defense budgets, one of which may not be the equipment we require in the changed world that Jack Gansler is talking about, so we may find ourselves cutting them up, burning them up, or beating them to death because we do not require them for the changed threat.

The other problem is budgetary. We may find ourselves in the process of large-scale production programs that outrun projected costs and then either need to be stretched to the point of inefficiency or need to be canceled or require deeper force structure cuts than we have thought about to provide the funding for those programs.

On the other side, deep cuts in force structure, before we have succeeded in negotiating the right multilateral deals, seems to me kind of throwing away the gain before we have actually negotiated the gain. Our hedge, it seems to me for the moment, is in our force structure in the careful negotiations of force reductions multilaterally, rather than simply walking them away unilaterally.

Representative HAMILTON. Do the rest of you agree that that's where the cuts will be?

Mr. LEE. As I said in my statement, I don't think you have a big choice. If you want us to make cuts and you want to see the payoff soon, weapons systems is a waste of your time; you will cut people. That's the only way practically that you can do it. I don't think that is necessarily the right way, either.

I think that Jack Gansler has put his finger on something that is really important in saying that it is even more important today than it has ever been to focus on research because we're not going to be building as many weapons, and if we're going to stay militarily capable, we're going to have to put more resources into the research area in order to accomplish that.

But there's no indication, so far, that the cuts that are likely to be made are being driven by any kind of strategy. They are just being driven by the way the numbers work in the budget.

Representative HAMILTON. And if they are driven by the way the numbers work in the budget, that means that you focus on manpower?

Mr. LEE. You have no other choice.

DEFENSE FISCAL PLANNING

Mr. GANSLER. For the short term, I would argue that if the Government wants to do something that could have a dramatic and positive effect, both on national security and economics, it is to shift to a multiyear budget process. It is fiscally irresponsible, in terms of economics and our security, to make the decisions on a 1-year basis. We are the only nation in the world that does its defense fiscal planning on a 1-year basis. Other countries tend to look at the 5th and the 6th year.

The Congress, in my opinion, would be better with a 3-year revolving budget, where the Congress votes annually on the 4th year. You have a 3-year budget cycle. We just ignore the 2d and 3d years. And then the questions of whether you address manpower or hardware and whether you address R&D and its effect on the economy and so forth, could be seriously addressed. To do it in terms of the 1st year, and only the 1st year, ends up making, I think, in many cases, the wrong decision.

Mr. ADAMS. One thing I think that has moved us slightly, not maybe a millimeter in the direction that Jack Gansler is talking about, and I want to give Secretary Cheney credit for this. I think he is the first Secretary of Defense probably since Mel Laird who has said to the services, years 3, 4, and 5 of your plan in the out-years are unrealistic, and I'm going to ask you to bring those numbers down and start thinking in terms of the program adjustments you need to make now, so that those numbers stay down in the out-years. We haven't had that kind of realism in nearly 20 years.

Representative HAMILTON. What has been the consequences of the unrealism?

Mr. ADAMS. The consequences, as I think all three of us have suggested, is that we keep kicking the planning can down the road 1 year. We keep mortgaging the future and doing this as a 1-year exercise.

Mr. GANSLER. All programs are affordable if you have unrealistic dreams in the "outyears", so you don't have to face the reality of what today's impacts are on the future.

Representative HAMILTON. In your view, the cuts will come in the manpower disproportionately?

Mr. LEE. At first.

Representative HAMILTON. And in your view, that is not the most desirable composition of defense spending cuts? Is that agreed upon?

Mr. LEE. That is correct.

Mr. GANSLER. It is not clear, to many, at least. I think you would like to have a balance between them if you have to take cuts. If the Congress will not allow cuts in weapons systems, it will have to come out from manpower in order to satisfy the budget levels, or the budgets will have to stay up.

Representative HAMILTON. Is it on the budget systems—

Mr. GANSLER. It is a catch 22. Last year, Secretary Cheney tried to cut a couple of programs and could not get away with it. Now the word is out, you know, that most likely that will happen again. My estimate is that he will try again next year, and Congress can respond or not respond appropriately. I think that there is a responsibility that is shared on both sides. Both have an obvious political incentive to maintain the current programs going.

Mr. ADAMS. And to start the new ones.

Mr. GANSLER. And even to start the new ones in their district. The really important question is whether logic or politics wins out in the debate over where the dollars should go and how they can be used effectively.

Representative HAMILTON. Congressman Scheuer.

Representative SCHEUER. Thank you very much, Mr. Chairman. I really enjoyed this very much. It has been enormously stimulating and instructive.

PEACE DIVIDEND DILEMMA

We are caught on the horns of a terrible dilemma. We have this marvelous opportunity to achieve a peace dividend but every way you pop the balloon, you come up with real problems.

And Congress has to take an enormous share of the blame. We are absolutely paranoiac about defense cuts that will produce unemployment in our districts. And you're saying that, from the Defense Department's point of view, those are the easiest to make—manpower cuts. From the point of view of the average Congressman, he will fight to the death to oppose any cuts of any military programs in his district that are going to produce unemployment. And we have this painful situation in New York with Grumman out there on Long Island manufacturing F-14's that apparently Secretary Cheney doesn't want.

Our delegation was mobilized, worked, buttonholed, jawboned other Members of Congress, the administration, and finally, we worked our will, such as it was, to force the Secretary to keep producing airplanes for \$1.5 or \$2 billion that he didn't want and doesn't think we need. Now, that has to be an absolutely aberrational result.

R&D FUNDING

What we should be doing is moving Grumman, moving those employees into some kind of productive civilian work. And just this morning, in the New York Times, I don't know if you read the story, it boggles the mind. Here, Grumman's president, chairman is spending 1 percent of annual sales revenue on research and development, compared with an industry average of 3 to 4 percent, when the bottom is dropping out of their trade, their business. And he says, "I don't see any need to spend any more than that. Why should I be wasting company money on R&D?"

I saw those cuts coming all along. It boggles the mind. This is the spokesman of a multibillion-dollar American corporation, and this man has the fate of perhaps 10,000 people in his hands, and this is the most creative thinking he can come up with. They are trying to diversify in what are two major thrusts. I think there is an object lesson in this. First, they are bidding on a \$300 million contract to develop a missile tracking system that is part of the strategic defense initiative. That is their one thrust; and their second thrust is they've already won a \$657 million contract to develop an air borne radar system that tracks tanks on the battle field.

Mr. ADAMS. Neither is a growth industry, as far as we can tell.

Mr. LEE. Unfortunately, Congressman Scheuer, there is evidence that the chairman of Grumman is not alone in his approach to funding R&D. There have been studies that concluded that the defense industry, as a whole, has funded substantially less R&D from company funds than American industry as a whole. The defense industry has depended on the Federal Government to provide the R&D, so they have not provided it internally. But Grumman is certainly not alone in taking that approach.

DEFENSE INDUSTRY INCENTIVES

Mr. GANSLER. If I might comment? It strikes me that beating on the industry when the basic issue is a public policy issue may be going too far. It strikes me that, when you talk about why people don't invest in things, in industry it is usually because the incentives aren't there to cause them to do it. And it strikes me that if the environment for capital investment, the environment for research and development, the environment for education and training don't exist, then it is perfectly rational for these people not only to not invest but even not to invest in the defense area when they do make the investment decisions.

And I would argue that we have created enormous barriers for a company such as Grumman to in fact attempt to integrate its commercial and military activities even in its own plants. There are explicit barriers of cost accounting standards, of data requirements, of military specifications, of military standards, and so forth, that

would force a company, even if they wanted to be in both civil and military, to keep those activities separate.

That is wrong in my opinion. Those barriers should be removed by the Government and incentives created to cause them to integrate, so that these good engineers at Grumman could in fact shift into high technology commercial activities.

Representative SCHEUER. There is no doubt that is the goal. Nobody wants to beat up on Grumman. We want to save those 10,000 jobs for the economy of Long Island, as well as for the morale of the people. It exacts an enormous, pitiful toll on a community in terms of its buoyancy, its confidence, whatever, its spirit, a cloud when you face them with the prospect of losing 5,000 to 10,000 jobs. And what Members of Congress would like to do, I think, is to avoid that.

And apparently, they're spending only a third or a quarter of what comparable companies are spending in research. They did get into the bus business but they were producing a bus that somebody else designed and they took a bum rap on that. But it seems to me, the answer to that is get into the bus business and design your own bus. If they can design an F-14, why can't they design a bus that works. Of course they can.

Mr. ADAMS. That is one of the reasons, Congressman Scheuer, that I suggested in my testimony that the defense industry is not monolithic is precisely because—it may be a little bit in contrast to what Jack Gansler was saying—I do see some hope in the defense industry for companies to be able to do things about diversification and about the use of their own scientific and technical personnel. There are defense contractors who do significant defense business who also do significant commercial business, and some of whom managed to walk expertise back and forth. I think of United Technologies, Martin-Marietta, or the Boeing Corp. that manage to do quite successful work on the commercial side, while doing quite successful work on the military side at the same time. The industry is not monolithic. There are companies that seem to be like Grumman that just have not got it, and some companies like Boeing, U-Tech, or Martin-Marietta who have it and figured out where their strategy should go.

Representative SCHEUER. It seems to me that our job, as Congressmen, is to kind of guide them, using a combination of the stick and a carrot; a little goad, a little incentive out there, to engage in thoughtful conversion programs.

Now, is there some way that we can sort of learn the lessons that these other firms—from the experience of these other firms who are far more successful in shifting into the commercial sector? How did they do it? What were the keys to their success? Are there a list of half a dozen?

Mr. GANSLER. When one looks at the successes worldwide, and there have been some, although certainly not a large number of them, the one thing that comes out glaringly is the fact that they planned it over a significant period of time. In other words, Grumman should have looked at it in the mid-1970's when they were looking at the buses, rather than saying, that was just a stopgap measure and, as soon as defense comes back, we will shift back into defense.

And the other thing that comes out glaringly is that the principal technology transfer mechanism is people, which means that you need to have the same production people, the same engineering people doing both the commercial and military activities, which means that we have to remove the barriers to having that happen. The dramatic increase in regulation of the defense industry that has, in fact, taken place over the last 10 years has caused more and more companies to separate, rather than to integrate. Boeing just recently, in Wichita, separated their commercial and military activities because of the enormous increase in the undesirability of government defense business. We have to remove that and encourage them to integrate.

Representative SCHEUER. You say there are a lot of disincentives in that for Grumman to try a rational program of sequeing to seque out of defense and into business. They have a trained labor force, educated labor force, they have a community that want them and needs them.

What kind of incentives could we provide that would ease this transition of Grumman and facilitate not only their engineering but their manufacturing, their sales, everything else, from a basically military focus to a commercial focus?

How do we get them, how do we harness all of that talent to be thinking about manufacturing subway cars and trains that travel on a couple of inches of an air cushion?

How do we think about their making modern streetcars, modern buses, modern jet passenger transportation, maybe prefab housing? I don't know.

But what are the incentives that we can create and what are the barriers that we can knock down as a Congress to encourage companies like Grumman to do more imaginative and more thoughtful and more long-term job planning conversion than they seem to be willing or are able to do now?

Mr. ADAMS. Congressman Scheuer, in my testimony, I suggested that we do in fact have a rather lengthy history in this country of dealing with economic adjustments, whether they be defense related or nondefense related. And probably the critical orienting word, if there is one term to describe how companies, communities, workers, et cetera, make these transitions, that word is, flexibility. If we attempt to devise some central planned mechanism that rubber-stamps on every defense installation in the country exactly the same process, it will not work. Some of those companies will not be able to—

INDUSTRIAL POLICY

Representative SCHEUER. You are not suggesting an industrial policy that would create a MITI?

Mr. ADAMS. In the area of R&D and technology, we need to look at four areas, I think, that we need to look at, that Congress can look at. One is something that Congress can only do a certain amount about. And that is, healthy adjustments or transitions for any company, for any community, for any worker, involve the economy, itself, being healthy, not just what is going on at that plant or in that community or at that location, but the regional

economy being healthy and reasonably diversified. Which has happened, to a large extent, in many of our more defense-dependent economies including Long Island, interestingly.

Second—so the healthy economy is critical. The national economy, if it is not healthy, all of the good planning in the world is not going to do a thing for any intention by Grumman's management to build anything else or anybody's desire working at Grumman to work on anything else. If the economy is unhealthy, it is a hopeless proposition.

Representative SCHEUER. Basically, because there's not a market there.

Mr. ADAMS. Exactly. There is no capital investment and there is no market.

Representative SCHEUER. If there is a market, there will be capital available; if there is no market, capital will not flow in that direction.

Mr. ADAMS. That's right.

Second, with respect to Federal spending, there are areas of Federal spending that make a difference. Some of them are in development planning assistance to communities, EDA-type grants, title IX. Some of them are worker transition and retraining moneys, JPTA, title III. Some of them are Federal spending in the areas that you were talking about a moment ago, that is to say, technology R&D. And I addressed in my testimony that I think we need to seriously address that now. The question of whether it is a MITI, or not, I don't know. But the question of what is the appropriate Federal Government role in technology and competitiveness and that will provide the kinds of spending incentives that a lot of companies—they know a fiscal target when they see it.

And third, worker adjustment issues. Again, flexibility needs to be key here. If we simply assume that all workers stay in one place and just work on something different in one place, we have condemned some workers to perpetual unemployment because the capital investment to market the jobs will not be in that place, they will be somewhere else. What is critical here is retraining, job counseling, relocation allowances, things that help workers find new jobs in the market, whether they are there at Grumman or in the two-county economy, Nassau and Suffolk, or somewhere else, in Washington or Long Beach or Sunnyvale, or wherever, Tulsa, wherever they happen to be, so those elements are important.

And, finally, the community development piece is absolutely critical. When I start hearing that the Nassau and Suffolk County legislatures and governments and executives have begun sitting down with the Long Island Regional Planning Board and the Grumman management and the other defense-related and defense contracting companies on Long Island and have begun to talk through where the skills of the work force, where the jobs are in the economy, what the legislators and county executives can do in terms of local resources and New York State resources to move into that economy and diversify and create new opportunities, then I will know the critical community level has begun to come together, which seems to be absolutely vital for these transitions to happen.

Mr. GANSLER. Let me comment. I don't think we should have MITI in the United States. On the other hand, it is necessary to contrast the MITI approach with the U.S. approach.

Representative SCHEUER. Just for clarification, MITI is the Ministry of International Trade and Industry and it is the major trade planning agency in Japan which, in many cases, very successfully directs corporate enterprise research and development production into specific product areas where they think there is a real target of opportunity in the future.

Mr. GANSLER. I would argue only with the word "direct." They encourage, they use incentives, it is not a Soviet-style planning at all. It is in indicative planning which encourages people through tax, trade, and other incentive techniques. And what they also do, which we don't have, it seems to me, is some strategy involved in which these actions are taking place. They have decided that they want to be the leader in a number of high-technology areas and they're going to go about doing that, and they're doing it—

Representative SCHEUER. And they select the high-technology arenas. They may select robotics, and provide financing for a company that told them in advance that it would be 10 or 12 years before they would show a product, and that is what they did. And that is the way it worked out. And now that company is the pre-eminent manufacturer of robotics in the world, starting from nothing, just an idea. So they target the high-technology industry, but then they will target a particular product.

Mr. GANSLER. The thing I was going to point out is, the contrast in looking at their defense industrial strategy which they have explicitly stated—in fact, have had now for a number of years explicitly stated—they have a conscious effort to integrate their civil and military technology. And as they are building up their defense industry, they are doing it in an integrated fashion so they don't end up with the Grumman that has nothing but defense.

And second, they have as part of, again, the statement that Yasuhiro Nakasone made when he was Minister of Defense, the statement of the specific defense industrial strategy, the second major thrust of it was an R&D based strategy, so that they would create an environment in which R&D would be encouraged, and, again, going back to your point, about, is Grumman really encouraged to make those R&D investments?

By contrast, the United States has a defense industrial strategy that is not explicit and, worse, it is counterproductive because of all of the disincentives that have been created.

Representative SCHEUER. Spell them out for us.

Mr. GANSLER. The high cost of capital, the short-term interest in capital, the lack of incentives for education and training, the lack of R&D investment incentives. In fact, the Department of Defense keeps threatening to take back the independent research and development that has been the one thing that defense contractors have been able to do for R&D. And I'm sure that is where Grumman is getting their independent research and development money from.

The lack of capital investment incentives in plant and equipment is seen by the difference in the depreciation time that the Japanese have compared to ours. They reward, encourage, through tax incen-

tive programs. They also will, as you point out, properly, explicitly pick certain areas that they think have high multiplier effects—"linkage" industries, in high technology, and rapidly changing—where they want to be the world leader in that field and then they make those investments. And they might do it through defense expenditures or they might do it through commercial expenditures, and they want industry to be players in that. It is not a directive one, it is a joint partnership, in a sense, with industry—a public and private sector partnership, if you will. We have not learned how to structure that. They are able to integrate their security considerations, both military and economic. We have not learned how to integrate those.

I don't think that we want to go into the full direction of the MITI, but it seems to me that, as a nation, we have to start to recognize the strong relationship among technology and national security and economic competitiveness.

TECHNOLOGY TRANSFER

Representative SCHEUER. Mr. Gansler, I was struck by your testimony. I think this has been a marvelous hearing. And you say, you talk about the need for the DOD to have lower cost, high-quality weapons systems. And you say that, combined with the fact that today's technology needs for defense greatly overlap those of the civilian world in such areas as advanced electronics, supercomputers associated hardware, new structural materials, advanced manufacturing equipment, these all offer the enormous potential for simultaneous benefits to the Nation, in both the economic and military areas, if this can be effectively utilized by the civilian economy.

Now, this phenomenon is not taking place automatically. When you say "we" should be doing this, are you talking about the private sector, are you talking about Grumman, are you talking about the Long Island Regional Planning Commission, are you talking about Members of Congress from New York who, if they put their brains and their zeal together, could structure legislative packages that would make it a hell of a lot easier for Grumman to figure out where, in that vast array of civilian windows of opportunity, their talent and the curriculum vitae, the CV's of all of their top professionals, their engineers and design people, what aspect of the civilian economy is right for them?

Maybe in all of this array of talent that they have producing missile tracking systems, air borne radar, maybe that very sophisticated communications equipment should be employed in some kind of telecommunications projects. Maybe it should be employed in producing medical electronics communications, as well as other things. That is a matter for technical people to study. But, obviously, if they can produce a sophisticated plane that is loaded with high technology, like the F14, there must be a hell of a lot of areas possibly in the economy where, if they focused their goals and their talents in a directed way, you would think that they would be very successful competitors.

Now, where is the responsibility for taking the leadership in that kind of effort? Do they hire a consultant like Arthur Andersen, or Arthur D. Little? Aren't there industrial consultants who have had

experience in those kinds of analytical approaches? Should this be a Congressional mission? Should our Congressional Budget Office, should they have a division of military conversion? Should we pass legislation perhaps providing funds for these corporations to retain private consultants out there?

Should the Defense Department make a major effort to work with these firms to say, look, over the long haul, this particular company's going to be as extinct as the dodo bird if we don't help you focus on the kinds of manufacture and the kind of products for which there is a civilian demand? And here we have set up an office with a whole lot of brilliant engineers from MIT and all over the place who are going to look at your pool of talent, your design and engineering talent, and figure out, if you have been successful in manufacturing F-14's, we can help you figure out where your niche would be, or where we can find several niches for you. We're going to help you do some finetuning of your own labor, your own production fine labor, and your own engineering and design people. And if you need some retraining for that labor, we will provide some funds for that retraining. We would rather spend money, as a country, phasing out the F-25 a little faster, but spending that money right in Grumman, retraining workers, analyzing the kind of products that they ought to be designing, giving them more R&D money to design the products that agglomeration of talent is suited to design.

Is there a government function? Is it a private sector function? Where should that initiative be? Where should that helpful analysis, the business of sitting down with Grumman and helping them get their act together and figuring out where they have a future?

Mr. GANSLER. In our market economy, I think probably the leadership has to come from industry. On the other hand, it is the executive and legislative branches' responsibility to perhaps speed up the market forces, or at least allow them to operate effectively.

REMOVING THE BARRIERS

Representative SCHEUER. Remove the barriers.

Mr. GANSLER. In fact, right now, we dramatically retard the structural adjustments, prohibiting the market forces from operating. I don't believe personally that it is the Government's responsibility to worry about individual firms. It is the Government's responsibility to worry about the environment in which those firms operate, the incentives in which those firms operate, and from the Government's viewpoint, the national security aspect, you do have to worry about what structure you end up with. Do you have any firms left, for example, in some critical areas; or, in some new technology areas, whether you stimulate sufficient innovation or, indeed, capital investment in order to allow those firms to survive.

What we did in the case of the supercomputers, we stimulated R&D and purchasing. Now, if people knew in advance that for the next 5 years we were going to make significant investments in certain areas, Grumman and others could shift into those directions. But it takes at least a plan as to which direction we are going in. Technology strategy, if you will, that is jointly evolved between the industry—collectively—not individual firms—and the Government,

acting to speed up the market adjustment process. Because today technology is changing rapidly and world economic conditions are changing rapidly, the United States can no longer stand still saying, help us. I think that's wrong.

Mr. LEE. Congressman Scheuer, you started out talking about the carrot and stick approach to provide incentives for companies to make these kinds of adjustments. We haven't really talked about the stick. And I think that there are times when Congress sends the wrong message to a company like Grumman, when they know that they can mobilize their congressional delegation and get a military program funded that may have outlived its usefulness. You send a message to the corporation that maybe they don't have to make the adjustment because they have enough political clout to keep doing what they've been doing.

Representative SCHEUER. I think they have received the message, because in that appropriation, there is language saying that, this is it, fellows; no more after this. I think they can see the handwriting on the wall.

Mr. LEE. Grumman is certainly not—

Mr. ADAMS. You may throw the baby out with the bath water.

Representative SCHEUER. That is exactly what we don't want to do. We don't want to do that.

Mr. LEE. Grumman is not the only corporation that might be used here. But I think that the point that has been made before is that longer range planning would certainly be very helpful.

Representative SCHEUER. You would think that incentive would be as obvious as the nose on your face, but it hasn't been.

Mr. ADAMS. As I suggested before, there are defense contractors who have been looking at this, I think, with some anticipation, and attempting, as it were, to hedge their bets. In contrast to the piece on Grumman in this morning's Times, I commend to you the piece Monday morning in the Washington Post business section on Martin-Marietta and Norman Augustine, and the degree to which he has begun to anticipate where the niches are in the defense market, what investments the company needs to make on its own hook in R&D development, and what long-term planning it needs to do. I cannot underline any stronger than the other two panel members have underlined it. My sense is that the primary instigator here has to be on the corporate side, on the industry side. That is our strength. And some of the best long-range planning in America is done in the corporate sector.

Not some of the best in defense, but, even there, there are some companies like Boeing that do awfully well at long-term planning. And I think they need to be encouraged with appropriate Federal incentives for Federal policy, removing the barriers Jack Gansler was talking about will happen. I do not think, on the other hand, that Congress or the executive branch is the best place to go in and say, now, I brought in my experts; here is my plan; here's what you should be doing. That frustrates the very motor at the very heart of the market system that we have in this country. And I think it doesn't work, in the end, when you impose a public sector plan, chosen by public sector employees, on a company. That is probably the least successful adjustment strategy that I can imagine.

And I think it is right, it is really not the responsibility of the Federal Government to say company x is a company that we should definitely save; company y is a company that we should let go. Those things are probably left in the private sector as they are now. There is a lot of retraining and employment stuff that we can do.

Representative SCHEUER. But we have done that a half a dozen times in recent years.

Mr. ADAMS. I know.

Representative SCHEUER. With Chrysler, with Boeing, and with Lockheed.

IMPLEMENTING A CHANGE IN POLICY

Let me ask you—and that is a very debatable policy that we have been acting out of—let me ask you: Several of you said that if the cranking down of the Military Establishment comes rapidly, that is going to produce temporary dislocations, perhaps even depression. Can someone describe what kinds of dislocations? And I have in mind, thinking about what Federal policy would be, to crank down as rapidly as we can but have programs in place that would mitigate the temporary dislocations. Is it job training, education and skills enhancement, and relocation? What are the phenomena, what are the separate phenomena involved in this dislocation that you talk about, temporary dislocation? What kind of Federal, State, city, or private programs could be devised to minimize dislocation?

Mr. ADAMS. There are three critical areas of adjustment, as I suggest in my testimony. Corporate is one, work force is a second, and community is the third.

In each case, a certain amount of flexibility of approach with cooperation among the private and public sector actors is absolutely critical to the adjustment. We have done these things before. We should avoid, I think, reinventing the wheel in terms of adjustment. We have a lot of experience on this. With respect to the company, the kind of long-term planning that we have been talking about on the corporate side is probably the most critical thing to the company, ensuring its own transition, and companies do this all the time.

Representative SCHEUER. What do you do with the company who's making less than full and thoughtful efforts to ensure its own survival?

Mr. ADAMS. In some cases, you can do nothing for the company. But what you can do is something for the work force and community, and those are the second two areas that I am talking about.

Representative SCHEUER. Let's hear about that.

Mr. ADAMS. With respect to the work force, in some cases, workers are moved within a company to other production; in other cases, they are moved out of the company but stay in the area and do other types of work that is similar. In some cases, they leave the area and go to other areas. Apt Association has done studies on the adjustment of the work force in both defense and nondefense. And this study suggests that the most critical and useful pieces of worker-targeted assistance involve assistance for retraining of the

work force, assistance for job search and job notification, and looking at the labor market for the work force, and assistance with respect to the relocation of the workers if they must relocate. Those three things are the most important ingredients of a successful adjustment.

Mr. GANSLER. What Gordon Adams listed would apply to the two types of adjustments; one being the military coming out and the work force that you would let go from factories. And I would tend to totally agree that probably is an area that the Government needs to focus on in the short term; not saving a company. If the company's not going to make its adjustments and isn't competitive enough, then we cannot save them. In many cases, certainly in the defense arena, we already have far too many companies in certain sectors. They have known that for a long period of time.

We have an aircraft industry, for example, which is basically structured around the about 2,700 aircraft—fighter and attack aircraft—per year that we used to build in the 1950's. And now we are building around 300 a year so it is almost one-tenth as many. We have largely the same number of plants. There are a few that have been consolidated but not that much of a structural adjustment. It has been clear to people that that adjustment had to take place. Some, as Gordon Adams said, have been adjusting to it and are very competitive, and others aren't. The ones that aren't need to address the labor force.

Mr. ADAMS. The third area is the community area. We tend to neglect that, but it is very important. And that is focusing some of the adjustment effort in the Office of Economic Adjustment, and the Defense Department has done this over 100 times with respect to bases. Coordination of activity at the community level, nothing has been as successful over the past 15 or 20 years in the area of defense production as the diversification of the economies of local communities where defense plants are located. That process has made incredible leaps and bounds of progress over the past 20 years. Focusing in adjustment cases, when you know well enough in advance and the role of the county, the role of the locality, the role of State resources, and the State level is critical here. California and Michigan have developed State capabilities in transitions that are much greater than they were 10 years ago.

Representative SCHEUER. How about New York?

Mr. ADAMS. New York State is not as capable as Michigan and California.

Mr. LEE. One thing you have to keep in mind, though, Congressman Scheuer, is that none of these programs that we have been talking about here are going to work very well if the economy is in a recession. And it is the primary responsibility of the Federal Government to provide the kind of macroeconomic policies that are appropriate to keep the economy growing. And all of these adjustments will be much easier, much faster, if the economy is fundamentally healthy. And it may be that the Congress can make its greatest contribution in providing appropriate fiscal and monetary policies to keep the economy healthy and growing.

Mr. ADAMS. And that returns us to the question of how the dividend, if that is what it is, gets used. The impact of deficit reduction on the growth or recession in the economy, the impact of public

sector spending, alternative strategies for demand in the economy that keeps the economy growing or in recession are very important ingredients of what Congress needs to think about.

IMPROVE QUALITY OF EDUCATION

Representative SCHEUER. One thing that we have to do for our national needs is to vastly improve the quality of education, and the results of education. We have a 25-percent rate of adult illiteracy. We have a 25-percent dropout rate in our high schools; 40 percent for blacks and 52 or 53 percent for Hispanics. This is a horrendous burden around our necks. And we know some of the answers.

We know that if you have a child from an educationally deprived family, that one way to make that child learning ready when they hit the schoolhouse doors is to provide them with a Head Start experience. I am proof of that; I had a Head Start experience. We called it pre-kindergarten or nursery school in 1923 when I got it. But over that 70-year period—60-year period [laughter]—I'm not that old—we have given this preschool experience to the kids who needed it the least, and we have denied it to the kids who are urgently at education risk. And I suggest to you that, nationally, we are funding less than one out of six Head Start spots for kids who are at urgent education risk. That is a national shame and a national disgrace, and it cripples our economy. Because when those kids fail in school, and they generally fail on the 2d or 3d year when they should be learning how to read, they may not walk out until the 10th or 12th grade, but they failed when they didn't learn how to read and write with their colleagues.

The cost of education failure is horrendous in terms of denying the economy a skilled work force, a competitive work force, and, of course, the failure in terms of welfare, in terms of the criminal justice system, in terms of this whole nightmare of third and fourth generation welfare families, public housing families, and so forth. So from the national point of view, an urgent priority has to be producing a skilled and competent work force.

We had 9 days of hearings in this committee last year on how we'd do that, and produced an excellent report.

From the point of view of the defense industry, I would think that you have, by and large, a very skilled labor force who aren't working for Grumman and the other defense contractors. There, it seems to me, the need may be for retraining, give them other alternative skills that there may be more demand for in the civilian economy. You wouldn't have to teach them literacy skills, I wouldn't think, but you may have to teach them other sophisticated skills that are more in demand.

IMPLEMENTING A CHANGE

It seems to me, there is just a prodigious challenge to the Congress to make possible the fastest possible winding down of our Defense Establishment consistent with military needs. The plan should be to meet a comprehensive long-term estimate of military needs, and unemployment and depression shouldn't enter into that calculation. We should wind down as fast as we can. And then, according to military needs criteria, and then we sit down and say,

all right, we are aware of the possibility of dislocation; we are aware of the possibility of unemployment. How do we use this fiscal dividend from winding it down to eliminate or vastly to reduce the potential for dislocation, for unemployment, for economic upsets in those communities?

And when you tell me that where we have to close a military base, it costs us more money for the 2d or 3d year, then I say, well, let's get on with closing it. We're going to spend more money on the base and we're going to have to spend more money in all kinds of retraining services for those GI's, but that is a capital investment in stability, in avoiding a recession, and in human development for those GI's that we absolutely have to make.

So, in the first couple of years, I could see a situation where you could have higher costs of closing the bases and an additional increment of investment, let us say, imposed on that to evaluate the talent, evaluate all of those GI's, what they bring to the table. And say, hey, you'll need 6 months of training as a draftsman; you need 6 months of training or 1 year of training as an electronics computer expert; you need to be a medical specialist. So there might be a significant add on to avoid dislocation and to avoid those young kids ending up their military careers and being on the unemployment rolls.

This is a tremendous challenge to Congress. I want to commend Speaker Hamilton for having organized these two hearings. I just cannot say how important and vital and critical they are. And, Lee Hamilton, I congratulate you for your vision and leadership and what we are doing today and what we are doing in the second hearing ought to have an enormous dividend for the American people. I congratulate you.

Representative HAMILTON. Thank you. I appreciate your comments. You may want to correct that record and get my title straight here. You referred to me as the "Speaker," Jim. [Laughter.] You and I both may be in deep trouble, unless we get that corrected.

Representative SCHEUER. I ask unanimous consent that that be corrected.

Representative HAMILTON. Without objection.

Thank you for your comments and your participation, gentlemen.

I would like to hit some things very quickly.

IMPACT ON EMPLOYMENT

What is the unemployment rate going to do as a result of this transition? You have talked about excess capacity, Mr. Gansler, in the defense industry. Are you going to see any jump in the unemployment rate because of this peace dividend in transition?

Mr. GANSLER. I don't think dramatic at all. It is much more driven by the rest of the economy than it is going to be by this small increment in the defense. These are skilled workers, by and large. There may be some local, short-term impact—

Representative HAMILTON. That is not something we need to worry very much about, is that right, unemployment jumping?

Mr. ADAMS. If the economy is in a recession when these changes take place——

Representative HAMILTON. That's very, very clear. But the adjustment we would go through in defense spending, you are not worried about the impact that is going to have on people out of work?

Mr. ADAMS. I don't think it is a central concern right now.

Mr. GANSLER. This period is a lot better than the post-Vietnam one in that respect. We don't have the cutbacks in NASA, the cutbacks in commercial aircraft that we had at that time.

IMPACT ON FINANCIAL MARKETS

Representative HAMILTON. Mr. Lee, you've paid a lot of attention to the financial markets. What is going to happen here with regard to stock values, investments in the defense industry, financial markets and all the rest, as a result of this peace dividend?

Mr. LEE. The defense companies' stock prices by and large sell for very low multiples. That is going to continue. The defense companies are going to have a very difficult time raising capital if they choose to stay in the defense business. Smaller companies, I expect, are going to be purchased by larger companies. There will be some companies that choose to get out of the defense business altogether.

Representative HAMILTON. Are we going to see a big shakeout in the defense industry, here; mergers, acquisitions, failures, and that sort of thing, in the next few years?

Mr. LEE. We have been seeing a lot of mergers and acquisitions in the past few years. If you've been paying attention, particularly in the electronics area, there have been a number of small companies that have been absorbed by larger ones. Lockheed, for example, purchased——

Representative HAMILTON. You see, as a result of the peace dividend, more of the same?

Mr. LEE. It's going to happen faster because we're going to move the defense budget down faster, so the industry's going to shrink.

Representative HAMILTON. Will that be good or bad for the industry?

Mr. LEE. The industry's going to shrink.

Representative HAMILTON. Is that good?

Mr. LEE. I think it has to happen. I don't think that the defense budget is going to support the defense industry that we have right now.

Mr. GANSLER. It is not just the price multiple of the declining market; they now have heavy debt structure, and low profit and that will make it tougher.

DEFENSE INDUSTRIAL BASE

Representative HAMILTON. Do you see any threat in this shakeout that occurs to the defense industrial base?

Mr. LEE. I think this is a problem that we need to pay attention to. As I mentioned in my testimony, I think there is a legitimate national security reason for saying that there are certain critical things that we need for our national security. And it may be that we have to have an explicit public policy of subsidizing those criti-

cal needs because the private sector economy will not provide those things. And I think that we need to take a look at that, and not just let those things go away without having considered the implications of it.

Representative SCHEUER. Which critical needs are you referring to?

Mr. LEE. We have had situations where you couldn't get certain types of equipment; you couldn't get ball bearings or you couldn't get particular types of electronics equipment, or you found that the only producers of certain types of chips, or the only producers of certain things were foreign producers. And those things were critical to weapons systems that we thought we needed, that were important for our national security.

Mr. GANSLER. Those critical technologies, the things that defense badly needs, tend to be at the lower tiers, not the prime contractor, and those are the common, "dual use" technologies that we are talking about that, in fact, could have a positive effect on U.S. competitiveness in the civilian sector, if properly stimulated.

Representative HAMILTON. What is going to be the result of all of this changing the defense industry on American technology prowess, anything?

Mr. GANSLER. It depends on how we go about doing it.

Mr. ADAMS. Everything is how you go through the change; nothing is automatic. My sense is, if we are self-conscious about the public and private sector roles in America's technology future, and think about the areas that Jack Gansler has been talking about, what areas a public sector needs to play a role in the stimulation and development of technology, then, out of the change, could even come some resources that could be profitably put to America's competitiveness in this situation.

Representative HAMILTON. Are you optimistic or pessimistic about our capacity to make this change?

Mr. GANSLER. Pessimistic. I'm afraid there are still too many people saying that what we have to do is to let the free market operate. And the problem is, we don't have a free market; in defense, we have a perverse market with a single buyer and only a few suppliers. And even in the civilian market, we have, in the case of the European or Japanese, we have industry and government cooperating against our firms competing against each other. And I am afraid that, if we continue in that direction rather than establishing some form of an explicit technology strategy—that would focus on those critical industries with some government, at least, encouragement of those industries—that we are going to continue the trend that we have been having in those areas that Doug Lee listed of critical technologies. They are all going offshore.

INDUSTRIAL POLICY

Representative SCHEUER. You were talking about a specific technology strategy. Now, do we need a national industrial policy now at this point? Is this a government role. Who is going to determine this explicit policy?

Mr. GANSLER. I think we do have to identify those industries that are critical to national security.

Representative SCHEUER. Who is going to identify them?

Mr. GANSLER. I would argue that that should be done by the executive branch.

Representative SCHEUER. All right. Please proceed.

Mr. GANSLER. It should be a very limited number; it should be defined as those that are rapidly changing that are essential to defense, that are indicated going offshore rapidly. We need to do something to stimulate those and to create incentives for people with high-technology skills to go into those areas. We have done that in the past, successfully; we are actually doing some of that today. I would argue that Sematech is an example of one of those; superconductivity is another example.

Representative HAMILTON. Do you agree with these comments, Mr. Lee?

Mr. LEE. By and large, I think that is right; we do not need some macro, big government policy. What we need is a policy that explicitly says that we need certain things and we're going to pay for them. And that part of the cost of providing for the national security is to pay for these specific technologies that are critical—that we will not get any other way.

Representative HAMILTON. Do you agree with that, Mr. Adams?

Mr. ADAMS. I think that is right. I would agree with that. I would say that, I think I'm more optimistic than Jack Gansler. This may be because I look at two things; one, is the ability of a number of defense contracting companies who do a significant amount of the defense business who have begun their own process of adaptation, and I expect them to be able to carry it off.

The other reason I'm optimistic is because we tend to not pay adequate attention to the successes, particularly, that American multinationals have had in establishing themselves in global markets. The National Bureau of Economic Research study about 4 years ago concluded that the share of global production in manufacturing markets held by American-based multinationals hasn't changed since the 1950's. We have a lot of capability to adjust, adapt, and succeed in the international markets.

Mr. GANSLER. If I could make one point. It is not sufficient, it is necessary but not sufficient to be able to identify these critical technologies and to stimulate them. Far more important, undoubtedly, is the overall economic and cultural environment, the educational shift, the creating of the capital environment, the money environment in which long-term investment is rewarded, rather than short term; that savings are rewarded, rather than consumption. We need to shift, basically, to an overall environment in the United States geared toward more competitiveness. And if we do that, then clearly focusing on a few selected technologies can make a big impact. It can't if the overall environment is negative.

INTEREST RATES

Representative HAMILTON. Do any of you see any impact on interest rates?

Mr. ADAMS. It could be but I would suspect that it could be in either direction. It is hard to know.

Representative HAMILTON. It doesn't worry you very much, as you think about these problems?

Mr. ADAMS. I don't think it is going to be major. If anything, the likely impact would be positive; that is, the margin interest rates might go down as a result of, over time, a reduction in the Federal deficit. This might contribute to it.

Representative HAMILTON. Would you say that we have a successful economic adjustment after Korea and Vietnam?

Mr. ADAMS. After Korea, I would say, yes; after Vietnam, I would say, no. Although—

Representative HAMILTON. Do you agree with that, Mr. Gansler?

Mr. GANSLER. Not particularly, because of the macroeconomic environment. It is not what we did specifically in defense but basically we did what we are doing now; we borrowed, and that drove up the interest rates.

CONCLUSION

Representative HAMILTON. OK. Do you have any parting wisdom for the committee here, gentlemen?

We have had a good session. As Congressman Scheuer has mentioned, on several occasions, and we are most grateful to you for starting us off on these difficult questions. You have contributed significantly, each one of you, and we are grateful to you. Thank you very much.

Your full statements, of course, are made part of the record.

The committee stands adjourned.

[Whereupon, at 12 noon, the committee adjourned, subject to the call of the Chair.]

ECONOMIC ADJUSTMENT AFTER THE COLD WAR

TUESDAY, DECEMBER 19, 1989

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room 2359, Rayburn House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representatives Hamilton and Scheuer.

Also present: Richard F Kaufman, general counsel.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

Representative HAMILTON. The Joint Economic Committee will come to order.

In the first session of this series on "Economic Adjustment After the Cold War," a week ago, we heard testimony about the possible changes in the defense budget, assuming the current favorable trends in European developments and United States-Soviet relations continue.

The experts we heard from were in agreement on several important points. First, that for the next few years the downward trend in defense spending will be in about the same range as in the past few years. Second, that in the near term savings from defense cuts are likely to be modest. And third, that the Defense Department will probably prefer to make most of the reductions in manpower rather than hardware, although a more balanced approach would be more desirable in the view of the witnesses.

Today, we want to look more closely at how defense reductions will influence the economy and what measures, if any, ought to be taken to make the transition to a post-cold-war era a smooth one.

We confront major choices about how to employ the so-called peace dividend. Should it be used for deficit reduction, tax cuts, new spending programs, or some combination of those purposes? Is this an appropriate occasion for a major reordering of priorities? Will the size of the budgetary savings make a difference in performance of the economy on a national or regional level; and should government policies be modified accordingly?

We are quite pleased to have with us today, to respond to these and other questions, three highly respected economists. Charles L. Schultze is very familiar to this committee as a former Director of the Bureau of the Budget, a former Chairman of the Council of

Economic Advisers, and a private economist based in the Brookings Institution.

Roger E. Brinner has taught economics at Harvard, served as a senior staff economist on the Council of Economic Advisers under President Carter, and is presently group vice president and chief economist at DRI/McGraw-Hill.

Donald H. Straszheim has held positions at Wharton Econometric Forecasting Associates, Inc., taught economics at Purdue University, and is presently chief economist and primary economic spokesman for Merrill Lynch.

Gentlemen, we welcome each of you here. You have prepared statements that will, of course, be included in the record in full. We do have several questions to address to you after each of you have completed your oral statements.

We will begin with you, Mr. Brinner, and just proceed across the table. We would appreciate it if you would summarize your statement and then we'll turn to the other witnesses before we begin questions.

Mr. Brinner, please proceed.

STATEMENT OF ROGER E. BRINNER, CHIEF ECONOMIST AND GROUP VICE PRESIDENT, DRI/McGRAW-HILL

Mr. BRINNER. Thank you very much. It is a pleasure to join you here to discuss this topic. As you noted in your remarks, we have a unique opportunity today, because of the situation in the Eastern bloc with democracy appearing to be ready to replace totalitarian communism, we do have an opportunity to consider very serious disarmament initiatives. Today, I will focus on the economic effects, both direct and indirect, of substantial defense reductions.

Defense Secretary Cheney has outlined a program of dramatic cuts, and although the time profile and the program-specific composition are both unclear, the magnitude of the \$180 billion reduction is so great that some corporate analysts are already predicting dire business repercussions. Their initial reaction was to slash earnings estimates of defense-related industries. This was correct, but nondefense analysts should call attention to the beneficiaries of the proposal as well.

Cheney's scenario seems to envision phased-in cuts from a Pentagon baseline summing to \$180 billion in budget authority, but only \$120 billion in outlays in the medium term. By 1995, spending in current dollars would be approximately at the current level, but after adjustment for inflation purchases would be about 20 to 25 percent below 1989 levels.

Regardless of whether all or part of these hypothetical cuts are realized, sales of military suppliers will be weak. By the mid-1990's though it will be clear that builders, nondefense-capital-equipment manufacturers, the thrift industry and borrowers everywhere—and I might specifically add in the less-developed countries—stand to gain from the lighter Federal borrowing requirements. There could be a winner to match any loser and I'm confident the national economy could cope with this new defense posture without major problems.

The Federal deficit now equals 3 percent of national income and absorbs 30 percent of our savings. Today, defense spending is 6 percent of national output and the Cheney scenario would trim it to only 4 percent by 1995.

The impact of the full-defense shift on the Federal deficit, however, could be significantly greater than the direct effect of the military reduction. The Federal Government is such a large borrower in global credit markets that interest rates could be driven down substantially if other Federal programs do not consume the savings and if the Federal Reserve cooperates.

In subsequent exhibits, I'll show you just how important that second is, if the Federal Reserve cooperates.

Long-term bond rates could fall by a full percentage point by 1995 and by as much as 2 percentage points by the end of the century. And the best possible outcome: Federal budget balance will restore the normal postwar relationship of interest and inflation rates; Treasury bill rates would roughly equal prevailing inflation and bond rates would be about 1½ percentage points higher.

In the invitation to testify, I was asked to advise on the proper use of the fiscal dividend created by the defense cuts. My response is that they should be applied to deficit reduction. The burden of a persistent \$150 billion shortfall poses a chronic, significant drag on the U.S. standard of living. It's not a situation that means we are about to fall off a cliff or have a crisis.

I don't subscribe to the theory that this deficit created the stock market crash of 1987 or any other cataclysmic event. What this deficit does mean is that our standard of living will rise about one-quarter percentage point less rapidly than otherwise would be the case. That's about \$100 per person per year. We may not be able to feel it as it's ongoing, but at the end of the decade, the end of the generation, we'll miss it.

Without wanting to provoke a loud ideological debate today, let me state that I do object to the Federal deficit of the eighties because that deficit has not funded any investment to meet that interest burden. By accident or design, the deficits largely match the personal tax cuts produced by the 1981-82 Reagan program plus the 1986 tax reform legislation and it's obvious to all of us that American consumers saved and invested a trivial portion of these tax windfalls.

To the much more limited extent that the defense buildup was responsible for the deficits, it perhaps purchased the investment asset of national security that could pay tangible and intangible benefits to future generations.

In fact, I think the events in Eastern Europe lead to an increasingly convincing case that the Warsaw Pact nations were forced to say uncle because they couldn't afford to compete with our defense budget. In any case, we should accept the peacetime benefits and not reduce or offset them by carelessly spending the fiscal dividend.

My opposition to continuing deficits does not mean that I oppose new government expenditure programs that are genuine investments. Highway and bridge rebuilding programs that facilitate commerce enough to cover national costs or education and science programs that create sufficient valuable human capital to be supported or opposed on their own merits should be pursued. But

hardheaded cost-benefit calculations must be applied regardless of the size of the Federal deficit or of the defense program.

I indicated that monetary policy will have a tremendous impact on the outcome with regard to the deficit. It's quite possible to propose that the Federal Reserve might be generous, that they might target and achieve an output path very close to the one that could be hit by the economy with a full defense program. The Federal Reserve could fill the defense void with housing, nonresidential construction, exports, and a small import share in the United States. Alternatively, the Federal Reserve could turn conservative and use this as an opportunity to achieve a cooled-down economy and to take a percentage point or so off of the inflation rate.

In support of that prediction, you can look at the Federal Reserve's warm reception of recent congressional calls for zero inflation within 5 years. My crystal ball isn't bright enough to tell you which way the Federal Reserve might respond, but I can warn you in some of these exhibits that the Federal Reserve can completely eliminate your fiscal dividend.

Now the exhibits in table 3 of my prepared statement show you some such calculations. In this table, I show you two scenarios, both of which have exactly the same Federal Government programs after adjustment for inflation: same defense posture, like the Cheney scenario, same nondefense posture as in the baseline and all I've changed is Federal Reserve monetary policy.

In the generous case, labeled the "easy" money case, the Fed delivers an output path very similar to my original presentation. In other words, exports, housing, and nonresidential construction fill the void.

In the "tight" money case, the Federal Reserve is just a little more stingy. Instead of having an unemployment rate that in the second half of the decade averages $5\frac{1}{4}$ percent, the Fed targets 6 percent to try to bring inflation down a little bit, and in fact they do. I believe that the inflation would average $4\frac{1}{2}$ percent rather than 5 percent. These are not dramatic macroeconomic differences.

Yet, because of the scale of our economy and the size of our national debt, these changes are enough to cut receipts by \$86 billion and to raise interest expenditures by \$50 billion. As a result, the full Cheney scenario, with the interaction of this Federal Reserve compensating action, changes the deficit by very little compared to the base case.

If you look at table 4 in my prepared statement you'll see, bottom line, on average, only about a \$15 to \$20 billion difference, in spite of defense cuts averaging \$100 billion in the second half of the decade. So don't spend this fiscal dividend, your Federal Reserve might not let it develop.

In my concluding remarks I discuss the interactions of this defense reduction with Warsaw Pact economic and democracy initiatives and I note that you can get the vicious cycle we have had converted into a virtuous cycle: the more trade is opened up, investment is pursued with the East, the more likely we'll feel comfortable reducing our defense likewise for the Warsaw Pact.

We could in fact take advantage of some excellent investment opportunities relating to the low paid, highly skilled labor over there;

we also could help them develop their natural resources to the mutual benefit of both sides.

We'll have to be careful as we negotiate the joint ventures and other deals to be sure that we are not giving away our technical prowess; our joint ventures and licensing agreements should protect our intellectual capital. And, on the other side, the Warsaw Pact nations will be suspicious of us as they set up their side of the deal.

In summary, let me say that as you certainly understand, budget miracles are often prayed for but seldom realized. The opportunity to scale back defense expenditures may seem to offer deliverance from deficit woes and even give you the freedom to pursue new positive civilian programs. My advice is to push for the earliest and largest defense reductions that national security and rational purchasing management will allow; then, ignore this dividend as you evaluate new programs and review old ones.

Thank you for this opportunity.

[The prepared statement of Mr. Brinner follows:]

OPPORTUNITIES AND UNCERTAINTIES IN THE POST-POSTWAR ECONOMY

by Roger E. Brinner

With democracy poised to replace totalitarian communism in the Warsaw Pact nations, far-reaching disarmament initiatives require serious evaluation. The direct economic effects of bloodless East Bloc revolutions can certainly include dramatically lower defense spending, substantial debt and equity investment in Eastern Europe, major new markets for goods, and disruptive competitive pressures on Western manufacturing from a new pool of low-cost, skilled labor. The indirect effects could also be substantial: depending on domestic policy choices, the U.S. could obtain stronger construction from lower interest rates, an opportunity to reduce inflation, or funding of new government programs.

THE RETREAT OF DEFENSE SPENDING

Defense Secretary Cheney has outlined a program of dramatic spending cuts over the next five years. Although the time profile and the program-specific composition of the cuts are unclear, the magnitude of the "\$180 billion reduction" is so great that some corporate analysts are already predicting dire business repercussions. Their initial—and correct—reaction was to slash earnings estimates of defense-related industries, but nondefense analysts should call attention to the beneficiaries of the proposal as well.

The first task, though, is to clarify what the well-publicized "\$180 billion reduction" entails. The baseline for the calculation appears to have been an earlier budget calling for real growth near 1-2% from 1990 through 1994. Adding the Pentagon's rosy inflation assumptions to these real

growth rates, military outlays rose from about \$300 billion base to \$350 billion by 1995. Use of DRI's inflation forecast boosts the 1995 figure to \$375 billion.

The Cheney scenario seems to envision phased-in cuts from this baseline summing to \$180 billion in budget *authority* but only \$120 billion in *outlays* over the next five years. This would hold nominal defense outlays to approximately \$295-300 billion per year; as a result, military spending would be 17% lower than the Pentagon's baseline in 1995 but slightly higher than the current level. Admittedly, after adjustment for inflation, this does mean about a 22% cut compared with real 1989 purchases.

Regardless of whether part or all of these hypothetical cuts are realized, sales of military suppliers will be weak. By the mid-1990s, though, it will be clear that builders, nondefense capital equipment manufacturers, the thrift industry, and borrowers everywhere stand to gain from the lighter federal borrowing requirements. There could be a winner to match any loser, and the national economy could cope with this new defense posture without major problems.

The federal deficit now equals 3% of national income and, more important, absorbs 30% of household and business savings. Today, defense spending equals 6% of national output; the Cheney scenario would trim it to only 4% by 1995, compared with the current Pentagon baseline implies a modest reduction to 5%. The full impact of the defense shift on the federal deficit, however, could be significantly greater than the direct effect of the military reduction from 6% to 3.5% of GNP. The federal government is such a large borrower in global credit markets that a direct shift of this magnitude would drive interest rates down considerably—if other federal pro-

Table 1
Federal Budget Impacts of Fully Implementing
the Cheney Scenario—Assuming Generous Federal Reserve Policy

	91	92	93	AVERAGE 91-95	AVERAGE 96-2000
Defense Spending					
Baseline.....	310	323	338	341	452
Cheney Scenario	297	300	303	304	365
Difference.....	-14	-24	-36	-37	-87
Other Programs					
Baseline.....	807	860	923	928	1,329
Cheney Scenario	807	861	922	927	1,312
Difference.....	0	0	-1	-2	-17
Interest Payments					
Baseline.....	194	215	232	231	301
Cheney Scenario	194	212	225	222	243
Difference.....	-1	-3	-8	-9	-59
Total Expenditures					
Baseline.....	1,311	1,399	1,494	1,501	2,093
Cheney Scenario	1,298	1,373	1,450	1,453	1,920
Difference.....	-14	-26	-44	-48	-173
Total Revenues					
Baseline.....	1,199	1,283	1,362	1,373	1,970
Cheney Scenario	1,192	1,272	1,351	1,359	1,919
Difference.....	-7	-10	-11	-14	-51
Deficit (Unified)					
Baseline.....	123	121	155	141	140
Cheney Scenario	115	105	122	107	18
Difference.....	-7	-16	-33	-34	-121

*Note: The baseline approximates the current Pentagon policy calling for 1-2% real growth in budget authority, 1990-1994, integrated into simulations including current DRI forecast assumptions.

grams do not hungrily consume the potential defense savings and if the Federal Reserve cooperates. Lower rates, in turn, would cut the deficit further and a virtuous cycle can be initiated. Specifically, by the end of the century, annual federal interest payments could be reduced by about \$100 billion or 0.8% of GNP; the combination could swing the federal budget from a deficit 3% of GNP today to a surplus of 0.3%.

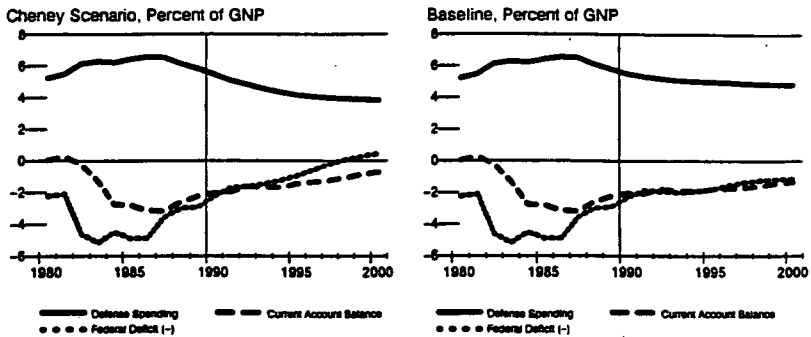
Table 2
Economic Impacts of Fully Implementing
the Cheney Scenario—Assuming Generous Federal Reserve Policy

	91	92	93	AVERAGE 91-95	AVERAGE 96-2000
Sectoral Shifts (% change from baseline)					
Military manpower.....	-2.9	-5.3	-7.8	-7.8	-14.0
Industrial Production					
Ordnance.....	-0.7	-0.7	-0.4	-0.6	-0.3
Defense and Space Equip.....	-3.7	-5.2	-7.3	-7.1	-13.2
Consumer Goods.....	-2.6	-3.6	-4.7	-4.5	-7.6
Business Equipment.....	-0.4	-0.3	-0.2	-0.3	-0.1
Intermediate Products.....	-0.8	-0.9	-0.6	-0.7	-0.1
Intermediate Products.....	-0.5	-0.4	-0.2	-0.3	0.1
Consumer Purchases					
Autos.....	-0.6	-0.5	0.0	-0.3	0.9
Housing.....	0.6	2.4	3.1	2.4	4.2
Office & Computing Equip.....	-0.6	-0.4	0.3	0.0	1.1
Nonresidential Const.....	-0.1	-0.3	0.2	0.4	4.1
Imports.....	-0.8	-1.3	-1.2	-1.3	-2.7
Exports.....	-0.1	-0.1	0.3	0.3	0.9
Financial Market Conditions (change from baseline)					
Federal Borrowing (\$11 \$).....	-9	-20	-37	-37	-127
Foreign Borrowing (\$11 \$).....	-5	-10	-14	-16	-63
10-Yr Treasury Bond Rate (basis pts)	-21	-46	-60	-58	-152
3-month T-Bill Rate (basis pts).....	-17	-40	-50	-48	-134
CPI Inflation (% points).....	0.0	-0.1	-0.1	-0.1	-0.3
Unemployment Rate (% points).....	0.14	0.18	0.14	0.15	0.14
Real GNP Growth (% points).....	-0.3	0.0	0.1	-0.1	0.1

*Note: The baseline approximates the current Pentagon policy calling for 1-2% real growth in budget authority, 1990-1994, integrated into simulations including current DRI forecast assumptions.

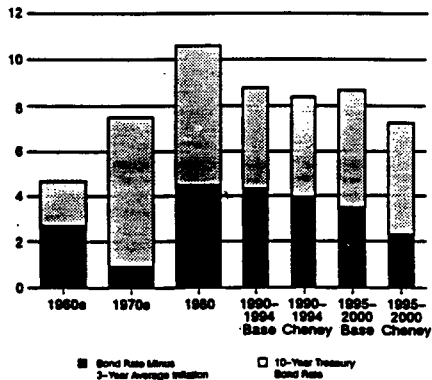
Policy choices can radically influence the shape of the economic response. Depending on the size of the final defense cuts, the determination of elected officials to devote the savings to deficit reduction, and the willingness of the Fed to counteract the fiscal restraint, long-term bond rates could fall by a full percentage point by 1995 and by as much as two percentage points by the end of the century. In the best possible outcome, federal budget balance will restore the normal post-

Chart 1
Hopes for Reducing the Twin Deficits



war relationship of interest and inflation rates: Treasury bill rates would roughly equal prevailing inflation, and bond rates would be about 1.5 percentage points higher.

Chart 2
Applying the Defense Savings to Deficit Reduction
Could Return Bond Rates to a Normal Range



GUIDANCE FOR FISCAL POLICY

In the invitation to testify today, I was asked to advise on the proper use of the fiscal dividend created by potential defense cuts. My response is that Congress and the Administration should apply the savings to deficit reduction. The interest burden from a persistent \$150 billion shortfall imposes a chronic, significant drag on the U.S. standard of living. Specifically, the need to pay more interest to foreign lenders and the restricted ability to fund more modern technology for our workforce shaves one-quarter percentage point from annual per capita income growth.

Deficits are not bad if they represent borrowing to purchase an asset whose yield is greater than the interest charged on the debt. I give this simple answer whenever I am asked to evaluate the corporate debt mountain, rising household borrowing or the federal deficit. Without wanting to provoke a loud ideological debate today, let me therefore state that I do indeed object to the federal deficits of the 1980s because they have not funded any investment; there have been few assets created to help current and future generations pay the interest burden. By accident or design, these deficits largely match the personal tax cuts produced by the of the 1981-82 Reagan program plus the 1986 tax reform legislation, and all observers will agree the American consumer saved or invested an insignificant portion of these tax windfalls. The sooner these frivolous deficits are removed the better. If public consumption — Amtrak subsidies, overly generous federal pensions, or pork-barrel projects — cannot be reduced to pay for the personal tax cuts, then they must be effectively rescinded or compensated for with higher sales and excise taxes.

To the much more limited extent that the 1980-89 defense buildup was responsible for the federal deficits, it perhaps purchased the asset of "national security" that could pay tangible and intangi-

ble benefits to future generations: in fact, an increasingly convincing case can be made that the Warsaw Pact nations were forced to say "uncle" because they could not afford to compete with our defense budget. In any case, we should accept the peacetime benefits and not reduce or offset them by carelessly spending the fiscal dividend.

My opposition to continuing federal deficit does not mean that I oppose new government expenditures that are genuine investments. Highway and bridge rebuilding programs that facilitate commerce enough to cover national costs, or education and science programs that create sufficient valuable human capital be supported or opposed on their own merits: hardheaded cost-benefit calculations must be applied *regardless* of the size of the federal deficit or the defense program. There is no free lunch.

THE MONETARY POLICY CHOICES TO BE MADE

Fiscal restraint would give the Federal Reserve a broad new range of options. If our central bankers felt generous, they could pursue a course of aggressively lower interest rates to fill the defense spending void with housing, exports, and consumer or producer durables. In other words, the Fed could target and deliver a short-run output path very close to that which would be obtained in a strong military spending scenario. Alternatively, a conservative Federal Reserve could seize the opportunity to reduce inflation through a cooled-down economy. After all, the Fed has not objected to recent Congressional calls for zero inflation within five years.

The exhibits I have already presented in this testimony assume the Fed would choose a relatively generous course, such that defense reductions only slightly trim medium-term growth and infla-

Table 3
The Federal Reserve Can Dictate the Size of the Fiscal Dividend:
Alternative Results of Fully Implementing the Cheney Scenario

Average Values, Calendar Years	Monetary Policy Choice				Impact:	
	Easy		Tight		Tight-Easy	
	91-95	96-2000	91-95	96-2000	91-95	96-2000
Credit Conditions						
Treasury Bill Rate (%).....	7.1	5.3	7.6	6.6	0.4	1.3
CPI Inflation Rate (%).....	4.5	5.0	4.4	4.6	-0.1	-0.5
T-Bill minus Inflation (%)..	2.6	0.3	3.1	2.0	0.5	1.8
Economic Indicators						
Unemployment Rate (%).....	5.4	5.3	5.6	6.0	0.2	0.7
Real GDP (\$ Billion).....	4,511.7	5,058.3	4,485.9	4,941.5	-25.9	-116.8
Nominal GDP (\$ Billion).....	6,713.5	9,459.3	6,666.0	9,085.3	-47.5	-374.0
Housing Starts (1000).....	1.5	1.6	1.5	1.5	0.0	-0.1
Trade Deficit (\$ Billion)...	-125.7	-128.6	-121.9	-122.8	3.8	5.9
Federal Budget (\$ Billion)						
Real Purchases (1982 Prices)	307.4	301.7	307.4	301.7	0.0	0.0
Nominal Expenditures.....	1,472.9	1,947.8	1,479.8	1,972.3	6.9	24.5
Defense.....	305.6	370.5	304.9	363.8	-0.6	-6.7
Interest.....	225.0	241.8	232.6	290.4	7.6	48.6
Other.....	132.0	184.1	131.7	181.1	-0.3	-3.1
Nominal Receipts.....	1,381.3	1,952.5	1,368.6	1,866.7	-12.7	-85.8
Surplus(+)/Deficit(-).....	-91.6	4.7	-111.3	-105.5	-19.6	-110.3

tion. To illustrate the sensitivity of the business and budget results to monetary policy, I have also used the DRI Model to estimate the repercussions of restrictive credit. Assuming the Fed sticks to the same interest rate path as in the *high* military spending baseline, the inflation rate is one-quarter percentage point lower by 1995 compared to my original presentation of the "Cheney scenario"; by 2000, the tighter monetary policy achieves nearly a 1.0 percentage point inflation improvement. Unfortunately, these inflation gains come at a substantial cost: the economy must be materially weaker, implying not only obvious pain for households and business, but also eventually eliminating the fiscal dividend of lower military spending.

Table 4
Federal Budget Impacts of Fully Implementing
the Cheney Scenario—Assuming Conservative
Federal Reserve Policy

	91	92	93	AVERAGE 91-95	AVERAGE 96-2000
Defense Spending					
Baseline.....	310	323	338	341	462
Cheney Scenario	297	300	302	304	359
Difference.....	-14	-24	-36	-37	-103
Other Programs					
Baseline.....	807	860	923	928	1,329
Cheney Scenario	807	861	923	927	1,296
Difference.....	1	1	0	-1	-32
Interest Payments					
Baseline.....	194	215	232	231	301
Cheney Scenario	194	214	230	229	288
Difference.....	0	-1	-2	-3	-14
Total Expenditures					
Baseline.....	1,311	1,399	1,494	1,501	2,093
Cheney Scenario	1,298	1,375	1,456	1,459	1,944
Difference.....	-13	-24	-38	-42	-149
Total Revenues					
Baseline.....	1,199	1,283	1,362	1,373	1,970
Cheney Scenario	1,191	1,268	1,340	1,348	1,839
Difference.....	-8	-15	-22	-25	-131
Deficit (Unified)					
Baseline.....	123	121	155	141	140
Cheney Scenario	117	112	139	124	121
Difference.....	-6	-9	-16	-16	-19

*Note: The baseline approximates the current Pentagon policy calling for 1-2% real growth in budget authority, 1990-1994, integrated into simulations including current DRI forecast assumptions.

The budgetary implications of slightly different reasonable monetary policies may seem surprisingly large. Shifting from generous to tight monetary policy, but keeping all inflation-adjusted federal programs at their Cheney scenario values could entail tax revenue losses equal to half the budget savings flowing from defense cuts by 1995, and all of the savings by 2000. This is true even though the unemployment rate is only 0.4 percentage point higher in 1995 and 0.9 percentage point in 2000.

Table 5
Economic Impacts of Fully Implementing
the Cheney Scenario—Assuming Conservative
Federal Reserve Policy

	91	92	93	AVERAGE 91-95	AVERAGE 96-2020
Sectoral Shifts (% change from baseline)					
Military manpower.....	-2.9	-5.3	-7.8	-7.8	-14.0
Industrial Production.....	-0.8	-1.2	-1.4	-1.5	-3.5
Ordnance.....	-3.7	-6.2	-7.3	-7.1	-13.2
Defense and Space Equip.....	-2.6	-3.7	-5.1	-5.0	-9.9
Consumer Goods.....	-0.5	-0.7	-0.9	-0.9	-2.3
Business Equipment.....	-0.9	-1.4	-1.7	-1.7	-4.3
Intermediate Products.....	-0.6	-0.9	-1.1	-1.1	-2.6
Consumer Purchases					
Autos.....	-1.0	-1.7	-2.1	-2.1	-4.6
Housing.....	-0.1	0.1	0.5	0.4	0.9
Office & Computing Equip.....	-0.8	-1.2	-1.3	-1.3	-3.5
Nonresidential Const.....	-0.2	-0.7	-1.0	-0.9	-3.0
Imports.....	-0.8	-1.4	-1.6	-1.6	-3.2
Exports.....	0.0	-0.1	-0.1	-0.1	-1.6
Financial Market Conditions (change from baseline)					
Federal Borrowing (\$11 \$).....	-6	-10	-18	-17	-17
Foreign Borrowing (\$11 \$).....	-5	-11	-16	-16	-35
10-Yr Treasury Bond Rate (basis pts).....	-8	-13	-19	-19	-32
3-month T-Bill Rate (basis pts).....	-1	-2	-3	-3	-3
CPI Inflation (% points).....	0.0	-0.1	-0.2	-0.2	-0.9
Unemployment Rate (% points).....	0.16	0.28	0.35	0.35	0.83
Real GNP Growth (% points).....	-0.4	-0.3	-0.2	-0.3	-0.3

*Note: The baseline approximates the current Pentagon policy calling for 1-2% real growth in budget authority, 1990-1994, integrated into simulations including current ORI forecast assumptions.

There is a clear warning here for fiscal policy: don't count on a defense dividend until you are certain your policy partner, the Federal Reserve, will let it develop. Moreover, you may even support the Fed's conservatism if you value lower inflation; in this case, though, you must complement the defense curtailments with new revenues and expenditure restraint elsewhere in the budget.

INTERACTIONS WITH WARSAW PACT NATIONS

The defense reductions are politically feasible only because of the pro-democracy developments in Eastern Europe and the Soviet Union. Without this opening, fear and suspicion of the "evil empire" would legitimately dictate at best stable real military spending or at worst a vicious new spiral of competing defense budgets. Instead, a virtuous cycle is now possible. Swift, mutual arms reduction would not only free up Western nation savings for housing and capital spending needs; it would also give the Warsaw Pact nations the opportunity to redirect their skilled labor pool and natural resources toward consumer and, eventually export-oriented, goods production. As interbloc trade and investment expands, defense budgets can shrink further, in turn freeing more resources for interbloc transactions.

The potential of the Eastern Europe market is vast. The population of the Soviet Union (about 290 million) is comparable to that of the U.S. and Canada combined, and the population of Eastern Europe (about 135 million) is slightly greater than that of Japan. Although per capita GNP in the Warsaw Pact nations is lower, these are clearly industrial rather than developing economies. The U.S. government estimated that the East Bloc GNP in 1987 was \$3.4 trillion on a rough purchasing power parity basis. If true, this would nearly match the Common Market's \$3.8 trillion, and imply per capita output of \$8,100 for the East Bloc compared with \$11,600 for the Market. Jan Vanous, Research Director of PlanEcon Inc., DRI's partner for Comecon analysis, believes this estimate may overstate the East bloc value by one-third because of product quality differences. Nevertheless, even at that more conservative level, the East Bloc compares very favorably to Latin America (with per capita GNP near \$2000) and the Asian Tigers (near \$6000).

At present, these nations import very little from the West. PlanEcon estimates that East Bloc purchases from the nonsocialist world amount to only \$81 billion, of which \$22 billion is capital equipment. But this is where the defense retrenchment comes into play. The Warsaw Pact nations spend as much on defense as NATO; if both sides pare their budgets by \$60 billion within five years and investment flourishes, a sizable fraction of the freed resources could move into international merchandise trade.

The motivating factors for Western businesses are the retail and equipment market opportunities, the Soviet oil and gas reserves, and the abundance of low-cost labor. The ideal vehicle to encourage development and trade is heavy equity participation by U.S., European, and Japanese firms. Bank loans and government grants are not the answer because entrepreneurial guidance is necessary to apply the funds to the proper industries, technologies, and distributive channels; moreover, fledgling enterprises would have to compete with the very firms that might otherwise be equity partners. The problem, of course, is that while the communist leaders may trust Westerners enough to reduce their arms, they may not be willing to exchange pieces of their patrimony for equity shares or to jump so boldly into free-enterprise capitalism.

Perhaps the most seductive asset the East Bloc offers is access to skilled labor at a cost possibly as low as 25-30% of that in the U.S. or Japan. But negotiators must be careful to recognize the costs of housing, consumer goods, transportation, and utilities being subsidized by the state in lieu of a system with higher wages and higher taxes. And even if socialist/communist governments fail to notice these subsidies in negotiating joint ventures, Western governments must con-

sider whether goods priced without such considerations and then sold abroad are being "dumped" to the detriment of domestic firms. Moreover, all that the Eastern Bloc needs to become a formidable competitor in some specific sectors is the transfer of technology and management skills. In our zeal to get the jump on other capitalist competitors, let's hope that we are not out-negotiated by the socialists and communists in licensing and joint venture deals. For all these reasons, State Department inclinations toward generosity must be tempered by Commerce Department emphasis on international competitiveness.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

As this committee certainly understands, budget miracles are often prayed for but seldom realized. The opportunity to scale back defense expenditures may seem to offer deliverance from your deficit woes and even give you the freedom to pursue new, positive civilian programs. My advice is to push for the earliest and largest defense reductions that national security and rational purchasing management will allow; then, ignore this dividend as you evaluate new programs and review old ones.

Thank you for the opportunity to present my views to you.

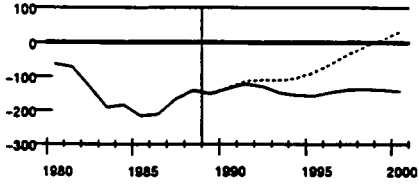
**CHARTING THE REPERCUSSIONS OF
LOWER DEFENSE SPENDING--
ASSUMING GENEROUS FEDERAL RESERVE POLICY**

- Budget impacts
- Macroeconomic Impacts
- Sectoral Winners and Losers

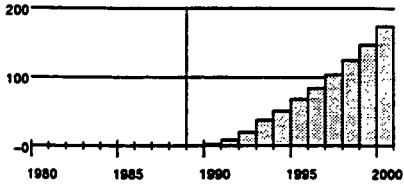
Shrinking Twin Deficits

— Baseline
----- Cheney Scenario

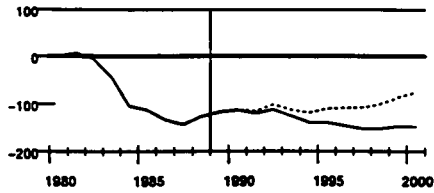
Unified Federal Deficit
(Billions of dollars)



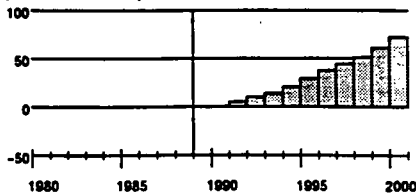
Federal Deficit Improvement
(Billions of dollars)



Current Account Deficit



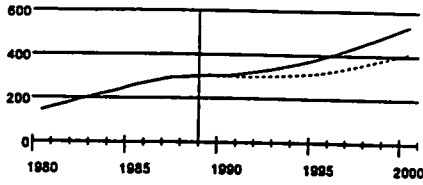
Current Account Improvement
(Billions of dollars)



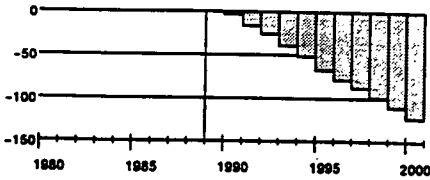
Key Budget Contributors

— Baseline - - - - - Cheney Scenario

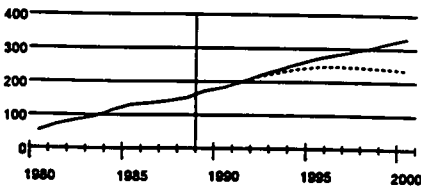
Defense Purchases
(Billions of dollars)



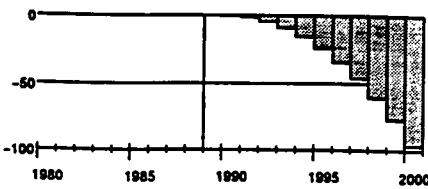
Reduction
(Billions of dollars)



Federal Interest Payments
(Billions of dollars)



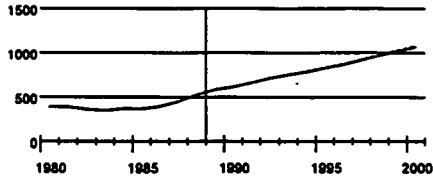
Reduction
(Billions of dollars)



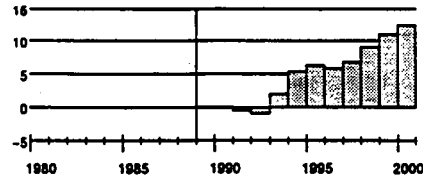
Real Trade Improvement

— Baseline - - - - Chaney Scenario

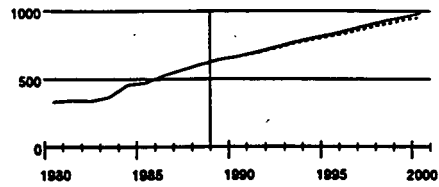
Real Exports
(Billions of 1982 dollars)



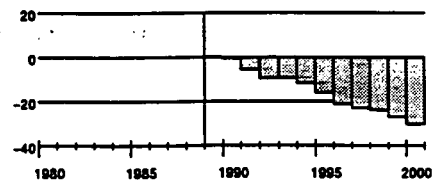
Improvement
(Billions of 1982 dollars)



Real Imports
(Billions of 1982 dollars)



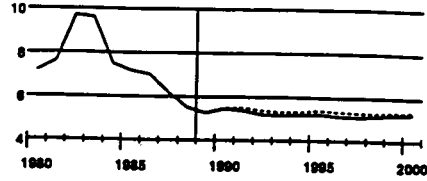
Improvement
(Billions of 1982 dollars)



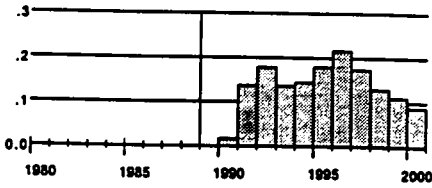
Slightly Weaker Near-Term Economy

— Baseline - - - - - Cheney Scenario

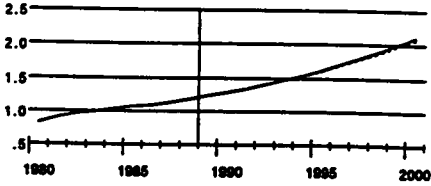
**Unemployment Rate
(Percent)**



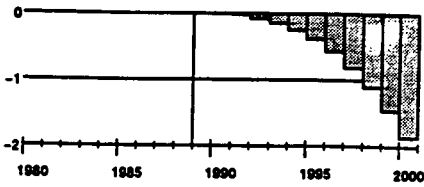
**Increase
(Percentage points)**



Consumer Price Index



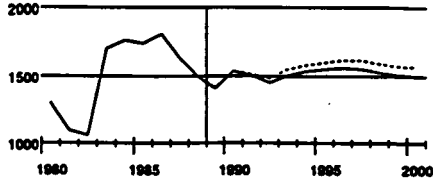
**Cumulative Improvement
(Percent of baseline)**



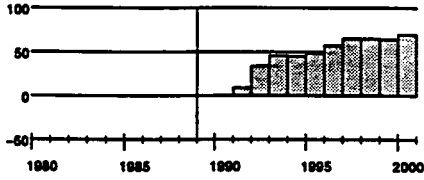
Construction Benefits

— Baseline - - - - - Chaney Scenario

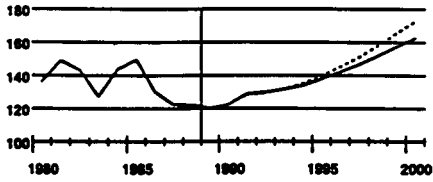
Housing Starts
(Thousands)



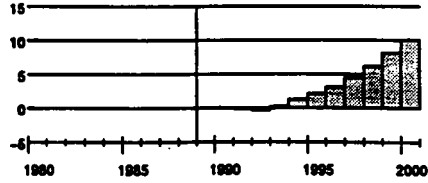
Gain
(Thousands)



Nonresidential Construction
(Billions of 1982 dollars)



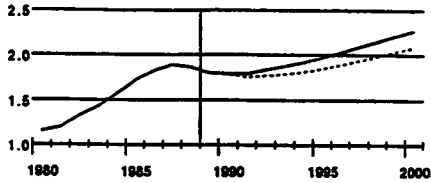
Gain
(Billions of 1982 dollars)



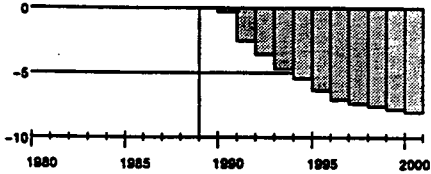
Defense Industry Contraction

— Baseline - - - - Cheney Scenario

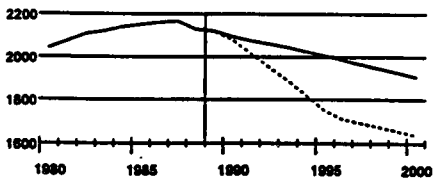
**Defense and Space Equipment
(Production Index)**



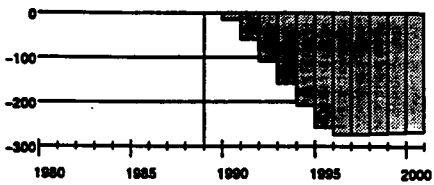
**Cumulative Loss
(Percent of baseline)**



**Military Employment
(Thousands)**



**Reduction
(Thousands)**



Representative HAMILTON. All right. Thank you very much, Mr. Brinner.

Mr. Schultze, please proceed.

STATEMENT OF CHARLES L. SCHULTZE, DIRECTOR, ECONOMIC STUDIES PROGRAM, BROOKINGS INSTITUTION

Mr. SCHULTZE. Mr. Chairman and Congressman Scheuer, thanks for inviting me. Let me start in advance by saying there was no collusion at all between Roger Brinner and me, but all great minds run in the same direction, so you will find our testimony in many ways quite similar. But I will not fear to repeat.

I have two central messages: given the size of the defense cuts that are very likely in store, there should be no fear of recession or really even substantial slowdown to the economy so long as the Federal Reserve performs its end of the task and accompanies significant defense cutbacks with appropriate easier money rather than targeting a significant reduction in inflation. Under those conditions we need not fear recession or major, major—even minor—national reconversion problems.

My second message is that with appropriate monetary policy these defense cuts can be a great boon to the economy and, in particular, can help us deal with the central problem of the American economy in the 1980's—and likely in 1990's if we don't do anything about it—namely, a drastic shortage of national saving.

Let me first say something about the size of the potential cuts in defense spending and try to put them into some sort of historical perspective.

In my prepared statement there is a chart, figure 1, in which I attempt to do this. The top line on that figure simply shows what is the administration's essential plan for military spending prior to the recent events, if you will, in Eastern Europe. That is as of about mid-1989. And essentially it would have in constant 1990 dollars defense spending increasing very modestly over the next 5 years.

The first budget cut that I put on there is one. Line No. 2 is William Kaufmann's proposals. Kaufmann—from MIT—recently published through Brookings a study of potential cutbacks under very optimistic scenarios with respect to us matching the Russians step by step in a whole series of strategic and conventional disarmament steps.

In the long run, over 10 years, Kaufmann's cuts would cut the defense budget in half. But in the short run, they would take the defense budget down from its current \$287 billion—which is where all those lines start over on the left-hand side—by about \$35 billion to \$254 billion.

The second cut line is Cheney's. That is, it's my attempt, in conversations with various people, to put together annually in constant dollars the spending consequences of the \$180 billion Cheney plan. That pulls defense spending in constant dollars down from \$287 billion in 1990 to \$246 billion in 1994, a cut of some \$40-odd billion.

The third one is to give some historical perspective, which is the post-Vietnam cut in today's dollars. The first 4 years after Vietnam

we cut \$75 billion out of—in today's dollars out of the defense budget.

The next line is a much more appropriate way to look at the size of the Vietnam defense cut, what proportion of the economy was required to reconvert from defense to civilian. So I took the Vietnam cut as a percentage of GNP and applied it to today's economy. And in the first 4 years after Vietnam, the defense budget in the size of today's economy was cut by \$110 billion, from \$287 billion—which is where all those lines start over on the left—to \$156 billion.

And finally to get some additional perspective, I put in the first 4 years after the Korean war as a percentage of the economy and applied it to today's economy, and the defense budget drops literally by over \$200 billion, from \$287 billion to \$72 billion, if we apply the same percentage cut.

Notice that after the Korean war—with that huge cut the first 2 years after the Korean war—the first 2 years after the Korean war, the defense budget was cut by \$160 billion, there was a mild recession, lasted only for about three quarters and thereafter the recovery was quite vigorous.

After Vietnam, there was a mild recession, but most experts do not agree it came from the reduction in defense spending but rather from efforts by both fiscal and monetary policy to restrain inflation which had been accelerating.

My message is that for what is likely over the next 4 to 5 years, there is no big deal in the basis of historical reconversions—and I don't mean World War II, just other postwar reconversions—it's relatively small. I have absolutely no doubt that the Federal Reserve, if it were willing, could handle it without increasing inflation, but it would have to give up the objective of using this opportunity to push inflation down further.

Let me assume for the moment that we do have a cut—I'm going to be a little more ambitious and say something like \$50 billion a year by 1994. A cut phased in at, say, \$50 billion a year by 1994 phased in gradually over the 4 years.

There are four possible ways to use those military spending reductions or, to say it another way, there are four possible reallocations of resources to other sectors of the economy in a broad sense. Let me tick off those four:

The first one, of course, is what we've done heavily in the past, is to cut taxes, channel the additional resources to taxpayers in the form of higher aftertax income and principally watch consumption rise; transferring employment and output from the defense goods industries to the consumer goods industries.

The second possibility—and, of course, you can always use a combination of these four possibilities—the second possibility is to increase government spending for infrastructure, to make up shortfalls in a number of other kind of housekeeping areas that have been let go for the last 7 or 8 years and for a number of other reasons, shifting employment and resources from the defense industries to associate industries furnishing these infrastructure and other objects of government purchasing.

The third is to cut the Government budget deficit, together with monetary ease by the Federal Reserve maintaining high employ-

ment. This, in turn, would lower interest rates. We would get an increase in employment and output in industries favored by lower interest rates, principally housing, exports, and business investment in plants and equipment.

And the fourth possibility is to launch, in combination with our European Allies, a new Marshall plan to provide capital and consumer goods to the countries of Eastern Europe to reduce the tremendous austerities that are going to be required in those countries and to raise the probability of their political success. In that case, we would shift resources from the defense industries to those kinds of export industries where our aid was principally going.

Mr. Chairman, I would give top priority to the final alternative: a Marshall plan for Eastern Europe, should such aid be needed and prove feasible. We've been willing for years to spend massive amounts to preserve our security in the cold war. We should surely be willing to spend a small fraction of those amounts to help ensure against political failure in the current heroic efforts of Eastern European countries to join the fraternity of free people.

However, I don't know what the magnitude of an appropriate and workable U.S. contribution would be. No one inside or outside the administration seems to have given serious consideration even to determining whether a major effort would do any good. And so I've not been able to build an explicit allowance for such a program into my analysis.

But I would be willing to modify the conclusions I'm about to reach below to make room for a program of aid to Eastern Europe should it turn out that substantial sums could effectively be used.

Let me just remind you, by the way, Mr. Chairman, that if you play my same game of applying percentages to the gross national product, that the percentage of our GNP we were willing in 1948 through 1951 to apply—1947 through 1950—to apply to Western Europe in the Marshall plan applied to today's GNP would be something like \$240 billion.

And the Polish and Hungarian per capita amount over a 4-year period would be about—if you then give it to Poland and Hungary alone—would be about \$34 billion. So in our past history, at least, we tended to have some imagination in these things.

But I am leaving that out of my analysis simply because I have no basis of knowing the extent to which it could be used, needed, and is politically feasible.

Over the past 5 years, Mr. Chairman, this country has short-changed itself in some areas of Federal investment: the Federal Aviation Agency, our Bureau of Prisons, civilian research and development spending, highway and bridge repair, and the like. And some of the resources freed up by lower military spending could surely go in that direction.

But there is an even more pressing national need elsewhere: our national saving and investment have been severely restricted in the 1980's. Most of the military reductions should be used, I believe, to reduce the budget deficit. To raise national saving and lower interest rates, bringing a partial restoration of output and employment in those sectors favored by low interest rates.

Let me give you a picture of how drastic the collapse of American national saving has been, and I ask you to turn to where I

have a chart in my prepared statement on net national saving in the United States.

By "national saving," I simply mean that part of our national income we don't consume by either government or households, the amount therefore available to invest in our future.

National saving has two components, private saving minus the Government budget deficit, because the Government budget deficit chews up that part of private saving, leaving that much less left available for investing in the future.

And as you can see, national saving fell from 8 percent to 3 percent, actually 3.1 percent the first three quarters of 1989. Of that decline, about half was a drop in private saving and half was an increase in the budget deficit. That national saving rate of 3 percent is, by any historical comparison in the United States, unprecedentedly low.

And, of all the eight or—I forget now to tell the truth, how many countries—but all the OECD countries that the OECD itself recently studied, we stand at the bottom—Australia is coming close, but we stand at the bottom with respect to national saving and, except for Australia and the U.K., nobody is even close, particularly Germany and Japan.

There are two alternative ways a country can adjust to a collapse in its national savings: it can cut its investment to match the low national savings—I call your attention to figure 3 in my prepared statement—it can cut its investment.

And we did a little of that. If you look at the charts, they're a little more complicated, but it simply shows you again national saving of 8 percent, which is what it averaged in the 30 years prior to 1980, matched mainly by domestic investment—a little bit of foreign investment, we ran a trade surplus and invested abroad.

We ran a trade deficit, we imported the resources, we were able to maintain our domestic investment only partially—cut it only partially in order to do that. And that's costly. It's costly because, of course, what we're doing is piling up debt service for the future at a very rapid rate.

And I don't think it will last forever. I do not think foreign investors over the long term will indefinitely finance us, and in that case we will then, have we not raised our national saving rate, be faced with having to cut our domestic investment much further.

We will, as Roger Brinner indicated, not catastrophically but significantly lower the rate of growth on our national living standards for years and years and years ahead.

What will be the consequences of using military reductions to lower the budget deficit with appropriately easy Federal monetary policy?

Again, on the assumption of a \$50 billion reduction in defense spending by 1994, \$10 billion of which goes to infrastructure investment and \$40 billion is used to reduce the budget deficit, on that assumption, using shorthand versions of several macroeconomic models, including Roger Brinner's own DRI model, I attempted to calculate what the interest rate effects would be and I came out actually with the same answer for all three of the models I used: a 2-percentage point reduction in short-term interest rates by 1994,

given a \$50 billion a year cut in defense spending and appropriate monetary policy keeping us on an even growth path.

And if there were a really credible program for reduction in the military budget the financial markets could believe in and count on, and if in turn they could count on the fact that three-quarters, four-fifths of that would be used for deficit reduction, I would think long-term rates would come down almost as much as short-term rates.

If you look at figure 4 in my prepared statement, you can see what we've done to ourselves with high interest rates. Because of the shortage of national saving and the large budget deficit, short-term real interest rates have gone from an average of almost about zero in the years prior to 1973 to something like 4 percent in recent years, and long-term rates have gone from something like 1½ percentage points—these are real rates, after inflation, a nominal interest rate minus the rate of inflation—have gone from 1.5 percent to an average of almost 7.5 percent from 1983 to 1988 and even now, after the weakening in the economy, they're still at about 5 percent for the first three quarters of 1989.

And I think there have been very substantial consequences of those high real interest rates. Let me simply close by indicating one of them, which I think is quite important:

It is widely bruited about, Mr. Chairman, that America's competitive problems and its slow growth in productivity stem, in part, from the unwillingness of American management and investors to take the long view. Japan and Germany, Japanese and German investors presumably do this much more willingly than our own do.

In fact, however, I believe that, while I think this is partly true, I think it stems not from any particular shortsightedness on the part of American management or investors, but is partially at least a consequence of the high real interest rates. High real interest rates particularly penalize the profitability of long-term investments.

For example, if you'll follow my arithmetic for just a moment, if real interest rates are 4 percent, a 1-year investment of \$100 has to return \$104 to pay itself off.

Suppose real interest rates go from 4 to 6 percent? Then a 1-year investment only has to make an extra \$2, it has to go from \$100 to \$106 in order to make itself liquid.

But the necessary return to a 15-year investment goes from \$180 to \$240 just because of that 2 percent increase in interest rates. You lose the potentiality; the profitability of a large chunk of potential investments is gone in the future.

When you're thinking of really long-term investments, putting your money in and waiting patiently, high real interest rates don't just affect investment generally, they tend to tilt it against precisely the kind of investment that at least common wisdom tells us is especially important in American competitiveness and productivity.

So I would urge that there are some subtle things involved in our low saving rate, our low national investment rate, there's been some more subtle things involved that we could help cure with using the reductions in military spending not solely but principally for deficit reduction combined with a matching policy by the Federal Reserve.

I still hold my option to put some of that, I think, into an Eastern European aid plan, but since I don't have no idea of what that might be, I have not been able to build it in.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Schultze follows:]

PREPARED STATEMENT OF CHARLES L. SCHULTZE*

Brookings Institution
before the
Joint Economic Committee
December 19, 1969

Mr. Chairman and Members of the Committee:

I am pleased to have this opportunity to testify before the Joint Economic Committee in your hearings on Economic Adjustment after the Cold War. My central message can be simply stated: A substantial but phased-in cut in military spending far from being source of economic concern can be a great boon to the nation. In particular, it has the potential of helping us deal with America's number one economic problem -- namely a drastic shortage of national saving and investment together with the high interest rates they bring in train.

*The author is Director of the Economic Studies Program at the Brookings Institution. The views set forth here are solely those of the author and do not necessarily represent the opinions of the trustees, officers or other staff members of the Brookings Institution.

The Magnitude of Spending Cuts -- An Historical Perspective

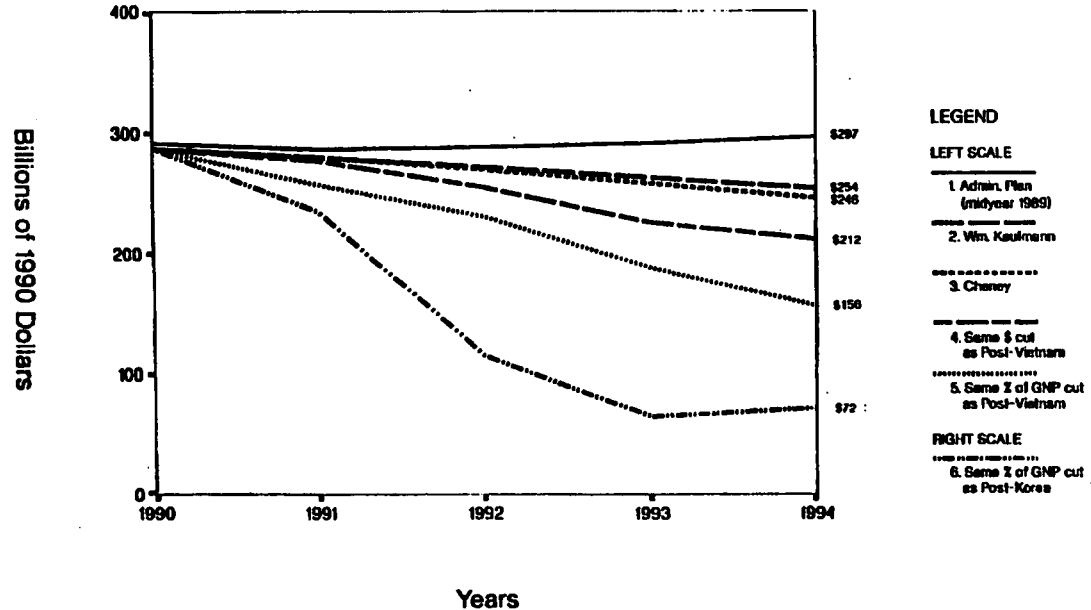
I have no expert knowledge of how big the cuts in military spending are likely to be -- or should be. But several official and unofficial preliminary estimates have already been made about what the cuts might be over the years immediately ahead. I would like first to translate those estimates into dollars of constant (FY1990) purchasing power, compare them to the current military budget, and then examine how big they are relative to the other two postwar cutbacks in military spending -- the phase downs from the Korean and Vietnam wars. Figure 1 summarizes these results. (All of the data on military spending in this Figure, and throughout my testimony, refer to the "military functions" of the Department of Defense -- budget function 051. These data exclude about \$9 to \$10 billion of spending for the defense-related atomic energy activities of the Department of Energy, which are included, along with a few other small defense-related items in the larger "national defense" category of the federal budget.)

The top line of Figure 1 shows, for reference, the Administration's budget plan for the fiscal years 1990 through 1994 as it existed at midyear 1989. Expressed in constant 1990 dollars, the plan envisaged budget spending of \$292 billion in fiscal 1990, a small decrease in 1991 and modest increases in subsequent years to \$297 billion by 1994. This year's budget actions will reduce 1990 spending to about \$287 billion. Several weeks ago the press carried an extensive series of stories in which Secretary of Defense Cheney was cited as having decided to cut some \$180 billion in budget authority from the pre-existing budget plan in the period between now and 1994. After consultation with some of my

Figure 1

ALTERNATIVE PATTERNS OF MILITARY SPENDING, 1990-1994

(constant FY 1990 Dollars)



colleagues at Brookings and other knowledgeable defense budget experts, I made a stab at translating these budget authority cuts into annual outlays in constant dollars. The results are shown in line 3 of Figure 1. If I am correct, the Secretary's tentative plans would involve a gradual reduction in constant dollar defense spending from \$287 billion in fiscal 1990 to \$ 246 billion in 1994 -- a cut of some \$43 billion in the annual rate of military spending.

Several weeks ago, the Brookings Institution published a study by William Kaufmann of M.I.T. which laid out a long-term program for scaling back the military budget. That program was based on an optimistic scenario in which the United States and the Soviet Union undertook a continuing series of simultaneous, mutual, and verifiable actions to reduce tensions, armaments, and arms budgets. The Kaufmann budget proposals were designed to phase down the U.S. military budget by a number of incremental steps, no one of which left us seriously vulnerable to a reversal of the mutual arms reduction process, and ended up with a U.S. military posture consistent with our global obligations and commitments. By the end of ten years the Kaufmann program produces major spending reductions, with the military budget cut almost in half. But during the first four years the cuts are rather moderate; they are shown as line 2 of Figure 1, and would produce savings of about \$31 billion a year by 1994.

Both of these reductions are quite modest relative to the reductions which occurred after the Vietnam and Korean wars. Line 4 shows what the cuts would be if we duplicated in dollars of today's purchasing power the absolute reductions that took place in the first

four years after Vietnam -- by 1994 military spending would be some \$75 billion below this year's level. But the U.S. economy is now about eighty percent larger than it was in 1968, the peak year of Vietnam spending. And for judging the size of the necessary reconversion effort and the potential shift of resources to civilian uses, what is relevant is the percentage of GNP represented by the military cuts -- that is, what fraction of our national output must be switched from military to civilian uses. And on that basis the cuts after both the Korean and Vietnam wars were huge compared to what appears to be in store over the next few years. Taken as a percentage of GNP, the cut in military spending in the four years after Vietnam, if applied to the current GNP, would involve a spending cut of over \$130 billion a year by 1994. And, on the same basis, the first two years after Korea saw a cut in annual spending that would be equivalent to \$160 billion, followed by another \$80-odd billion in cuts in the next two years.

Economic Effects of Defense Cutbacks

The huge reductions in defense spending during the first two years after Korea did produce a recession in 1954. But it was very brief and mild and was followed by a rapid recovery in 1955, despite the continuing steep downtrend in the military budget. There was also a mild recession in 1970 and 1971, during the post-Vietnam adjustment, but it is widely agreed that this recession was the product not of defense spending cutbacks but mainly of the restrictive fiscal and monetary policies which had been put in place to check the accelerating inflation then underway.

The reductions in military spending that are now realistically in prospect over the next three to four years are likely to be much smaller than those of the earlier postwar adjustment periods. The required shift of resources is unlikely to exceed 1 percent of GNP phased in over four years -- i.e., an adjustment of only one-quarter of one percent a year. We can clearly shift this modest amount of resources between military and civilian pursuits without any significant macro-economic problems.

There are essentially three broad alternative ways the nation can use the resources of labor, material, and capital freed up by lower defense spending.

1. Reduce taxes, channeling additional income to taxpayers who will use most of the tax saving to add to their consumption; production and employment in the consumer goods industries will increase.
2. Increase government spending for infrastructure and other high priority uses; production of goods destined for the government will increase (or people receiving additional government transfer payments will increase their spending on consumer goods).
3. Use the military savings to lower the federal budget deficit. Together with an easing of monetary policy, which would then be quite appropriate, interest rates would fall; the production of goods favored by lower interest rates would increase, chiefly exports, housing construction, and business investment in new plant and equipment.
4. Launch, in combination with our Western European allies, a large scale effort, along the lines of the Marshall Plan, to provide capital and consumer goods to those Eastern European economies who are seriously undertaking economic reforms, in an effort to reduce the severe austerities now in prospect and so to increase the probability that their newly emerging political systems will survive the test. To accomplish this transfer of resources American exports would necessarily have to increase substantially, opening up job opportunities in those industries.

Mr. Chairman, I would give top priority to the final alternative -- a Marshall Plan for Eastern Europe should such aid be needed and prove feasible. We have been willing for years to spend massive amounts to preserve our security in the Cold War. We should surely be willing to spend a small fraction of those amounts to help insure against political failure in the current heroic efforts of Eastern European countries to join the fraternity of free peoples. However, I do not know what the magnitude of an appropriate and workable U.S. contribution would be. No one inside or outside the Administration seems to have given serious consideration even to determining whether a major effort would do any good. And so I have not been able to build an explicit allowance for such a program into my analysis. But I would be willing to modify the conclusions I reach below to make room for a program of aid to Eastern Europe should it turn out that substantial sums could effectively be used.

Over the past six or seven years, budgetary stringency has sharply limited federal spending for a number of important economic and social purposes below the levels consistent with a well-run modern society: the Federal Aviation Agency, the Bureau of Prisons, highway and bridge repair and maintenance, and support for low income housing, to name but a few. Some of the savings from military budget reduction should be directed toward at least partially making up those shortfalls. But there is an even more pressing national need which has been neglected over the last decade -- national saving and investment have been severely restricted in the United States while real interest rates have been driven to unprecedented levels. Most of the military savings

should therefore be channeled into a reduction of the budget deficit, bringing about an increase in national saving, a reduction in real interest rates, and a at least a partial restoration of production and employment in those forward-looking sectors of the national economy that are favored by low interest rates. (Full restoration of public and private investment cannot be achieved without a tax cut to supplement the military budget reduction, but that is not the subject of these Hearings.)

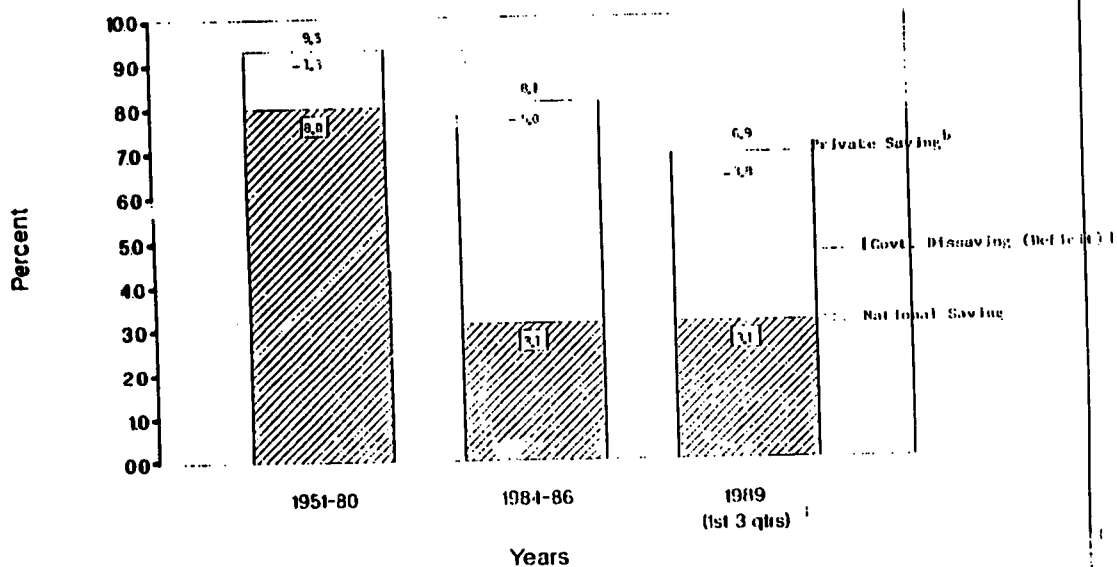
The Collapse of National Saving, and its Consequences

Figure 2 depicts what has happened to national saving over the past decade. By national saving I simply mean that portion of our national income which is not consumed by governments or households and which is therefore available to invest in the nation's future growth. There are two components of national saving: private saving less the government budget deficit (whose financing absorbs some of private saving, leaving that much less available for private investment). As a fraction of national income, national saving in the United States has fallen from its 8 percent average in the thirty years prior to 1980, to an abysmally low 3-1/4 percent at the present time. Both elements of national saving contributed to the decline: private saving fell and the federal budget deficit began absorbing a much larger fraction of what was left. This saving rate is unprecedently low with respect to our own past history and is the lowest of any modern industrial country, in most cases by a wide margin.

Figure 2

U.S. NET NATIONAL SAVING

(as percent of National Income)^a



- a. National Income - Net National Product.
 b. Surplus in state and local social insurance funds (mainly pension funds of state and local employees) classified as "private saving."

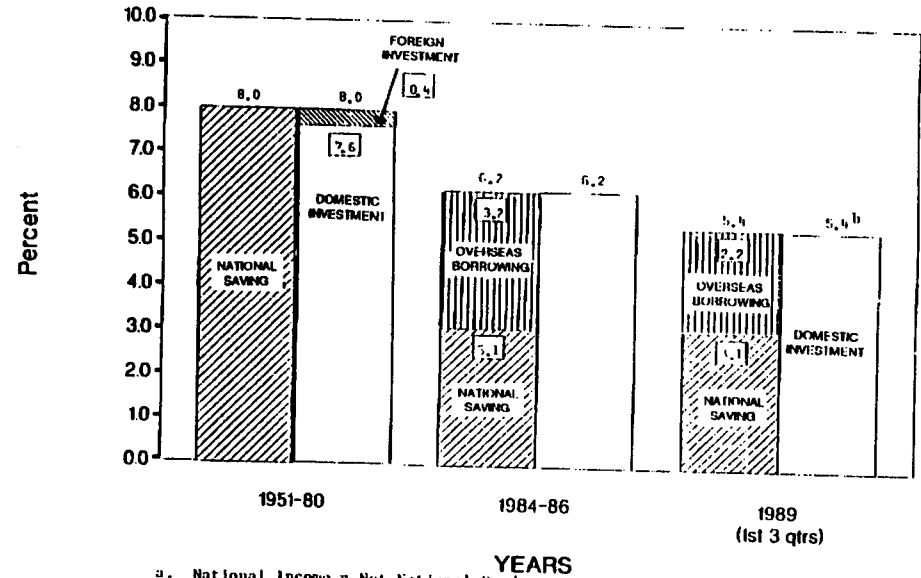
When a country goes on a consumption binge and its saving rate collapses, it can adjust in one of two ways: (1) It can lower its domestic investment to free up the resources needed to satisfy the rise in public and private consumption demand; or, (2) it can begin importing more than it exports, run a trade deficit and finance that deficit by borrowing from abroad. To say the same thing another way, when a country's saving rate falls it can either cut its domestic investment in housing and plant and equipment to match its shrunken saving or it can supplement its own saving by borrowing saving from abroad. That inflow of foreign saving is virtually the mirror image of the excess of the trade deficit.

As is clear from Figure 3, the United States principally relied on the second adjustment mechanism. As our national saving collapsed we did cut back our domestic investment somewhat; but principally we adjusted by supplementing our own shrunken saving with saving borrowed from abroad, and in the process ran a substantial trade deficit. While the import of foreign saving did allow us to sustain domestic investment in the face of a large drop in national saving, that approach has not been costless. We have liquidated our net foreign investment abroad, are now a large and growing net debtor, and each year we are now paying abroad an increasing fraction of our national income in debt service to foreigners. Moreover, while it may go on for awhile, foreign investors will not indefinitely finance our national

Figure 3

FINANCING U.S. DOMESTIC INVESTMENT

(as percent of National Income)^a



a. National Income = Net National Product.
 b. Includes 0.2 percent statistical discrepancy.

consumption spree.¹ Eventually the inflow of foreign saving into this country will taper off and then we will have to cut back severely on domestic investment to squeeze it within the limits of our own shrunken national saving -- unless, of course, we take steps in the meantime to deal with the problem.

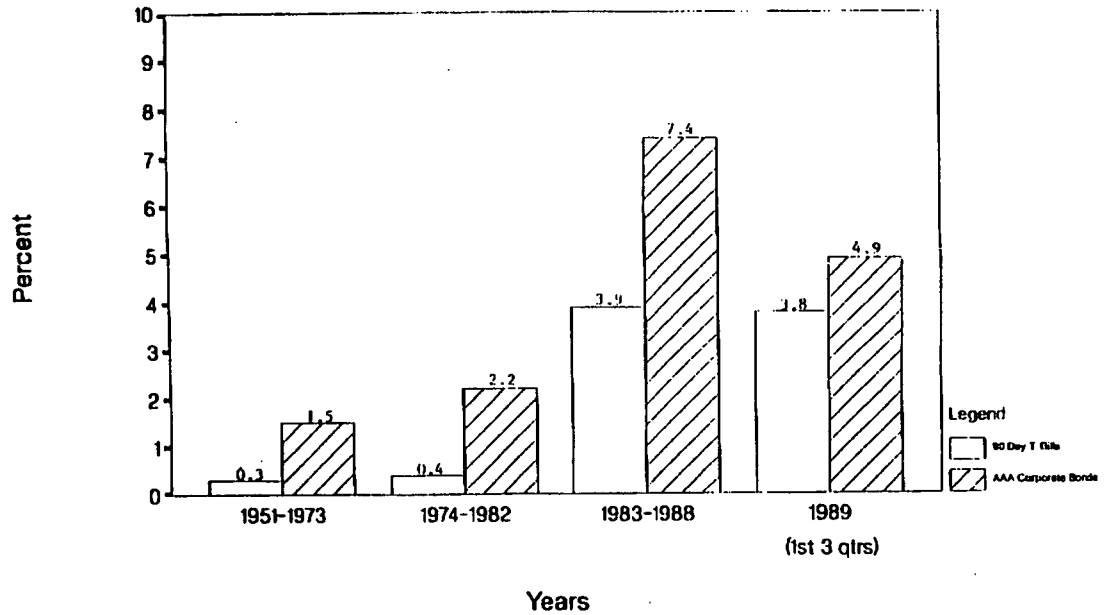
One of the major consequences of our national saving collapse has been the sharply higher levels of real interest rates with which the nation has been afflicted in recent years. By real interest rates I mean the excess of interest rates over the inflation rate. That excess, the real interest rate, represents the true cost of borrowing. As U.S. national saving shrunk, while demands for funds to borrow did not, interest rates rose. Indeed, the rise in interest rates was the mechanism by which we attracted foreign funds into the United States to finance our spending binge. Figure 4 shows what has happened to real interest rates over the past six years. For the period 1983 through 1988 real short-term and long-term interest rates were respectively 3-1/2 and 5-1/2 percentage points higher than their earlier postwar averages. This was a huge increase by any historical standard. Recently, as the economy has softened and some progress was made in 1986 and 1987 in cutting the budget deficit, long-term rates came down

1. The current situation is not like the nineteenth century, when the United States also borrowed heavily abroad; in that case we used the proceeds to increase our national investment in productive assets, generating a stream of additional national income out of which we paid the debt service while still ending up better off.

Figure 6

Average Real Interest Rates

(90 Day T-Bills + AAA Corp.)



somewhat. But they are still far above their earlier levels. Moreover, to the extent that the trade deficit eventually narrows further and the inflow of foreign savings into the United States shrinks, interest rates are likely to rise again in future years, unless we take steps to raise national saving.

Using Military Budget Reductions to Lower the Budget Deficit -- Effects on the Deficit and on Interest Rates

For purposes of analyzing the economic consequences of military budget reduction let me postulate the following scenarios: (1) A phased-in reduction in the military budget begins in FY1991 which, by FY1994, cuts the annual rate of military spending, measured in 1990 dollars, some \$50 billion; i.e., the constant dollar military budget falls from \$287 billion this year to \$237 billion in 1994. (2) One-fifth of this cut is devoted to increasing federal civilian outlays for infrastructure spending and other purposes, while four-fifths (\$40 billion) is used to cut the budget deficit. (3) Finally I assume that the Federal Reserve, in response to a credible program of budget deficit reduction would sufficiently ease monetary policy so as to keep the economy on a high employment path, a task I believe it could quite easily accomplish.

We can with a high degree of certainty predict the direction of the interest change that would occur if we lowered the budget deficit substantially, while the Federal Reserve took the necessary steps to ease monetary policy. Interest rates would decline, for two reasons -- the reduction in the budget deficit would free up funds to satisfy the needs of private borrowers, and the actions of the Fed would provide a

greater supply of credit to the banking system. Estimating the magnitude of the interest rate decline involves a great deal of difficulty and uncertainty, but I have tried my hand at it.

My colleague at the Brookings Institution, Ralph Bryant, has analyzed a number of large international econometric models and produced a series of coefficients or factors which allow one, rather easily, to calculate what each of these models would predict about the economic consequences of various government policy changes. I used the factors he developed for three of the large models -- the DRI international model, the Federal Reserve Board's multi-country model, and the OECD international model. I estimated what each model would predict about short-term interest rates if the scenario I outlined above were put into effect, namely, a \$40 billion cut in the federal budget deficit phased in over four years and accompanied by appropriately easier monetary policy. Interestingly enough each of the three models gave virtually the same numerical answer: by the fourth year, FY1994, short-term interest rates would fall be lowered by two percentage points. And this would not be a temporary cyclical dip in rates, but a lasting decline. Under those circumstance I think it is quite likely that long-term rates would drop by a roughly similar amount. Since there is no reason to believe that anything in this scenario would change the rate of inflation, the drop in nominal interest rates would be equaled by a drop in real rates.

A reduction of two percentage points in real interest rates would be a major tonic for the American economy. In the first place a two percentage point drop in interest rates, given our \$2-1/2 trillion

federal debt, would generate a very substantial saving in interest payments on the debt. To this would be added other interest payment savings stemming from the fact that the deficit reductions would lower the projected federal debt itself. All together, a cut of \$40 billion in the annual military budget, together with a two percentage point reduction in interest rates, would reduce the annual deficit in 1994 by something like \$70 billion. (This "feedback" from lower spending to lower interest rates to lower interest payments to even lower deficits is built into the various econometric models, and helps produce the large interest rate cuts.)

Permanently lower interest rates would particularly benefit three areas of the economy: housing construction, business investment in plant and equipment, and exports. How lower interest rates encourages homeowners and businessmen to purchase new investment assets is obvious. In the case of exports the lower interest rates weaken foreign investors' demand for dollars, the dollar falls, and U.S. exports rise. As a general proposition, the sectors that would be particularly benefited by the fall in interest rates provide good jobs at good wages; laid off defense workers would not be condemned to second class jobs, but would find good jobs waiting for them.

From a national standpoint, the fall in the budget deficit of \$80 billion would raise American national saving by roughly an equivalent amount. American living standards would grow faster for a combination of two reasons; we would be investing more at home in productivity improving projects, and we would be borrowing less from abroad and

reducing the buildup in foreign debt service payments. Both of these developments will raise our future living standards.

Finally, higher national saving and lower interest rates would have another very subtle but, I believe very beneficial effect on the vigor and competitiveness of the American economy. Both economic theory and common intuition tell us that high interest rates particularly penalize the profitability of long-term investments. For example, if real interest rates are 4 percent, a one-year investment of \$100 has to return \$104 dollars to make it worthwhile; an increase in interest rates to 6 percent only raises the necessary one year return to \$106. But the necessary return to make a fifteen-year investment worthwhile goes from \$180 to \$240, a rise of one-third, when interest rates go up from 4 to 6 percent. Any potential investments that paid off in the \$180 to \$240 range would be ruled out after the interest rates increase. Long-term investments are especially hurt by high interest rates.

One of the widely heard explanations for America's competitiveness problems and the slow growth of our productivity is that American businessmen are too interested in short-term payoffs, while their Japanese and German competitors are much more willing to invest for the long haul, and hence undertake many long-term productivity improving investments that Americans won't touch. To the extent this is true -- and there is surely some truth in it -- the fault may not lie so much with American businessmen, but with a set of national budget and economic policies that have condemned the nation to a long period of extraordinarily high real interest rates.

A short while ago I was asked by a reporter whether or not we would be unfortunate enough to have most of the peace dividend absorbed into the sinkhole of budget deficit reduction. Mr. Chairman, given what a reduced budget deficit and lower interest rates could do for the long-term vigor of the American economy, I can't think of a better sinkhole.

Representative HAMILTON. Thank you, Mr. Schultze.
Mr. Straszheim, please proceed.

**STATEMENT OF DONALD H. STRASZHEIM, CHIEF ECONOMIST
AND FIRST VICE PRESIDENT, MERRILL LYNCH CAPITAL MAR-
KETS**

Mr. STRASZHEIM. Mr. Chairman, good morning. I appreciate the opportunity to again appear before this committee. I would like to direct my comments really in three major areas: First, while the decline in direct defense spending is of note, none of us really can tell exactly what the size of that decline will be and, I think, far more important to the U.S. economy in the future is what is going on in Eastern Europe, what our stance is in response to it, and how we behave with respect to our overall budget policy in the presence of some as-yet-undetermined defense spending cut. So those are the areas that I'd like to focus on.

First, and quite quickly really with respect to defense, I would like to see, as I'm sure all of us would, a significant budget saving in terms of a defense spending cut. I think, however, we ought to go slow. It would appear to me that the Eastern European part of the world is likely to be more unstable, not less, in the next decade and I think that counsels a go slow stance with respect to defense. None of us can say with certainty what kind of defense spending cuts or really what size defense spending cuts will be appropriate.

I would agree with my two colleagues here, I think any feasible reduction in defense spending that might arise in the coming years will easily be manageable in a macroeconomic sense. I think we ought not worry about a major decline in aggregate demand from these defense spending cuts tumbling us into recession.

In any case, the aggregate demand issue really is one that will be left, I think, to the monetary authorities rather than to the fiscal side.

There will be a host of changes in the private sector that companies, that individuals, that regions are going to have to respond to with a major cut in defense spending. Individual companies are going to find their business' commissions meaningfully changed. Individuals are going to find that in some cases they're out of a job. You'll have regional areas: San Antonio, San Diego, the Tidewater area, for example, which will have important drags imposed on them. I don't think we ought to spend a great deal of money in any kind of major adjustment program for these areas. It seems to me there are far better uses for our money than that.

This decline in defense spending should freeze some resources for the private sector. High-tech individuals, highly trained individuals will be available. We should have some high-tech capital that could now be applied in the private sector.

It's as if over the last two or three decades we have been using our second team in terms of high tech to compete against Japan's first team. And with that first team having been used in our case for the defense area, now some of those individuals ought to at least provide us some benefit in that context as well.

Now with respect to Eastern Europe: here is where I think we ought to focus most of our attention at this point. There are 125

million people who live in Eastern Europe. They have no capital, low incomes, a good work ethic, pretty good job skills and, sadly, a higher literacy rate than the United States. And this is how can you keep them down on the farm after they've seen Paree story. An American analogy is perhaps appropriate.

I believe that the catalyst to change American policy in the late sixties and to get us out of the Vietnam war was when we started serving that war on television at night to the American people over the dinner table. In many respects, I think you can say the same thing about Eastern Europe.

The East Germans realize that 30 years ago their standard of living was equal to that in West Germany. Now they realize it's half and they want a piece of the action and this process is irreversible. And we need to play an important role in fostering this process. I think there are enormous opportunities for American business and we ought to figure out how we can support joint ventures, new investment of all different sorts.

It seems to me that we ought to view Europe 1992 somewhat differently than before. Prior to what happened in Eastern Europe, I think the way to envision Europe 1992 was as a north/south kind of problem: the low-wage economies in Europe of Ireland, Spain, Portugal, Italy, and Greece would have been benefited relative to the high-wage economies of Germany, France, England, the Benelux countries, and so forth.

Now I think what will happen is that capital, rather than flowing to Southern Europe, will flow to Eastern Europe. American business attention will be less on Southern Europe, more on Eastern Europe. Japan will think a bit less about Southern Europe and more about Eastern Europe. They will think less about investment in the United States than they did in the past as well. We will very likely have some outsourcing in the United States to take advantage of these highly skilled and low-wage laborers that work in—that live in the Eastern European part of the world.

It looks to me like there will be basically a two-tiered development process that evolves: that first tier I would put East Germany, Czechoslovakia, and Hungary. Those countries I think will rather quickly be assimilated into Western Europe without major difficulty.

I think there will be a second tier, however, that will lag much further behind: Poland, Bulgaria, Romania, and Yugoslavia. And I could throw in the Soviet Union there as well. Those countries need contract law. They need generally accepted accounting standards. They don't have well-developed commercial codes. Property rights are still something that is really quite—that concerns them a great deal. And this process, I think, in those countries will take a longer time.

I would second the comment of Charlie Schultze: an aid program, I think, is a most important and ought to be a high-priority item. The size, the dimension is something that ought to be worked out in the future.

I think that focus also ought to be on that first tier of countries. Foster the economic advance in that first tier of countries and then let the second tier via the demonstration effect of the first tier be brought along as well.

The adjustments, the economic adjustments in Eastern Europe are going to be substantial. And we can't tell precisely how they will work. But you have low-wage labor in Eastern Europe. All they need to have is capital, managerial talent, technology, a decent market system, and a chance. And we will see, I think, very rapid economic growth there. Enormous opportunities for American citizens in terms of export of capital goods and the like. I think that ought to be a high-priority item.

Now as the defense budget is really very much called into question from top to bottom for years and years, I think we ought to use this as an opportunity to do a wholesale review of our budget process and our budget choices.

Gramm-Rudman is not the answer from my perspective. Gramm-Rudman was an effort by the Congress to tie its own hands together in a way in which it could not untie them and that's not a logical possibility as we have seen before. And the budget process has degenerated into one in which we really had no budget debate at all in recent years.

THE PEACE DIVIDEND

One possibility would, of course, be to give it back in lower taxes. I don't think that's—that's not the direction I would go.

The other option that both of my colleagues have already mentioned, reducing the deficit, providing us some lower interest rates and a variety of benefits; I can appreciate the benefits. I have a great deal of sympathy with this view. These budget deficits are chronic, they are damaging and reducing the defense bit would help.

The question is, is the economy benefited most by applying whatever peace dividend to deficit reduction or would it be benefited more by using these moneys available in a variety of other projects?

I believe there are better ways to use those moneys than simply use them to reduce the deficit, what I would describe as investing in America. Let me just give you three quick examples:

The first, of course, the infrastructure. We've gone from 2.2 percent of our GNP devoted to infrastructure in 1965 to 1 percent now and the evidence is all around us it's more than just a personal inconvenience, it's starting to hurt our international competitiveness, hurting our productivity, and so forth.

There's one area I think we ought to invest in and invest substantially. We could devote another \$5 or \$10 billion a year to infrastructure without putting undue inflationary pressure on those supplier industries.

Second, drug rehabilitation. There are about 2 million hardcore drug addicts in this country. The cost of one rehabilitation experience for one of those addicts is about \$100,000. The arithmetic is \$2 million—I'm sorry, 2 million addicts times \$100,000 apiece is \$200 billion. Compared to the \$8 billion we have devoted to the drug program now.

Now I'm not advocating an increase of \$192 billion in this one individual program. But I simply want to show the size of the problem that exists. Those addicted are the sickest of us all, few have

gainful employment, we gain no tax revenue from these people; it seems to me that we ought to consider seriously some kind of major effort in this area. These people have no chance, no chance of being reintroduced into our society and economy as being economically productive without some kind of program.

And it strikes me that the neglect in the S&L situation over the last 4 or 5 years gave us a good lesson as to how costs can rise over time when a problem that starts small is allowed to get much larger.

Last, education. We have to spend more on education to become competitive in this world marketplace. One quick example. The Japanese student who graduates from high school has spent more time in class than the American student who graduates from grad school with an MBA; a striking, striking difference. We graduate high school seniors who are illiterate, who cannot do basic arithmetic calculations; this is an area, of course, ripe for significant new investment.

The three examples I've used are all projects, all areas that have shortrun costs perhaps but longrun benefits. And it strikes me that one of our problems in budget policy has been that we have this assymetry: we tend to choose policies with shortrun benefits but longrun costs and we tend to avoid policies with shortrun costs and longrun benefits. That's, I think, chronic and needs to be addressed in one way or another.

Last, if we review the entire budget on the spending side, we ought to take another look at tax policy as well. And again, I would agree with my colleagues here, the savings rate, dramatically too low, the changing demographics in our society are not the answer. They may raise the savings rate a bit, but very little over the next decade.

It looks to me like we ought to use tax policies to entice, to induce more savings in the future. I would remain an unrepentant critic of the 1981 tax law in which we gave 5, 10, in individual income tax reductions to all of us, we didn't have to raise our savings a bit to achieve those benefits.

We did the 15, 10, 5, 3 accelerated depreciation rules. What's developing right now in the real estate sector is a good example of that. We allowed companies to depreciate these 40-story office buildings over 15 years with the tax law, and the economic life is 40 years, as a consequence we have a dramatic excess of those with the necessary adjustment.

Mr. Chairman, let me just close by saying we can debate the size of the defense spending cuts, I don't know that we could come to any major—any conclusion, but I think we ought to use this as an opportunity to review budget priorities and budget policies in a wholesale way from top to bottom.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Straszheim follows:]

PREPARED STATEMENT OF DONALD H. STRASZHEIM

I appreciate the opportunity to again appear before the Joint Economic Committee, this time to discuss the economic consequences of a possible decline in the defense budget associated with developments in Eastern Europe. While the direct decline in defense spending is of note, I believe that the move in Eastern Europe toward market economics is far more important to our economy—and it is on these broader issues that I shall focus my attention. Of course, the views expressed here are mine and alone, and do not necessarily represent those of my employer.

First let me summarize my basic points and then discuss each in more detail.

- o While recent Eastern European and Soviet developments look favorable from a geo-political perspective, we should move cautiously in reducing the defense budget given the uncertainties involved in the political situation. This area of the world is likely to become more unstable, not less, over the next decade.
- o Any set of feasible defense spending cuts—perhaps as much as 50%—look to me to be easily manageable within our economy. Defense cutbacks will free resources in the private sector—both human and physical—for non-defense purposes.
- o Eastern European economic developments look largely irreversible, and I envision, reasonably quick integration into the west of the economies of East Germany, Czechoslovakia, and Hungary. Prospects in Poland, Rumania, Yugoslavia, Bulgaria, and the Soviet Union are much more problematic.
- o The United States should take a bold leadership position in fostering, along with Japan, Canada, the world's other industrial nations and a variety of multi-national institutions, the move to market economies in these countries.

- o The defense decline, of whatever size, and the overseas developments triggering it, highlight the international linkages to our economy. It represents an opportunity to review our economic and budget policy from top to bottom.
- o Our budget machinery is broken and does not serve the American public well. We have a fiscal result more than a fiscal policy. We need to overhaul that machinery and fundamentally review our spending priorities.
- o We should use the so-called peace dividend not as a give-back via lower taxes, nor as an opportunity to reduce the federal deficit. Rather, these funds should be used in spending programs that have a long run payoff—such as infrastructure, education and drug rehabilitation.

DEFENSE AND THE ECONOMY

Go Slow

While the developments in Eastern Europe have been stunning in their speed and heartening in terms of reducing world tensions, the prudent approach would be to go somewhat slowly in our de-mobilization. We are looking at changes which utterly alter the face of the post-war world. And while prospects appear to me to be quite solid in Czechoslovakia, East Germany, and Hungary, the prospects in the next tier—Poland, Bulgaria, Yugoslavia, Rumania—are much more problematic. This portion of the world had had a long history of instability and trouble. There are, in certain cases, still remaining disputes over appropriate borders. It may become more unstable, not less.

Even more important, prospects in the Soviet Union are highly problematic. The debate seems to be largely one of just how severe are their current economic difficulties. Soviet Premier Gorbachev has been in power since 1985 promising economic advancement, yet the general Soviet citizenry find their individual economic circumstance clearly worse than before. The clock is running.

If the Soviet economy breaks down further, we might pick up the newspaper some morning and find that Gorbachev has been incapacitated in one way or another. Then, fundamental new questions would arise as to the Soviet direction and intention. This says, to me, go slow.

Perhaps an analogy with our own electoral process is appropriate. In our economy, presidents like to run for election or re-election when the economy is strong. When the economy has been weak in presidential election years, the opposition party normally prevails. While free elections are not the issue in the Soviet Union, leaders, it seems to be, are always at risk when the economic condition of the people is deteriorating.

Defense in the Budget

Defense purchases are now about 6% of GNP, having declined from around 10% in the mid-1960s. As a share of the budget, defense spending is also somewhat unwinding now from its mid-1960s 40% level. My sense is that depending upon how conditions unfold, we might cut defense spending in round numbers from \$300 billion in 1990 to \$150 by the year 2000—a fifty percent cut. This is not meant to be a recommendation, only a round number that seems plausible.

One concern, sometimes voiced, is that a decline in defense spending will represent such a reduction in aggregate demand that the economy might fall into recession—an event none of us want. My own view, however, is that such concerns are unwarranted.

First, I simply am skeptical about our analytical abilities concerning gauging the economy's performance and reaction to such changes in defense spending. The proper level of defense spending should be determined by national security needs, rather than by the seeming aggregate demand impacts. These defense impacts on aggregate demand will represent a gentle downward pressure over many years, nothing more than that.

Second, any aggregate demand considerations ought to be left to the Federal Reserve and monetary policy, where the linkages are perhaps more direct and predictable. As our fiscal circumstance has become more clearly parlyzed over the last decade, monetary policy has become the aggregate demand LEVER of choice.

And even if one is concerned about the aggregate demand argument from the fiscal side, for reasons I shall mention shortly, I believe we should essentially reallocate these monies to other spending priorities.

Company and Industry Impacts

As defense spending declines, certain companies heavily geared to the defense business will find their business hurt and hurt a lot. While declining business conditions are always unfortunate to the company affected, I don't believe a major adjustment program geared to helping these companies is appropriate. In a market economy, adjustment to changing conditions is part of the process.

The result of the decline in the defense business will be companies which have plant, equipment and highly trained people which are excess. Their challenge will be to find ways to put these resources to productive use in the private sector.

Many of our most highly qualified technical people have been devoted to defense-related activities for years, putting us at a technological disadvantage to, for example, the Japanese. In that sense, a decline in the defense business may be an important plus to the United States economy as these people are newly devoted to commercial activity. Some of the major defense contractors may find it attractive to team up with other non-defense companies which have complementary skills and can provide useful new market opportunities.

Regional Impacts

Our mainland defense installations are located primarily, for historical reasons, along both coasts and the Gulf of Mexico. The defense contractors are somewhat more scattered. It is not difficult to isolate regions and localities which might be substantially hurt by a defense cut-back—the tidewater area of Virginia, San Antonio, San Diego, to name a few. We should consider ways to soften the adjustment but I am skeptical of this avenue. Major federal spending to support particular regions is counterproductive to the economy. Regional interests overwhelming the national interest is part of the problem, not part of the solution.

There will be transition costs to individuals, families, companies, industries, and regions. In some of these areas is a justified major national adjustment program.

Composition of Defense Spending

As our defense posture changes, we need to look carefully at the composition of our federal defense spending. While I am not a defense expert, just a quick look at our defense budget does raise questions.

- o Personnel spending is down sharply in recent years, with a greater proportion of the armed forces at lower ranks and pay. Will these lower-ranking, lower-paid personnel be able to operate our increasingly complex and sophisticated equipment efficiently and without accident?
- o Operations and maintenance spending is down to just over one-quarter of the defense budget, while procurement is increasingly in high-tech hardware. Will this hardware be in good operating condition as and when it is needed?

EASTERN EUROPEAN DEVELOPMENTS

Long-run Opportunities

More important than the direct defense spending changes are economic opportunities associated with Eastern Europe's economic transformation and presumed advance. There are roughly 125 million people who live in the Eastern European countries (Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Rumania, Yugoslavia).

In general, the citizens of these countries have low incomes, little capital, a good work ethic, decent job skills, and strikingly, a higher literacy rate than the United States. (This is a commentary in itself which we need to address.).

This emerging economic revolution is a "how can you keep them down on the farm after they've seen Paree" sort of story. The East Germans, for example, realize that their standard of living was equal to that of the West Germans 30 years ago. They also realize now that their standard of living is one-third to one-half of that in West Germany. They want a piece of the action.

The problem in the East has been an inefficient economic system which has left them behind the economic advance in the West. They need capital, technology, managerial talent, a rational economic structure, a little aid and a chance.

Two Tiers of Development

Two tiers of development are likely to evolve. The first tier deserves our initial attention. This first tier of countries (East Germany, Czechoslovakia, and Hungary) already have the pre-conditions in place for economic advance. They have some common commercial ties and an entrepreneurial and industrial history. These countries will rapidly be integrated into Western Europe. We need to take a leading role in aiding their advance, and should be a supportive force. Aid dollars, in some form, are appropriate.

Prospects for Poland, Rumania, Bulgaria and Czechoslovakia, however, are more problematic. Even a step further behind is the Soviet Union. In the Soviet Union, even the concept of private property rights is still too threatening a proposition for Premier Gorbachev to advance. In these Eastern European countries, there is no history of contract law, there are no generally acceptable accounting standards, and much more needs to be accomplished in the political sphere as well. Over time, the "demonstration effect" of economic advance in the first tier will be most powerful. Hence, the focus should be on the first tier. The second tier will follow.

Europe 1992

We need to re-think our stance toward Europe 1992. Prior to these developments in eastern Europe, the proper interpretation of Europe 1992 was in the form of a north-south issue. The low wage economies primarily in southern Europe (Spain, Portugal, Italy, Greece, Ireland) would have been advantaged via market openings relative to the countries of northern Europe (Germany, France, U.K., Belgium, Netherlands, Luxembourg). Now, however, the entrepreneurial attention and new capital is likely to flow to eastern Europe rather than to southern Europe. The attention of American companies will likely be on eastern Europe more than on southern Europe. The attention of the Japanese is likely to be more on eastern Europe as well. Some of the Japanese capital that would have flowed to the United States may also be diverted to eastern Europe.

U.S. companies are likely to find frequent opportunities for joint ventures and for the location of facilities to be put in eastern Europe. American companies that already have European production, distribution, marketing and sales operations will have a head start and new opportunities. U.S. firms may be inclined to out-source in Eastern Europe, taking advantage of the low wage costs thereby impacting domestic operations, a development not likely to be lost on the U.S. laborer.

The Pacific Rim Example

Wage costs in eastern Europe are dramatically below those in western Europe, Japan and the United States. In this era of transferable technology, the eastern European countries may be positioned as Japan was in the late '60s, and as Taiwan and Korea (for example) were in the late '70s.

These countries became important new centers of manufacturing, and important competitors and customers of ours. We need to establish close economic ties with these nations at the outset of their economic transformation.

Perhaps our border with Mexico and the so-called "maquiladora" program is an instructive case here at home. Just as the area around the U.S.-Mexican border has attracted a significant amount of new manufacturing employment during the last decade, one can envision a significant manufacturing presence in eastern Europe developing during the 1990s.

A whole host of U.S. industries will see new opportunities as the business news reports reveal almost every day. The telecommunications industry in eastern Europe is likely to be among the first to be modernized. Their computing technology is 30 years out of date. Commercial air traffic, both passenger and freight, should be advanced. Capital goods spending for machinery and equipment and plant will be in the forefront of the effort. Engineering and construction opportunities will abound as the eastern European infrastructure is developed. Demand for a wide range of consumer products in the East should grow.

A Do-It-Yourself Process

There are many examples throughout history of the process whereby a democratic society and market economy is transformed into a totalitarian system and centrally planned economy. However, the transformation in the other direction is a rare historical event—from a totalitarian system and centrally planned economy to a democratic system with a market driven economy. Accordingly, we need to be both humble in terms of the confidence of anticipating developments and positioning our economy right, and cautious such that our activities don't produce unintended and undesirable consequences.

In this increasingly inter-dependent structure of economies and financial markets, a shock or discontinuity in one region of the world or market quickly reverberates through other economies and markets. Accordingly, we should be alert to the risk inherent in the financial markets to some kind of an upset originating from a surprise as this rapidly unfolding eastern Europe and Soviet situation develop.

Aid—A New Marshall Plan?

As the eastern European nations have gotten a taste of free market economies, the United States increasingly has a stake in this process succeeding if we are to reap any material advantage from it. In that sense, a 1990s' version of the Marshall Plan is appropriate purely from our own long-run best interest. The overtures and initiatives discussed so far should be pursued in a systematic way. The United States should take a leadership role, not just in terms of funding, but also as relates to terms, conditions, prospects, paybacks, and so forth. The key participants should be all of the industrialized countries around the world, including the U.S., Japan, Canada, and the major countries of western Europe.

At present, the eastern European economies have little to sell that the West is interested in, besides some commodities and a few low-tech products. They need a convertible currency as a precursor to growth. While aid via both loans and grants can perhaps get the process started, they must rather quickly begin to get at least certain portions of their economy so that they are producing output that meets Western standards, or else the process will founder.

Regional Trading Blocks

A concern voiced over the last year or two can be summarized in the phrase "fortress Europe." And, as trade friction in the United States with Japan has escalated and now seems to be growing into investment friction, there is a real possibility that the world economies might fall into, by accident, three major world trading blocks. First, a Pacific rim block of Japan, the tigers, China and the sub-continent. Second, an Americas block, and third, a European and Soviet block. It seems to be that we want an economically integrated world, not three economically integrated blocks. Hence, U.S. and Japanese involvement in the European sphere should be encouraged, not discouraged.

Just as aid would seem to be a desirable objective, during the early years of the 1990s, rapid growth would also be desired simply in order to speed the transition from centrally planned to market economies. In that sense, economic policies among the industrial nations of the world might be well served to lean on the side of stimulus rather than on the side of restraint to foster a period of rapid growth, even if the cost is somewhat higher inflation in the short-run.

European Strains

The economic adjustment facing the European nations and the difficulty of this task must not be underestimated. The low wage labor in eastern Europe represents a significant threat to those in western Europe. And just how the integration of East and West works is of crucial importance. If few further meaningful reforms in the economic system occur in the East, the pressure will be for the people to leave, migrating to the West and working for low wages and disrupting the West's economy and institutions in that way.

Conversely, if the economic reforms in the East take place at a rapid pace, then investment and production will be increasingly focused in the East with goods flowing back across the borders, also in a competitive way. In either case, the eastern European countries, represent a sizeable labor force which must be reckoned with. Economic growth in this part of the world will be advanced. We need to be an active participant, not a bystander.

THE PEACE DIVIDEND

How Large a Dividend?

As a practical matter, in the early years the "peace dividend" is likely to be small because some monies are committed in long-term projects, and other programs aren't feasibly cut in the short run. Pondering the details of the peace dividend is not instructive, simply because given the uncertainty in eastern Europe and the Soviet Union, these questions are inherently unanswerable. It is useful however to decide conceptually what to do with any peace dividend as it develops.

Lower Taxes or Smaller Deficit

One possibility would be to, in effect, give the peace dividend back in lower taxes, leaving the size of the budget deficit unchanged. Given the various items on the public agenda (see below), my sense is that this course of action would be a mistake.

Another possibility would be to perform a twist of economic policy, leaving fiscal policy tighter, and reducing the budget deficit, thereby allowing an opportunity to make monetary policy easier. The attendant lower interest rates and reduced deficit would pay major dividends. This is a position advanced by many economists and I do have some sympathy for it.

Investing In America

But in principle, it seems to me that an even better alternative would be to use the peace dividend in a variety of other ways which would have long run benefits to our economy and to society in what I have generally classified as investing in America. The three items at the top of my list would be to increase our investment in infrastructure, drug rehabilitation, and education.

Infrastructure Repair

We are now spending around 1% of our GNP on our infrastructure annually, versus about 2.2% of GNP 25 years ago. The neglect of our infrastructure is now past the stage of personal inconvenience. It is beginning to slow our productivity, hurt our international competitiveness, and our long run economic growth. The infrastructure shortfall is evident, and directly touches us all. The problem is bridges, roads, airports, air traffic control, mass transit, sewers, wastewater treatment, water purity and the like. The sooner we begin to reinvest in our infrastructure, the better.

How much more should we devote to infrastructure? That's hard to say, but we could easily spend \$5-to-10 billion more annually for at least the next decade without creating excess demand conditions with undesirable results in the various supplier industries.

Drug Rehabilitation

The drug problem is another case in point. There are perhaps two million hardcore drug addicts in the country. The cost of one drug rehabilitation treatment for one individual is about \$100,000. This arithmetic yields a \$200 billion problem, swamping the \$8 billion anticipated in the most recent budget.

While I am not recommending \$192 billion of new spending, few Americans appreciate the magnitude of the present problem—and it is growing rapidly.

Most of the drug-addicted are not contributing members to our economy, but rather represent a major drag on it. They are the sickest of us all. They are heavily involved in crime, and most have no legal income and accordingly pay no taxes. While the drug problem may seem somewhat narrow to many Americans, its indirect consequences and costs are growing at an alarming rate. The cost of inaction, not unlike the case of the savings and loan bailout, is rising rapidly.

Without intervention, few of these individuals have any likelihood of becoming contributors to our economic advance. There would, accordingly, be an enormous payoff to salvaging some of these lives.

Education and Training

Education is another area starved for investment and spending. Our educational attainment is rapidly falling far behind that in most other advanced economies in the world. We have a basic and growing mismatch between our labor force skills and labor force needs. Our educational system is so unsatisfactory that in some cases private firms are having to teach people the "three R's" because the available labor pool of many high school graduates do not have these skills. What a sad commentary. The continued growth of private education in grades K-12 can be read, at least in part, as an indictment of our public school system.

In our largest cities, schooling through the secondary level is, unfortunately, largely warehousing. We give high school diplomas to students who are illiterate, and to students who cannot do elementary arithmetic calculations which are required in our society today. While we can no doubt make strides in education without additional funding, some new spending for a better physical plant and more competitive teacher compensation would be an important plus.

Our Broken Budget Machinery

Our budget machinery seems to be in worse repair than ever. The process is incoherent and is the laughing stock of economic policy makers around the world. We still have more a fiscal result than we do a fiscal policy. There is bi-partisan agreement that defense spending at least deserves review if not major reduction.

This is a perfect opportunity to review the Gramm-Rudman legislation and the entire budget making mechanism. During the last few years, the budget debate seems to have centered on just how creative could our accounting be in terms of keeping any spending cutback to a minimum, yet still satisfying the letter of the Gramm-Rudman legislation. But with the thrust of the debate having simply been 50% cutbacks in defense and 50% in non-defense—with a variety of other spending categories exempt—the result really has been no budget priorities debate at all.

The opportunity now is for a true national debate on just what our level of defense spending should be. If eastern European developments continue on their recent general path, the outcome will be a "peace dividend" of some dimension.

In that circumstance, the debate can commence on how much of the dividend to save and on a new and invigorated debate on budget priorities outside of defense, along the lines suggested above. We all have perhaps a different perspective on the appropriate priorities—which will be the appropriate and constructive nature of the debate. Let's not miss the chance to have this debate.

Long Run/Short Run Choices

In this debate, we have an opportunity to again confront what I regard as the most troubling aspect of our budget problems. As a nation we have a fundamental asymmetry in the kinds of policy choices we make. The evidence is all around us. We tend to choose policies which have short-run benefits but long-run costs. And we tend to avoid policies which have short-run costs, but long-run benefits. I realize that this short-run policy focus relates to our election cycle and the fact that senior officials in the executive branch usually only hold their positions for a period of somewhat less than two years. Nevertheless, until we break that mold and begin to take a longer run view, our economy will continue to suffer—and the damage is cumulative.

Twenty five years ago, we thought of our GNP potential as rising about 4.3% annually. Now, a consensus estimate would be 2.5%. About one-half of the slowdown is demographically driven. But the other half is attributable to lower productivity growth—and is directly traced to the incoherence of our economic policy, and our short-run attention span.

In the new controversial book by AKIO MORITA and SHINTARO ISHIHARA titled The Japan that Can Say No, the authors have a section titled "America Looks 10 Minutes Ahead; Japan Looks 10 Years." While their focus is on the short-run focus of American business, the same point can be applied in Washington (This striking little book should be "must-reading" for us all.).

Savings and the Tax Code

Finally, a comprehensive look at spending is an open invitation to take another look at the tax code. The U.S. savings rate is very low—among the lowest in the world—and despite some of the popular wisdom, the changing demographics and the aging of our society is unlikely to lift the savings rate very much. We need to do that with tax policy, enticing and enducing savings in place of consumption. We could easily do as much to advance our economic future by changes in tax policy as by the above changes in spending.

Composition of Federal Spending
(Percent of Total Spending)

	Transfer Payments	Defense Purchases	Net Interest Paid	Grants-in Aid	All Other
1947	35.1	32.5	13.3	5.5	13.6
1948	32.4	31.8	11.5	5.6	18.6
1949	33.1	33.1	10.2	5.2	18.3
1950	35.0	34.7	10.7	5.6	14.1
1951	20.1	58.2	7.7	4.3	9.6
1952	15.3	64.7	6.3	3.6	10.1
1953	14.8	63.1	5.9	3.6	12.5
1954	18.9	59.2	6.5	4.1	11.2
1955	21.1	56.9	6.7	4.5	10.8
1956	21.1	56.1	7.0	4.6	11.2
1957	21.9	55.6	6.9	5.2	10.3
1958	23.9	51.7	5.8	6.2	12.4
1959	24.0	50.6	6.8	7.4	11.2
1960	25.0	48.2	7.2	6.9	12.6
1961	26.4	46.6	6.1	7.0	13.9
1962	25.0	46.8	6.1	7.2	14.9
1963	25.4	44.7	6.3	7.9	15.7
1964	25.3	42.2	6.7	8.7	17.2
1965	26.0	40.7	6.7	8.9	17.7
1966	24.7	42.7	6.3	9.9	16.4
1967	25.7	44.3	5.9	9.6	14.5
1968	26.5	43.2	6.2	10.2	13.9
1969	27.7	41.2	6.6	10.6	13.8
1970	30.8	37.0	6.8	11.7	13.7
1971	33.7	33.0	6.1	12.9	14.3
1972	33.7	31.1	5.8	15.1	14.4
1973	35.9	28.8	6.7	15.1	13.6
1974	38.8	27.0	6.8	14.4	13.0
1975	41.4	24.6	6.3	15.0	12.7
1976	41.6	23.7	6.8	15.5	12.4
1977	40.5	23.5	6.8	15.7	13.6
1978	39.7	23.1	7.5	16.4	13.2
1979	40.5	23.4	8.2	15.4	12.5
1980	41.2	23.2	8.7	14.4	12.5
1981	41.0	23.8	10.3	12.5	12.4
1982	41.5	24.8	10.8	10.7	12.1
1983	41.7	25.6	11.3	10.3	11.1
1984	39.6	26.2	12.9	10.5	10.9
1985	38.6	26.3	13.2	10.1	11.8
1986	38.6	26.8	13.1	10.3	11.1
1987	38.6	27.5	13.2	9.6	11.1
1988	39.2	26.6	13.5	10.0	10.7

The Size of the East Bloc Market

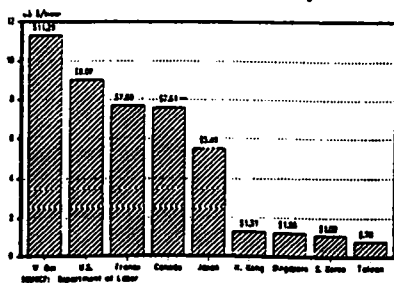
	Estimated Population in mid-1988		U.S. Government Estimate of GNP in 1987	
	In Billion	% Above	In Billion \$	% Share
East bloc total	425.0	8.25	3429	20.05
Soviet Union	288.9	5.81	2375	13.89
Eastern Europe	136.1	2.84	1054	6.16
Bulgaria	8.7	0.17	65	0.38
Czechoslovakia	15.7	0.30	151	0.88
East Germany	18.5	0.32	197	1.15
Hungary	10.6	0.21	88	0.51
Poland	37.8	0.73	259	1.52
Romania	23.1	0.45	146	0.85
Yugoslavia	23.7	0.45	148	0.87
Common Market	325	6.31	3782	22.12
United States and Canada	273	5.30	4879	28.53
Japan	124	2.41	1608	9.40
Rest of the World	4003	77.73	3402	19.90
World Total	5150	100.00	17100	100.00

Note: More realistic exchange rates could reduce estimates of Soviet and East European GNPs by about one-third.

Source: PlanEcon Inc. and CIA.

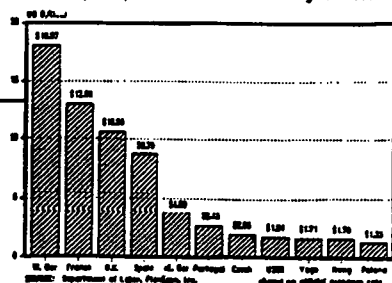
The Pacific Rim Advance

Hourly Compensation in Manufacturing for 1979



Europe Looks East

Hourly Compensation in Manufacturing for 1988

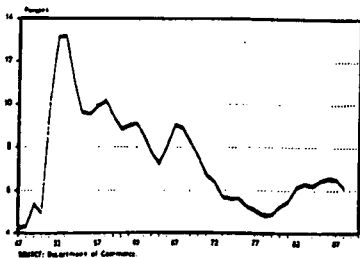


WHERE OUR DEFENSE DOLLAR GOES

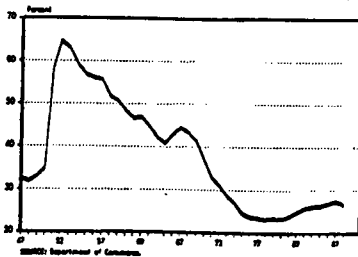
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	89
Personnel	35.5%	36.9%	37.3%	38.8%	38.3%	37.2%	36.3%	34.6%	34.0%	32.1%	30.5%	30.4%	29.8%	29.0%	28.2%	26.8%	26.2%	25.5%	26.3%	26
Oper. & Maint.	26.5	26.6	27.4	27.5	28.3	30.6	31.1	31.5	32.1	31.3	33.4	32.9	32.2	30.9	29.6	28.6	27.5	27.0	29.1	28
Procurement	26.4	23.9	21.7	20.4	19.2	18.5	17.8	18.7	19.1	21.8	21.7	22.3	23.4	25.5	27.2	27.8	28.0	28.6	26.5	27
R&D, Test/Eval.	8.8	9.3	10.0	10.6	10.8	10.2	10.0	10.1	10.1	9.6	9.8	9.7	9.6	9.8	10.2	10.7	11.8	11.9	12.0	12
All Other	2.8	3.4	3.7	2.6	3.3	3.6	4.9	5.2	4.7	5.2	4.6	4.6	5.1	4.7	4.8	6.0	6.5	6.9	6.1	5
TOTAL:	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: U.S. Budget, various years, fiscal years.

Defense in the Economy
Defense Spending as a Percent of GNP



Defense in the Budget
Defense Spending as a Percent of Federal Spending



DEFENSE SPENDING
(As a Percent of GNP and Federal Spending)

	Percent of GNP	Percent of Federal Spending
1939	1.9	9.3
1940	3.1	15.8
1941	13.7	52.8
1942	35.7	79.8
1943	48.9	87.9
1944	51.1	89.2
1945	46.1	88.7
1946	12.5	57.7
1947	6.3	37.6
1948	6.3	34.7
1949	7.1	36.9
1950	7.3	38.0
1951	14.1	57.0
1952	17.3	61.4
1953	17.4	59.7
1954	14.9	55.8
1955	12.7	52.4
1956	12.4	52.0
1957	12.8	52.0
1958	12.4	48.4
1959	11.6	47.4
1960	11.0	45.4
1961	11.2	44.9
1962	11.2	44.8
1963	10.4	42.3
1964	9.4	39.4
1965	8.7	37.3
1966	9.5	39.6
1967	10.6	41.8
1968	10.4	41.0
1969	9.6	39.5
1970	8.6	36.4
1971	7.5	32.9
1972	6.9	31.5
1973	6.1	29.7
1974	5.9	28.1
1975	5.8	27.0
1976	5.4	26.5
1977	5.2	26.3
1978	5.1	26.1
1979	5.1	26.5
1980	5.3	27.3
1981	5.5	28.5
1982	6.1	30.2
1983	6.3	32.0
1984	6.3	32.4
1985	6.6	32.5
1986	6.8	33.3
1987	6.8	33.5
1988	6.4	32.7

THE PEACE DIVIDEND

Representative HAMILTON. Thank you very much, Mr. Straszheim. Well we'll turn to questions.

Let me begin by seeing if I can identify for you the areas of agreement among you. And if I mistate it, then please correct me.

It seems to me all of you said that the peace dividend, at least in the short term, is going to be fairly modest. It seems to me all of you have said that no matter what that peace dividend is you're not worried about the economy's ability to handle it, it's manageable; we're not going to have a recession.

None of you came out in support of a tax cut as the way to deal with the peace dividend.

All of you, I think, said that the economy should be stronger and that really whatever that peace dividend is, it represents a real opportunity for us in the country.

None of you favored any kind of an economic adjustment program. as you probably know, we've had some bills introduced in the Congress last year, before many of the events occurred in Eastern Europe, to deal with the problems of the peace dividend, if there are such problems. But none of you supported that.

Now if there is a major difference among you, it seemed to me to be with respect to whether you allocate the peace dividend to deficit reduction, as you, Mr. Brinner and Mr. Schultze, appeared to me to argue, or whether you use that money to invest, spend in programs like education, infrastructure, drugs, and Eastern Europe.

Now do I state it about right? And how about this difference that exists among you, if it is a difference? Mr. Brinner?

Mr. BRINNER. I think you have summarized our positions very well. On the small difference that you cite at the end, I think that may be more apparent than real.

All three of us agree that the peace dividend should be devoted to investment. Then the question is, should that investment be public or private? Should it be an investment in housing and plant and equipment, private or public, science, education, drug rehabilitation, infrastructure, et cetera?

I think that we as economists would all agree that simply is a question of finding investment opportunities that make sense given the cost of capital. And I suspect that we would all agree that the economy would be better in the longrun if we invested in more of both, and that all we need is hardheaded evaluation.

The interaction of the peace dividend with those decisions is the cost of capital. If we get a substantial reduction in Federal borrowing, you could get lower long-term interest rates and, as Charlie Schultz noted, that would encourage long run investment in both public and private sectors.

Again, we agree that the East bloc citizens deserve support in their effort to move toward democratic capitalism, but there may be a difference among us again in public versus private investment.

I sensed in Charlie Schultze's remarks the sympathy for government grants along the Marshall plan line. I worry that you can't replicate that. I would much more prefer private sector led investments: joint ventures, equity deals, and licensing arrangements.

Because this is not a bloc that has the technology or the managerial know-how to use our money well. I think bank loans and government grants will be more likely to be wasted than used effectively when we put them into an environment that doesn't have the right managerial expertise and technology. So there is a difference there.

Thank you.

Mr. SCHULTZE. One, well, a little more than a quibble with one aspect of your summary:

If you push the outer edges of what may be possible in the military spending reduction and say it might be feasible to get a \$50 billion reduction in annual spending by 1993, four years from now, which you might spend most in deficit reduction, the interest reduction effect on interest payments on the national debt begin to mount up to be a sizable sum so that program—a \$40 billion deficit reduction to start with, ends up with a \$70 billion deficit reduction.

Representative HAMILTON. Where do you come up with this \$50 billion figure? I mean, what's the basis for that?

Mr. SCHULTZE. Well, I have—I guess I really have no basis but that if Mr. Cheney is willing to offer up to \$45 billion, I'll go to \$50 billion.

You know, it is common sense, it is looking at the past and what we've been able to do, finally, it is looking at what my friend Mr. Kaufmann proposes and simply accelerating a little. He comes with a—

Representative HAMILTON. Now you're an economist, of course, and I don't want to take you outside your realm of expertise, but you've had a lot of experience in government:

You think the \$50 billion is a realistic figure? You're willing to bet on it as of December 1989?

Mr. SCHULTZE. Well, you know, I wouldn't bet the farm that Charlie Schultze's judgment on what the optimal defense cut is the best you're going to get, but I guess I would say that something between \$40 and \$50 billion seems to be well within the ballpark. At least that's the way I'd say it.

Representative SCHEUER. Within what kind of timeframe?

Mr. SCHULTZE. 1994.

Representative HAMILTON. Now did you want to comment on my statement?

Mr. STRASZHEIM. Were you finished?

Mr. SCHULTZE. No, I hadn't finished. I mean, you may want to stay on this subject—

Representative HAMILTON. Oh, I'm sorry.

Mr. SCHULTZE. I mean, I hadn't finished my statement.

Representative HAMILTON. Well you go ahead and finish, then we'll go to Mr. Straszheim.

Mr. SCHULTZE. So in any event, all I'm saying is it wasn't so much the \$40 billion versus the \$50 billion, but if you cut the budget deficit initially by \$40 billion, you set in motion a feedback effect on interest rates on the debt so you would end up with a \$70 billion cut, taking everything into account, by—I say \$70 billion, in the ballpark of \$70 billion by 1994.

Mr. BRINNER. If you look at the exhibit Key Budget Contributors in my prepared statement you can see that, in fact, I would very much support the quantitative estimates.

By 1995, for example, I estimated about a \$60 billion defense reduction and about a \$20 to \$25 billion interest reduction. So Charlie Schultze's calculations are definitely on the mark.

Representative HAMILTON. Let me just intervene at the point of your projections on defense savings. I don't know if you saw Senator Sasser's article in the Times this morning.

Mr. SCHULTZE. I only had a chance to glance at it.

Representative HAMILTON. He runs through a lot of figures, of course. But he's talking about the Cheney proposal. And his conclusion is that—and I quote it now:

To put all of that as simply as possible, the Pentagon gets \$287 billion in the budget just passed in fiscal 1990. Under the exercise in austerity proposed by the Secretary, the Pentagon would get more than \$290 billion annually through the midnineties.

Mr. SCHULTZE. Current dollars.

Mr. BRINNER. That's the game that's being played—I mentioned that in my testimony, too. The current dollars actually rise a little bit. But after the adjustment for inflation, it appears that outlays would be 20 to 25 percent lower in 1995.

Representative HAMILTON. Lower. OK. That's helpful. Thank you for that.

OK, go ahead, Mr. Schultze. I didn't—I keep interrupting you. I don't mean to do that. But go ahead.

Mr. SCHULTZE. No, no, no, that's fine. It's worthwhile getting straight.

So again, just to summarize, I don't pretend to be enough of a defense expert to want to bet the farm on \$50 billion. What I am saying, something in the range of \$40 to \$50 billion to me seems quite reasonable. And in that range, I wouldn't even be disagreeing with Secretary Cheney, I would just kind of push it toward the \$50 billion end.

Representative HAMILTON. OK.

Mr. SCHULTZE. One side point which I think is important, as long as we're into this, to express an amateur's opinion informed by discussion with experts:

That by this time in the U.S. Defense Establishment, the lead-time on training troops is probably longer than the leadtime on weapons systems. And that if you were getting a phased-down reduction, so that you could flip back up again if you had to, and if you're doing this in steps, it isn't necessarily the right thing to do to say we're not going to cancel weapons systems, we're going to get rid of troops. It depends on a matter of emphasis, but it is not obvious you can reverse the troops up that fast. I'd just put that as a point.

Let me make—have one quarrel, I guess, if you will, with my colleague Mr. Straszheim:

I find, by the way, this is quite interesting that the man from Merrill Lynch Capital Markets is the one who wants to have the Government spending and the democratic economists and all these other administrations is the one that wants to cut the budget deficit. But times change.

Representative HAMILTON. I noted that, too.

Mr. SCHULTZE. Times change. Times and my age.

INFRASTRUCTURE

Let me say a little bit about infrastructure. Yes, I think there are a number of places that people conveniently use the term "infrastructure" for that we have neglected for some years now. Mainly—not solely—because in this budget stringency what happened was that you didn't—you, collectively, the Government, and the Congress, did not cut selectively. It tended to penny-pinch everywhere, the good with the bad, that's the nature of Gramm-Rudman's pressures. And so we've accumulated a lot of—quote—needs—unquote.

However, this is matter of tradeoff. The bulk, the overwhelming bulk of investment in the American economy is private. No. 2, merely the fact of having some infrastructure needs does not necessarily mean the Federal Government ought to go out and spend more money on them. Let me give you two examples: roads and highways. A friend of mine—one of our staff members at Brookings has just published a book on infrastructure. The essential conclusion of which is that if we were smart enough to radically change the way we plan and tax—charge for investments in highways in this country, we could get almost everything we need with only a very modest additional outlay. Now that's a whole other hearing, but it isn't necessarily true more money is going to do it. In this case you couldn't quite get away with no more money, but you'd get—fairly modest outlays will give you big payoffs if you do it right.

Representative SCHEUER. Excuse me, are you talking about the gasoline—

Mr. SCHULTZE. No, no. In fact, that's what you do not do. We don't tax for highways correctly. We ought to be taxing with congestion charges, not gasoline. If you tax for gasoline, you force the truckers to do things that are uneconomic and tear your roads up. You really ought to have a lot of axles on a truck, because that's what tears the road up. But that's costly on gasoline, bigger motors.

And we do it in ways that literally waste our investment. Now I'm trying to summarize a book in two sentences. All I'm saying is it isn't necessarily just spending more money. We can do a lot with better spending of what we have.

EDUCATION

I agree completely with Donald Strasheim that, at least everything I've seen suggests up through high school, the performance of American students when you give standardized tests is abysmal. And it seems to get worse the further on you go in school. I think it turns around, by the way, in college and graduate school, but that's another matter.

The problem is I also—I believe I'm correct in saying that per student we spend more than virtually any other country. I'd be willing to spend a lot of money, I'd be willing almost to reverse everything I've said if I thought somebody had a way that we could pour another \$30 billion a year into the educational system and do this. I haven't seen anybody convince me that this can be done. And in particular, I'm not sure the Federal Government can do it.

Because that's the second connection, the Federal Government with elementary and secondary education.

So I am not unsympathetic to the need for public infrastructure and other investment. I would, in my ideal world, have allocated about a fifth of the savings that I—but as an old budget director, I hasten to caution that the mere fact there's a need doesn't mean that we know how to meet it. And the one thing I am fairly sure is that with low interest rates and permanently lower interest rates the American business community will do a pretty good job of allocating investments where the payoff is good.

PEACE DIVIDEND

Representative HAMILTON. Mr. Straszheim, before you speak, let me make a comment just to sharpen the difference:

Now Mr. Brinner a moment ago you said that the differences among you on this question of deficit reduction, on the one hand, and in spending to invest on the other was, I think you said, more apparent than real or something to that effect.

Mr. BRINNER. In a choice between public and private investment.

Representative HAMILTON. But what strikes me is if you look at Mr. Brinner's statement he's very, very clear: "My response is that Congress and the administration should apply the savings to deficit reduction." And he concludes at the end of his testimony: "Don't do anything, basically, ignore the dividends."

Now you, on the other hand, say, Mr. Straszheim, that: "We should use the so-called peace dividend not as a give-back via lower taxes"—which all agree on—"nor as an opportunity to reduce the Federal deficit. Rather, these funds should be used in spending programs that have a longrun payoff. . . ."

Now that strikes me really as a very major difference among you.

Mr. STRASZHEIM. I agree.

Mr. SCHULTZE. Could I add one point, Mr. Chairman?

Representative HAMILTON. Now, they've been attacking you strongly here, Mr. Straszheim. You defend yourself here.

Mr. SCHULTZE. Could I get one point in here before he goes, very quick?

Mr. STRASZHEIM. I could have guessed.

Representative HAMILTON. Yes. Sure.

TAX INCREASE

Mr. SCHULTZE. One quick point.

I know with myself and I suspect with my colleagues if you give us an option for our ideal budget policy, we wouldn't be disagreeing at all. I don't think you can do what needs to be done without a tax increase. And I think the defense budget cut is sort of a frosting on the cake; I mean, it's going to make it a lot easier, small tax increase, we can do more.

The real difficult question is we're not going to have a tax increase unless political circumstances substantially change, unfortunately, and how do you spend \$40 to \$50 billion, not what would you do in an ideal world.

Mr. STRASZHEIM. I'm glad I let Charlie Schultze get that in.

I don't want to come out and—I wouldn't go so far as to say I don't think what needs to be done can be done without a tax increase, I think we ought to be talking about here, as they say, the art of the possible. And a tax increase seems to me just entirely implausible.

Let me take the issues in turn:

First, the size of this peace dividend and the spending cut. None of us have any idea. Is it going to be \$50 billion in 1994, is it going to be \$75 billion, is it going to be \$25 billion? Things have changed dramatically in Eastern Europe over the last 3 months.

With my focus on investing in a variety of these domestic concerns, it's apparent that my stance is that there are major unmet domestic needs with longrun payoffs. And I would desperately like to have that \$50 billion be \$75 or \$100 billion or whatever. None of us really have any idea what it will be. And I don't think we ought let national security issues be totally driven by the budget process, which I think is the temptation in these kinds of issues.

On these individual areas of spending:

INFRASTRUCTURE

The issue that, if we were prepared to make some sort of a radical change in the way we do the taxing and planning for roads and highways, could we pay for a significant amount of infrastructure rebuilding without direct outlays. I haven't seen the document. Perhaps so.

But we're not about to launch, I don't believe, in this society a radical change in the way we do this kind of planning and taxing and, as a consequence, I think the issue in infrastructure gets back to how might we rebuild that infrastructure, where should those dollars be spent, bridges, roads, airports, air traffic control, sewers, wastewater treatment, so on and so forth.

I can't answer those questions. Some of that spending, no doubt, would come from the State and local level as opposed to the Federal level. But it doesn't seem to me to make any real advances here, we would need some moneys from the Federal level.

EDUCATION

President Bush has emphasized a variety of times in this rhetoric about the education president, that maybe you could make major advances in educational achievement in our society without spending much money.

Perhaps we can. I would argue that spending here though is a necessary but not a sufficient condition to improve our educational attainment. And no doubt here again perhaps a significant amount of the funding should come from the States and local level as opposed to the Federal level. But I think some kind of additional Federal involvement would be appropriate.

DRUG PROGRAM

That didn't come up in the responses from Mr. Schultze and Mr. Brinner. But there is one I think—it's evident to me that we need to do something beyond the \$8 or \$9 billion that's being contemplated

right now to get this very rapidly growing population, which are—you know, the central part of their life is drugs and death and disease and desperation and homelessness and, you know, no job. It's a vicious circle of the worst kind—

DEFICIT REDUCTION VS. FEDERAL SPENDING

Representative HAMILTON. If I may interrupt you, Mr. Straszheim. It seems to me that the burden of their argument is that although all of these areas you identify are worthy areas to invest more at any level, State or local or Federal, the advantages that come from deficit reduction and low interest rates outweigh the advantages of direct Federal spending.

Is that a fair—

Mr. BRINNER. Not quite.

Representative HAMILTON. OK.

Mr. BRINNER. I think all three of us are—

Mr. STRASZHEIM. And not obvious to me.

Representative HAMILTON. Not obvious to you. OK. All right. That's a point I wanted to bring out.

Mr. BRINNER. All three of us certainly agree that it's very likely that public investment is urgently needed in those areas.

Now how do you finance that public investment? Do you use defense reduction, do you use reduction of some other nondefense program that hasn't been brought up for discussion—I mean, Eastern Europe doesn't bring up Amtrak subsidies but maybe those need to be considered—or other nondefense programs, or do you use fees? Let's not call them taxes, let's keep them on the table, let's call them user fees.

Representative SCHEUER. Revenue enhancement.

Mr. BRINNER. Why don't you consider a supportive education program? A program that generates future income. And we will add a user fee, let's call it, for the recipients of that income in the future. You might call that user fee an income tax.

On education. I've just described that.

On infrastructure, like highways and so forth. Charlie Schultze, already described that you could either be simple and have, you know, gasoline or vehicle excise taxes that are targeted or you could be more complex. I think you could go through and match up investments with the beneficiaries of those investments and then a long-term tax, user fee, program to pay the costs of those investments. We all want the investment; just a little debate over how to finance those investments.

Representative HAMILTON. All right.

Are you through, Mr. Straszheim?

Mr. STRASZHEIM. Yes.

Representative HAMILTON. OK. Mr. Schultze.

Mr. SCHULTZE. One thing to remember is that if you split the peace dividend 3 or 4 to 1 between public and private investment, that roughly is about how actual investment is now split in this country. So it's not a radical reassignment there, it's simply you need both.

It is—I'm 60 percent sure of what I'm about to say—likely that if we don't raise our national saving rate over the next 10 years, we

are not going to have it supported by an inflow of saving from abroad over all those years at \$100 to \$150 billion a year and we're going to have to cut our national investment a lot more in the private sector.

So that using some of this peace dividend indirectly to improve private investment may actually be counsel almost in desperate—maybe to exaggerate a little—because we're not dealing with an investment outlook that's stable, we're dealing with at least the significant possibility that we cannot continue to borrow abroad to consume.

So we're talking at the margin how do you split that whatever it is, and I'm saying split it both ways but keep it in rough proportion, because that's about where the needs are.

Mr. STRASZHEIM. And if we don't improve our infrastructure, and if we can't turn our schools into something other than warehouses, and if we can't salvage some of these—this rapidly growing number of lives in a drug program, our investment prospects are going to be dramatically worse.

Representative HAMILTON. Congressman Scheuer.

REGIONAL IMPACT OF PEACE DIVIDEND

Representative SCHEUER. Well, Mr. Chairman, it's been a very productive hearing and I want to congratulate you for your leadership in calling it and I want to congratulate the witnesses for excellent testimony.

You all seem—I'm just going to hit a couple of points that haven't been touched on too much now. Most of the major questions have been very well dealt with.

You all seem to agree that as we achieve this \$40 to \$50 million peace dividend in the next 3 or 4 or 5 years there is not going to be a significant depression, recession, shakeout, or what have you.

I take it, Mr. Schultze, you were speaking in national terms. How about regionally? Are there sections of the country with major concentrations of military production that will suffer disproportionately and can you see some kind of Federal intervention there in terms of retraining of workers and so forth?

I'm thinking of Grumman out on Long Island. Grumman sits over that Long Island economy like a 600-pound canary. And when it chirps in sorrow or in pain, that has a devastating impact on the whole island. Grumman produces F-14's, not for very long it looks like. As Grumman seeks to diversify or as Grumman seeks to perhaps retreat from Long Island—that's not a known factor—what do we do about 10,000 employees who seem to be at risk of an interruption in Grumman's military activities? What do we do? What do we do about filling that hole in the Long Island economy?

I mean it's great to look at the gross national effects of the peace dividend and say that there's not going to be a national employment—and I agree, I agree with that. But certainly there are going to be places in our country, regions in our country that are disproportionately military where local economies, regional economies, have a major military component. And as that is wound down, what do we do about those special circumstances? Do we have retraining programs?

Mr. SCHULTZE. A couple of points.

No. 1, I guess in this context we should congratulate the Pentagon and the Congress over the last 10 years, they've done such a good job of spreading those subcontracts all around the country and the Pentagon has gotten around to get enough political pressure on everybody that if you look at the State-by-State distribution, I don't believe it's all that uneven—it's uneven, but it's not all that uneven.

No. 2, a \$40 to \$50 billion peace dividend is a change of a quarter of a percent of GNP a year. Now every year we have things like the exports, exports have moved more than that; housing, housing moves more than that. Does this country have a decent program to deal with dislocations? Maybe we could do better.

Now I don't pretend at this moment to have an answer to that. What I don't really believe is with one or two exceptions—Grumman may be one of them—with one or two exceptions, that this is the kind of change that we have all over the country almost every year different ways for different aspects of the economy apart from the defense budget. So I would look at this in terms of evaluating the United States of America's ability to deal with economic disruption generally, not do we need something special for this. Because this isn't a big deal.

Mr. STRASZHEIM. Let me just say a couple of quick things.

We might stumble into recession in the next 1, 2, 3, 4 years, but I wouldn't put the defense decline the point of blame.

Second, it seems to me that all too often in past years we have allowed defense decisions to be driven too much by regional considerations. Every time there is a question of a base closing it immediately gets right to the constituency involved, and I don't need to go into that—

Representative SCHEUER. Mr. Straszheim, you're absolutely right and we hope that's going to change. We hope that rationality will prevail and that there will be a wind-down of military facilities where they're not needed, where Secretary Cheney, in his wisdom, thinks—and the Joint Chiefs of Staff think that we can dispense with them.

How about those situations where that ought to happen and where each State delegation, congressional delegation, decides to pass on acting as a block to any reduction of defense expenditures in that particular State? Now that may be nirvana.

But let's assume that congressional delegations play it straight for a change and absent themselves from the process and let the military decisionmakers decide where the most cost-effective and the least harmful cuts to the Defense Establishment can take place. They may very well be geographically concentrated. What do we do in that case? That is my question to both of you.

Mr. BRINNER. I think that if you look at the—

Representative SCHEUER. Excuse me, I didn't mean to interrupt Mr. Straszheim—

Mr. STRASZHEIM. Yes—

Representative SCHEUER. I'm sorry.

Mr. STRASZHEIM. Yes, could I—

Representative SCHEUER. But he talked about a political problem that has been very real. We have to assume for the purpose of this

discussion that we're going to let the Defense Department make rational cuts. When they do make rational cuts, what do we do about it if they disproportionately affect neighborhoods and regions?

Mr. STRASZHEIM. Let me respond, if I might, to that specific question. Given that you've said we're not going to get into this potentially bottomless pit of providing assistance and the way in which we're driving these decisions by these very narrow concerns, I think I would take the cold and hard position of doing nothing in terms of providing support.

The State of Texas was devastated economically in recent years when oil prices went straight up to \$20 or \$30 a barrel and then straight back down. That's life. That's how market economies work, you have periods of strength and weakness and good fortunes and bad fortunes and I don't think you want to—I would not suggest getting involved in a very wide ranging kind of support program which then might be used in defense and the next year use it because of some other adjustments that have gone on in the budget and so forth.

RETRAINING PROGRAMS

Representative SCHEUER. Let's talk about a narrower ranging kind of approach, retraining of workers.

In other words, we're not trying to tell Grumman not to phase out its Long Island operations, we're not trying to tell Boeing not to phase down in Seattle. Do we do something in terms of a very narrow focus to help the workers move into some other field, just as a matter of a humane society? Do we take some of the pain and the anguish—with a modest level of expenditures—out of the readjustment process that our society is going through and which locally, in some cities, in some regions, may be a wrenching, agonizing process for the workers and their families involved?

Mr. STRASZHEIM. I might be convinced that there are particular individual circumstances, but in principle my idea would be no, leave that retraining to the marketplace.

Mr. BRINNER. It's my understanding that Boeing has such an enormous backlog of commercial airframe orders that they could absorb themselves a good deal of the well-trained aircraft industry employment if those people were willing to move or perhaps Boeing and Grumman could establish a joint venture to use the local facility rather than forcing that relocation.

In the case of the people in the communities who support the airframe workers, the service industry employees: if that industry stays there, you solve that problem; if it moves away, then you do have the same kind of problems, adjustment problem, that Charlie Schultze mentioned that occurs around the country.

It does sound hardhearted, but I don't think we can do anything more than perhaps study the cases where defense bases were close and we see where those succeeded. There are certainly many cases where the transition was so successful that 3 years after the closing average pay was higher because instead of just being service support for a fairly low-pay military operation, you had some other opportunity because there's valuable real estate involved.

So I think that the commercial sector may be able to absorb that. If we have lower interest rates and a stronger economy, you can be certain there will be more air travel and more use of commercial aircraft.

Representative SCHEUER. So you would more or less let free market forces take care of that problem?

Mr. BRINNER. The only thing I would suggest is study the cases of successful military base conversions to give some guidance to the local communities and State governments to support that adjustment. But direct assistance and grants and so forth, I don't think that would be useful. Educating those local governments would be useful.

EDUCATION

Representative SCHEUER. Let me talk about education for a moment, because all of you agree that that's a major problem.

Yes, in Japan the kids go to school 240 days a year; in our country they go to school 180 days. And when you subtract absenteeism from that it's 160 days, so they go to school 50 percent more days than we do, and they are longer days and they do far more homework. So I guess that's how one of you got to the figure that by the time a kid graduates from high school in Japan he has spent more hours in school or more days in school than an MBA candidate. Which one of you said that?

[Mr. Straszheim gesturing.]

Representative SCHEUER. That's a remarkable figure and I take it it's a summation of what I've just said.

Well we're going to have to make massive changes in our education system and they're going to cost massive amounts of money.

Just to fully fund Head Start will take somewhere on the order of \$7 or \$8 billion a year, and if they were really truly enriched Head Start programs like the Head Start program I went to, it would probably be \$10 billion a year.

I have to say as a footnote in my time we didn't call it Head Start; in 1923, we called it nursery school or prekindergarten. But a rose by any other name, et cetera.

You're talking about a \$10 billion bill just to fund the Head Start slots for the kids who are urgently at education risk, kids from really deprived homes; not from homes like yours or mine or the chairman's where traditionally these kids have received the benefit of Head Start. The kids who have needed it the least have received it the most over the last century. The kids who desperately need it have received it the least.

Now even today, 24 years after Congress passed the Head Start program as part of the Elementary and Secondary Education Act, and even after watching it succeed as few programs do, almost without flaws—I know we can improve it, but it's been a beautiful, wonderful program. We haven't applied it nationally. As I said, only one-sixth of the kids at urgent education risk are getting Head Start—in New York City we're doing a little bit better, it's about 50 percent.

How do we fund Head Start? How do we improve the quality of teachers?

One of you said that money is an essential precondition or an essential ingredient in education change—certainly not the only thing that matters, but a precondition. And that's true.

One thing we have to do across the country is vastly increase teacher training. We tell young people in college we don't think very much of teaching, so you'd want to seriously consider going into the teaching profession. When we pay teachers \$20,000 or \$22,000 or \$25,000 a year and when those same college graduates have—the talented ones have the opportunity of going to law school or medical school or MBA programs, teaching isn't very attractive.

First, because we don't treat teachers like professionals, we try and micromanage their decisions, we really don't give them authority and decisionmaking capacity, we cripple and inhibit their creativity and all of that, but certainly salary is a major part of it. Probably over the long haul if we wanted to attract top quality kids into teaching, we'd have to increase those salaries probably 50 percent or more. We ought to be paying starting teachers \$30,000 or \$35,000 or \$40,000; more or less comparable to other starting salaries that kids get graduating from good colleges with good grades.

The same thing goes for nurses. That's why we have a nursing shortage. When you pay a woman who has to go through—or a young man who has to go through several years of rigorous training after high school and you start them at \$20,000 a year, you're telling them we don't really value this profession very much so think clearly before you go into it.

Where are we going to get the tens and tens of billions of dollars that will be required to be ingested in our education system to provide adequate financial incentives, assuming that we do what Mr. Strasheim is talking about in terms of making many other reforms and changes, structural reforms that enhance the role of teachers, dignify teachers, liberate teachers to do the job they want to do.

Where are we going to get the bucks to compensate teachers the way they should be compensated if, doing all the other things that are necessary, we want to attract young people into teaching jobs? You're talking about massive dollars.

Where are we going to get the money to extend the entitlements education system as a recent Presidential commission suggested? And I'm sure you're all familiar with it, the recent Presidential commission that recommended that we extend our K to 12 program to K to 14 program in view of the additional demands that are made upon kids. You all know who that was, that was President Harry Truman's Commission on Higher Education in 1947.

Maybe, since that was about midpoint from the start of the K to 12 system in about 1910 to the present, we ought to extrapolate that trend and say well right now what we ought to do is extend public education, an entitlement to public education, from K to 12 to K to 16.

When you think about what we have to do at the low end of the system and you think about what we have to do at the high end of the system and when you think about the investments we have to make the teaching profession per se more attractive, you're talking about massive dollars.

Can we rely on State and local communities to provide those dollars, or do we have to look to the Federal Government that has the resource of the income tax, the excise tax, the corporation tax, the personal income tax, and say the Federal Government, as sources of income are today, sources of income to governments, the Federal Government has the major claim on taxes and therefore the traditional 6 or 7 percent Federal contribution to education is going to have to be massively increased.

Or do we say look it's traditionally been a State responsibility and we in Congress and the administration are going to make it possible through various incentives of one kind or another to enable the cities and States to pick up this education load?

Because massive, massive investment—and I'm not saying spending, I'm saying investments—in education are going to have to be made before we're going to eliminate this painful discrepancy in education results that we're all aware of and that you've described.

How do we approach this problem?

Mr. BRINNER. I think you're exactly on the mark in noting that it's a Federal role. Because although the provision of the education is a State/local role, the funding I believe does have to come in this incremental basis for the investment you're talking about from the Federal Government.

I live in Massachusetts. We have a budget crisis. We're talking about raising taxes as part of that. But it's quite clear from the debate that each State is individually very heavily constrained from raising taxes because it must compete with the other States. And if you, as an individual State, raise your sales tax, your citizens go buy in New Hampshire or they go buy in Rhode Island. If you raise your capital gains taxes, the entrepreneurs leave the State a year before they sell their company. If you raise your income on your corporate profits tax, companies do not expand in your State.

The States do not have the freedom to unilaterally raise their taxes to support the education initiatives that you and the three of us would support. So I definitely agree that Federal funding needs to play a dominant role for these incremental investments.

How you manage that is the big challenge. How do you make certain that if you give a State x billion dollars the State then spends that on education? I suppose matching programs are a part of the answer.

Mr. SCHULTZE. Two comments. It seems to me fairly clear that the American people at the present time aren't willing to pay more taxes for anything.

Representative SCHEUER. More taxes what—

Mr. SCHULTZE. For anything.

Representative SCHEUER. I would disagree with you.

Mr. SCHULTZE. It has to be, you know—

Representative SCHEUER. Lou Harris testified before the Joint Economic Committee not many months ago. And he testified that, in the case of education, when people were told we have a new education program that will work, if we assured you that additional taxes aren't going to go down that big black sinkhole but were really going to make a difference, would you pay another 2 percent taxes—would you agree to a 2-percent increase on your personal

income taxes. And about 65 or 70 percent of them said that under those conditions they would.

Mr. SCHULTZE. I wouldn't.

Representative SCHEUER. Pardon.

Mr. SCHULTZE. I wouldn't. Because I don't think you can guarantee that. I mean, I'm the odd man out here. At this stage—I am not yet convinced that we know enough of what to do about it that if somebody said to me you have \$20 billion a year extra available, that I would have any assurance that it could be well spent. The people I talk to—and maybe they just happen to be the more conservative people—are not convinced from the research studies so far that you know what buttons to push.

I suspect it is not in the schools. I suspect it is much more in the homes and the families' and parents' attitudes and all sorts of community attitudes, it's in the amount of time people spend watching television, it's in all sorts of things. And I am not yet convinced that if I had \$20 billion—or that I know anybody who could take \$20 billion a year and spend it well there. So I'm a little reluctant to say yes, we need to spend a lot more money there.

Mr. STRASZHEIM. Congressman Scheuer, you asked a very good and clear question which was: Where are we going to get the massive amounts of money? The quick answer is—

Representative SCHEUER. Let's say assuming that we could assure the public and assure ourselves and assure Charlie Schultze that they were going to be spent in sensible, cost-effective ways and not poured down that big black sinkhole that I just referred to.

Mr. STRASZHEIM. And that's difficult to give anybody assurance that they can really believe. But I think the simple answer to your simple question is the peace dividend. We already have the money.

To me—the point I really wanted to make here this morning is I think we need to fundamentally relook at our spending priorities. If you look at the composition of the budget over the last 10 to 20 or 30 years, dramatic increases in transfer payments to about 40 percent, 26 percent in defense spending, another 14 percent in net interest, and the other 20 percent or thereabouts that's left is grants and aid and everything else.

I think you're quite right on education: we need to sharply raise teacher salaries if we're going to get the quality people who will enter that profession. I could use that \$20 billion easily.

I would do it via—or one way to do it would be via a steady and progressive and clear pay increase growth path that these people could realize that if they enter the teaching profession that they're not always going to be at the lowest 10 and 15 percent of the income distribution, that in fact they have some opportunities. They enter that profession because they enjoy it, it's personally rewarding and so forth and in fact they can afford to do that and raise a family and own a home and so forth.

I think you could spend those moneys very effectively in the educational area, but you need an education expert, not an economist from Wall Street to really tell you that.

Representative SCHEUER. How does society produce those funds? Under the present conditions that prevail, with a President who says no new taxes, read my lips—that's a very—an effective constraint.

But then you have the problem that one of you pointed out, that money is fungible, people are fungible, capital is fungible and there's a sort of aggressions law at work where bad tax policies drive out good tax policies, and there's a negative competitive advantage situation where a no-tax State or a low-tax State aggressively markets that and merchandises that and seeks to pull wealthy individuals and businesses to its locale. We have a real Hobson's choice here. How do we parse that out?

Mr. BRINNER. I think you have to convince the public that the funds they're taking in are well spent. After you do that, there is the willingness the Harris polls suggest to pay taxes, but it's after. So we may get back to Don's comment that we have to take this opportunity to revise our budget approach to build that confidence.

Mr. SCHULTZE. One, I think it is true that people do appear on surveys to say they'll pay taxes, additional taxes for x, y, and z. Maybe we have to hold our nose and go in for earmarked taxes.

Our joint friend, Alice Rivlin, for example, has suggested a major national value-added tax turned back to the States for various purposes, including education. But earmarked for certain purposes—at least, that's my idea, not hers.

Representative SCHEUER. Thank you very much all of you and thank you, Mr. Chairman.

EASTERN EUROPE

Representative HAMILTON. Let me try to hit a couple of things quickly here before we conclude.

Mr. Straszheim, I was particularly interested in your comments on Eastern Europe. You put a two-tier classification. And interestingly enough, you put Hungary in the first tier and Poland in the second tier. And of course that flies in the face of what the Congress and the President just did, because our whole effort there is toward Poland, modestly toward Hungary. You almost seemed to give up on Poland in some way. And so I want you to explain that.

And then I want you to comment also on this sentence about entrepreneurial attention and capital going to flow to Eastern Europe rather than Southern Europe, in your view—I'm very interested in that—and you think the Japanese likewise will be interested in Eastern Europe and less, I guess, in Southern Europe.

Could you elaborate on those for me?

Mr. STRASZHEIM. Sure.

First of all, I didn't mean to give up on Poland. I don't think we ought to be giving up on any of these countries. But the first tier that I mentioned, East Germany, Czechoslovakia, and Hungary, as opposed to the second tier, which would be Poland, Bulgaria, Yugoslavia, and Romania, I think have more—

Representative SCHEUER. Maybe it hasn't joined the team yet. It's the one holdout apparently.

Mr. STRASZHEIM. Give them a chance.

I think there is simply a better opportunity with more acceptable contract law, accounting standards, a past entrepreneurial history, some, you know, longer term commercial ties from before the war that to me would put Hungary in that first tier more so than Poland.

In Poland, Solidarity, for example, is having difficulty accepting the general proposition of individual property rights and wondering about just how much they want to encourage foreign investment.

Representative HAMILTON. Do you—

Mr. STRASZHEIM. I don't hold myself out, Mr. Chairman, as an expert in Eastern Europe, but this is an area that—

Representative HAMILTON. Do you see the American business community moving in the direction you've suggested here?

Mr. STRASZHEIM. Yes, sir.

Representative HAMILTON. Do you see them making a distinction, for example, between Hungary and Poland?

Mr. STRASZHEIM. I do.

Representative HAMILTON. And there's much more investment flowing to Hungary than to Poland, at least proportionately?

Mr. STRASZHEIM. Yes, I believe that will be the case.

Representative HAMILTON. And do you see American business investment likewise flowing much more to Eastern Europe than to Southern Europe?

Mr. STRASZHEIM. Well, let me add on that point, before this issue of Eastern European economic revolution, if you will, really came about, much of U.S. business' attraction to Europe 1992, if you will, was the opportunities to take advantage of the low-wage in Southern Europe: Spain, Portugal, Italy, Greece, and I'd throw in Northern Ireland as a low-wage economy there, too, because without the trade barriers across country borders, you invest and use that low-wage labor to sell all over in Europe.

Now I think what is beginning to happen is companies are re-thinking and they're saying perhaps instead of locating that new facility in Spain or in Italy, maybe we ought to locate it in Eastern Europe. In Eastern Europe they have the well-trained, educated labor force with a good work ethic, most business, I think, in America, businessmen would argue that the labor force is better available in Eastern Europe than it is in Southern Europe. There will still be economic advance in Southern Europe along with Europe 1992, but some of the attention is going to flow from Southern toward Eastern Europe.

Representative HAMILTON. Mr. Schultze, I was interested in one of your comments, too, about the Marshall plan for Eastern Europe. And the thing that struck me about it was your observation that no one inside or outside the administration, nobody, I guess, that you've talked to seems to have given serious consideration to the idea, right? Didn't you make that statement?

Mr. SCHULTZE. Yes, I may have missed some, but as far as I know, that's—

Representative HAMILTON. Now why? Why is that the United States—what is there about our circumstances now that, as compared to right after World War II where we adopted the Marshall plan, what is it?

Mr. SCHULTZE. Dare I say leadership?

Representative HAMILTON. Well, I'm just interested in your analysis.

Mr. SCHULTZE. I don't really know, Mr. Chairman. Looking back on it—

Representative HAMILTON. Is it because the fiscal constraints that we all recognize we have so overwhelming that no one, no matter what our political persuasion may be, is willing to step out and say can't do it?

Mr. SCHULTZE. Two comments: One, we really don't have any fiscal constraints. This is a country of a \$5.5 trillion gross national product; properly measured, the highest living standard in the world. We have a tax constraint. We have had 8 years of being told that the worst thing next to nuclear war that could happen in the country was a tax increase—and I'm not sure which is worse.

We have Dick Darman—even though his own budget policies don't seem to show it—had it right: what this country is facing is—we have learned how to deal, I think, with—quite well with economic stability. We've had 7 years of continued economic progress, unemployment coming down, inflation behaving well.

But we are not doing anything for the future. It is now now-ism. It is—at risk—leadership doesn't consist of dealing with a crisis. In most countries, many leaders do quite well. It's how you do mobilize people for a long-term goal. And the leadership after World War II in this country, whatever their other faults, were men of some incredible vision that also seemed to know how to mobilize the people to do it. Now that's what we're lacking in part.

Now one comment: they did have it easy. Easier than you now would politically because it was, to some extent, possible then to get money for public purposes by not lowering taxes. As you came down off those great huge defense spendings, you didn't quite have to make a decision let's raise taxes—although Harry Truman did go to the Congress and ask for it, by the way, in 1948—

Representative SCHEUER. Harry Truman spent 1 percent of our GNP on the Marshall plan.

Mr. SCHULTZE. Six percent.

Representative SCHEUER. Six percent?

Mr. SCHULTZE. Over 4 years. It was somewhere between 6 percent and—over 4 years. It was somewhere between 1.5 and 2 percent a year for quite some time.

Representative SCHEUER. Of GNP?

Mr. SCHULTZE. Of GNP.

Representative SCHEUER. And just let me horrify you all by throwing the figure on the table: 1 percent of GNP would be \$55 billion a year; 1.5 percent would be, what, \$75 or \$80 billion a year in foreign aid. If we were doing the same thing today as post-World War II America—mobilize from within its heart and soul and its real resources—we'd be spending between \$50 billion and—

Mr. SCHULTZE. \$240 billion over the entire Marshall plan. And by the way they were mainly grants, not loans. That's the one thing we don't want to do.

So I don't know how much could be used, I don't really—we have Western Europe sitting there, very high income, all of this, but my lord we'll spend a half a billion dollars on a Stealth bomber. Ten Stealth bombers would probably do what Poland needs.

But this is a matter of mobilizing opinion that this is somehow important. And beyond that, I don't know what to say.

Representative HAMILTON. Mr. Brinner.

Mr. BRINNER. But let's remember that these countries that we're talking about aiding in Eastern Europe are not low-income countries by world standards. The per capita GNP in Eastern Europe compares very favorably to Latin America and the Asian Tigers.

For example, without making—if you just take the Government's official estimates, the per capital output for the East bloc is about \$8,100 per year, compared to \$11,600 for the Common Market. Knock it down for some exaggerated quality differentials and maybe you'd get to \$5,500, or about half Common Market. So keep that \$5,500 per capita figure in mind. Compare that to the Asian Tigers of \$6,000; they're the same level as the most well-developed countries in Asia. And then compare it to Latin America, near \$2,000. Eastern Europe has caught our attention. Latin America has a standard of living one-third of Eastern Europe. Before we go to the aid of Eastern Europe with \$50 to \$80 billion, let's consider going to the aid of Latin America.

Representative SCHEUER. How about sub-Sahara and Africa?

Mr. BRINNER. Fine.

Representative SCHEUER. It's a third of Latin America.

Mr. BRINNER. Absolutely.

Representative HAMILTON. Are you making an argument that communism has worked pretty well in Eastern Europe?

Mr. BRINNER. No, I'm simply saying they started with a better economy.

Representative HAMILTON. I understand.

Mr. BRINNER. They messed it up, and they still ended up with a better economy than we have in the poorer sections of the world. So I'd support them in their struggles.

LOSERS IN THE PEACE DIVIDEND

Representative HAMILTON. Let me—I know you've been here a long time, we'll conclude it here. I did want to get in my mind a little better the losers on the peace dividend. Congressman Scheuer was talking about Grumman and so forth.

Are there losers? Are we going to see a jump up in the unemployment rate, even if it's a modest one? Are we going to have some loss of technology because we're not putting the money into the defense budget? Are there going to be regional problems that stick out?

You've been very upbeat generally in your assessment of the peace dividend. Where are the losers?

Mr. BRINNER. In my exhibits to my prepared statement, I showed you that if the Federal Reserve is generous, the unemployment rate over the next 5 years might be a quarter percentage point higher, an extra 250,000 people unemployed. Those are, on average, losers.

Now it's not the same 250,000 that are unemployed, you know, for 2 months it's one person, for another 2 months it's another, but I think you do have to recognize there would be very likely a slightly cooler economy. If the Federal Reserve is stingy, multiply those numbers by 4, then take into account regional differences like Congressman Scheuer pointed out.

Those losses, those losers though are small in scale to what we go through in a moderate-sized recession. We're not looking for a recession at all being created by this.

Representative HAMILTON. Well that's quite clear, of course.

Any closing comments here?

Mr. STRASZHEIM. Could I say one other thing—

Representative HAMILTON. Mr. Straszheim.

Mr. STRASZHEIM [continuing]. On the losers and the unemployment rate?

I also wouldn't worry about that. I mean, we spill that much in making these kinds of economic forecasts that it's not worth worrying about.

THE PACIFIC TIGERS

The other point I did want to make: Roger Brinner just mentioned the Pacific Tigers—Korea, Hong Kong, and Singapore—I think they're an interesting sort of opportunity or case to think about. The kind of economic advance that those four economies have achieved in the last decade is primarily because they had an economic structure that allowed them to accept the capital, had educated labor force, political stability, modern infrastructure, and they have become very important political and trading economic allies and partners of ours. And the low-wage situation in at least that first tier of Eastern European countries, is really very similar to what those Pacific Tigers were a decade ago.

So we might envision an economic advance over the next decade in East Germany, in Czechoslovakia, in Hungary, and perhaps with less certainty to those second tier of countries, just like we saw in the Pacific Rim.

CONCLUSION

Mr. SCHULTZE. May I have 20 seconds?

Representative HAMILTON. All right.

Mr. SCHULTZE. If we'd used the same criteria that Roger Brinner used, we would never have done the Marshall plan because at that time Europe had a living standard—except for the immediate post-war impact—well above anybody else in the world.

No. 2, I urge anybody interested in this to read what I think is one of the most honest and moving statements of economic policy—if you could ever have a moving statement of economic policy—from the Polish Prime Minister, who laid out in cold, hard, stark terms—mind you, this is a labor government in effect—that we are going to create—I can't remember the numbers— x amount of unemployment, we are going to create x amount of unemployment, we are going to raise your prices, we are going to cut your living standard. And I don't know whether you can do this year after year without political failure.

So in addition to the problems all over the world God knows there are, there is a very specific problem that they are being asked to cut their living standards very radically from a government which has taken over in a great surge of hope and everything else. And this is terribly important not to let that fail.

Representative HAMILTON. Any other comments?

[No response.]

Representative HAMILTON. Gentlemen, thank you very much for an excellent hearing.

The committee stands adjourned.

[Whereupon, at 11:48 a.m., the committee adjourned, subject to the call of the Chair.]

ECONOMIC ADJUSTMENT AFTER THE COLD WAR

TUESDAY, MARCH 20, 1990

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room B-352, Rayburn House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representatives Hamilton and Scheuer.

Also present: Richard F Kaufman, general counsel.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

Representative HAMILTON. The Joint Economic Committee will come to order. In December, this committee began hearings on the economic consequences of substantial reductions in defense spending. It became clear after 2 days of testimony that most economists believe the overall economy will be able to adjust to defense cut-backs without going into a recession.

It's also clear that there will be serious adjustment problems for specific firms, work forces, and communities. A small comfort for those who are directly affected by base closings or plant shutdowns to know that the national economy is doing well or at least is doing no worse. If you lose your business or your job, it's a tragedy for you.

To discuss these and other problems we have before us today a very interesting group of experts who have given a great deal of thought to these questions. They come from different walks of life and bring to Congress the kind of perspectives we need in order to reach intelligent decisions.

John Tepper Marlin is codirector of a MacArthur Foundation Productive Peace Project of defense conversion being conducted at the Council of Economic Priorities, and the author of several books on urban economics, the most recent of which is "Cities of Opportunity" published last year.

Richard Greenwood is special assistant to the international president of the International Association of Machinists and Aerospace Workers, one of the largest of the defense industry unions.

Gregory Frisby is the chief executive officer of Frisby Airborne Hydraulics, a manufacturer of hydraulic systems which does both defense and commercial work located in Long Island, NY.

Gentlemen, I am delighted to see you here. You each submitted very excellent prepared statements which I look forward to reviewing. And, of course, I look forward to your testimony. The procedure will be for each one of you to spend a few minutes in oral summary of your views. The balance of the time will be used in a question and answer period. Your entire prepared statement, of course, will be printed in the record of these proceedings, with any supplemental material you choose to submit.

I might say to you that I have a problem. I have a meeting at 11 o'clock this morning, and unless we have another member come in who can preside, we'll have to conclude. I hope we'll be able to keep going beyond that time, but I do have another appointment that arose just a few hours ago and we'll have to see if we can work it out.

Before proceeding with the testimony, I'd like to insert in the record at this point a letter, together with an attachment, provided to me by the office of Maryland Governor William D. Schaefer. The letter addressed to the House and Senate leadership is signed by the Governors of 12 States. It relates to the matter we're interested in this morning. Without objection, the material will be placed in the record at this point.

[The letter, together with an attachment, follows:]



WILLIAM DONALD SCHAEFER
GOVERNOR

STATE OF MARYLAND
EXECUTIVE DEPARTMENT
WASHINGTON OFFICE
444 NORTH CAPITOL ST. NW #315
WASHINGTON, D. C. 20001

This letter was also sent to Foley, Gephardt, Dole, and Michel

February 25, 1990

The Honorable George J. Mitchell
Senate Majority Leader
United States Senate
Washington, DC 20510

Dear Senator Mitchell:

We are writing to ask you to work with us to ensure that any cuts in defense spending will produce economic opportunities rather than economic hardships. Today we are sending you a proposal that we believe can help accomplish that objective. Our proposal consists of a four part plan on how the federal government can help the states and localities respond to any economic dislocations that may result from cuts in defense spending.

The historic changes that swept Eastern Europe last year have set the stage for the new decade. These changes will not only transform international relations during the 1990s, but they will also have a profound impact on the daily lives of people right here at home. The various proposals to close military facilities and other cutbacks in defense spending already reflect these changes.

We face a difficult challenge. Cuts in defense spending pose the risk of substantial economic dislocation in areas that have become heavily dependent on defense spending, but they also offer a unique opportunity to invest some of the "peace dividend" to restore American competitiveness. The challenge is to beat swords into plowshares by anticipating these changes and turning defense-dependent communities and businesses into thriving communities with strong civilian-based economies.

As the Administration and the Congress shape our military establishment to meet America's changing defense requirements, we as Governors, believe there is a responsibility to prepare for the consequences of whatever cuts are made. Workers in the defense sector have been working for our national

security and we have a national obligation to ensure that their futures are secure. Communities that have provided the support network for our defense related facilities should not be devastated by these closures. And the national investment in defense industries should not be squandered by allowing high-technology infrastructure to go unutilized.

It is difficult to predict which workers, communities, businesses and states will be hardest hit by defense cuts, but we all agree that a portion of any savings should be used to help those people and communities who will be most adversely affected. We are offering a plan to turn the danger of economic hardship into the promise of economic growth.


We understand the serious budget constraints under which you operate. They are not dissimilar to the constraints we face in our own states. The cost of our proposed program will vary directly with the potential economic hardship caused by defense cutbacks. We believe that a modest portion of the savings from defense cutbacks should be adequate to help workers, communities, and businesses adjust to the economic impact of those cuts.


Our proposal is set forth in the attached documents. We recognize that the Congress is also working on proposals to address these issues. We look forward to working with you and other members of the Congress to develop a comprehensive program to turn the potential of economic hardship into the reality of economic opportunity.

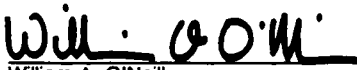
Sincerely,


 William Donald Schaefer
 Governor of Maryland

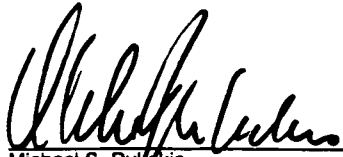

 Richard F. Celeste
 Governor of Ohio


 James J. Blanchard
 Governor of Michigan


 James J. Florio
 Governor of New Jersey



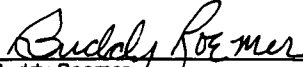
William A. O'Neill
Governor of Connecticut



Michael S. Dukakis
Governor of Massachusetts



Roy Roemer
Governor of Colorado



Buddy Roemer
Governor of Louisiana



Booth Gardner
Governor of Washington



Ray Mabus
Governor of Mississippi



Bill Clinton
Governor of Arkansas



Mario M. Cuomo
Governor of New York

STRATEGY FOR DEALING WITH DEFENSE CUT-BACKS

Many existing federal programs will need to be expanded and targeted to meet the needs of workers, businesses and communities affected by changing defense priorities. The federal government should establish a central oversight mechanism to ensure that the various programs are effectively coordinated to meet these needs.

Early action to retrain workers and assist businesses and communities to readjust their economic base is an essential part of any program to minimize the adverse impact of the realignment in defense spending and to promote opportunities for economic growth.

It is of critical importance that state and local governments receive prompt notification from DOD of proposed changes in federal defense spending that will affect their workers and businesses. Each of the programs outlined below assumes a system of prior notification by the federal government and prompt federal assistance.

I. **Transition support for workers whose jobs are threatened due to defense cut-backs**

Transition relief for workers displaced by the shift away from defense spending.

The federal government should assist the state in providing retraining assistance for affected workers; job search assistance and counseling; and extended unemployment assistance where appropriate.

- A. Develop a discretionary JTPA grants program for workers whose jobs are threatened as a result of defense restructuring comparable to the Trade Adjustment Assistance program
 - * Workers employed by subcontractors as well as direct Pentagon contractors would be eligible for this program.
 - * Civilian employees of the defense department would be eligible as well.
- B. Increase DOL assistance for returning service personnel who are discharged
 - * Improve the Department of Labor's Office of Assistant Secretary for Veterans Employment and Training
 - provide greater help for discharged veterans

- step up counseling services for discharged veterans
 - provide counseling in Europe and U.S. for service personnel prior to discharge
- C. Increase federal funding for state employment service programs to give them the resources necessary to address the needs of civilian defense department employees and contractor employees released as a result of the defense realignment.
- * Enhance employment service computer capability, particularly for the regional and national job banks
 - Regional resume service for high tech workers to facilitate quick job referral in region
 - Similar resume service and job location assistance at the national job bank
 - * On site counseling services for workers to arrange retraining if necessary as well as job search and other assistance

II. Assistance to small businesses

Small defense dependent companies will be particularly vulnerable to reductions in defense spending. These firms need an active outreach program by the Small Business Administration to provide loans, loan guarantees and counseling services to assist these small firms restructure for civilian production.

- A. SBA programs in coordination with state economic development offices are needed to:
- * Provide re-tooling assistance (SBA loans, etc.) giving priority treatment to small defense contract dependent businesses
 - * Provide federal assistance for state counseling assistance to help small businesses diversify into civilian production
- B. Increased federal effort to locate foreign markets for new products developed by American firms
- * Increased U.S. Commerce Department participation in trade fairs and promotion activities for American producers

III. Assistance to communities affected by base closings and defense procurement changes

A community's economic base can be dramatically affected by the closure of a military facility or the termination of a local defense contractor's operations. These communities will need early assistance to diversify the local economy and attract new businesses to the area, prior to any closures or contract terminations.

- A. Revitalize Title IX of the Economic Development Act to provide assistance to communities for efforts to readjust local economy in response to the closure of military facilities or corporate lay-offs due to defense contract changes. There must be increased funding to meet these new demands.
- B. Strengthen community control over the disposal of closed military facilities
 - * The Office of Economic Adjustment (DOE) should place an even greater emphasis on the priorities of state and local governments regarding new uses for these facilities.
 - * When a military facility is closed and declared excess property by the federal government and all requirements regarding land disposal have been met, including the requirements under the McKinney Act, the land should then be made available to the state or local government.
 - The state or local government should receive the land without cost if the land is used for a governmental purpose. (i.e., schools, prisons, parks, etc.)
 - The state or local government should be allowed to act as the broker for the property and resell it to private industry for economic development purposes. In this case, all proceeds from the sale would be turned over to the U.S. Treasury.
 - * The Federal government's top priority should be assisting in the adjustment of the local community and its needs -- not maximizing the sale price to the federal government.

IV. Federal civilian R&D efforts:

The United States must invest more in civilian R&D to regain its competitive edge in a rapidly changing world. Currently, the U.S. invests significantly less on civilian R&D than some of our major trading partners.

We have, however, invested heavily in defense R&D and infrastructure. More than 30% of our total national spending on R&D and 65% of federal R&D spending is in the defense sector. As defense spending declines, some of these savings should be channeled back into civilian R&D. In addition, the federal government should facilitate efforts to find commercially useful applications for developed technologies.

- A. **Increased Federal R&D Funding:** Federally funded R&D is an investment in the nation's future. The federal government should increase its investment in R&D, particularly commercially applicable civilian R&D.

The Small Business Innovation Research (SBIR) Program has been particularly successful at promoting technology commercialization. This program should be expanded by increasing the participation of federal agencies and raising the percentage of research funds that may be contributed by each participating agency.

- B. **Better Federal Coordination of Civilian R&D and Applied Technology Efforts:** The federal government should adopt a national R&D strategy that targets the high-technology areas that are essential to gaining a competitive edge. As part of that effort a civilian R&D and applied technology coordinating agency should be established at the National Institute of Standards and Technology. That agency should:

- * Utilize the existing high-tech defense infrastructure for civilian research;
- * Develop a strategy to target critical technologies;
- * Direct the Federal laboratories to give increased attention to transferring the technologies they develop to private industry;
- * Develop a system of federal matching grants for state and local applied technology and technology transfer programs designed to boost economic competitiveness;
- * Strengthen the incentives for private industry, universities, and state agencies to collaborate on major R&D and applied technology projects by pooling their resources in "Centers of Excellence." The federal government can encourage these Centers by contributing its own resources and funds on a matching basis;
- * Continue to oversee and coordinate the federal Regional Centers for the Transfer of Manufacturing Technology and identify areas for new centers.

- * Ensure that the Clearinghouse for State and Local Initiatives on Productivity, Technology and Innovation provides state and local governments with information about the various federal R&D and applied technology resources that are available to them as they begin their own technology initiatives.
- C. **Promotion of High-Tech Exports:** The federal government should do more to support state efforts to promote the export of commodities, products and services based on advanced technologies.
- * As new markets open up in Eastern Europe and the Soviet Union, the federal government should ensure that U.S. export controls on high-tech goods do not place U.S. firms at a competitive disadvantage.
 - * Federal action is required to provide assistance for state trade promotion programs, streamline the export licensing process, and provide states with accessible export marketing assistance.

Representative HAMILTON. Mr. Marlin, you may proceed.

Representative SCHEUER. May I say a word about—

Representative HAMILTON. You may indeed, Congressman Scheuer.

OPENING STATEMENT OF REPRESENTATIVE SCHEUER

Representative SCHEUER. I am very pleased to introduce Mr. John Tepper Marlin to this committee. He comes with very excellent credentials, having earned his B.A. in European history and literature, an M.A. from Oxford in philosophy, politics, and economics, and a Ph.D. in economics from George Washington University.

He has worked as an economist for 5 years in the Federal Government, including time in the Small Business Administration. And for 15 years he headed an organization focused on the economic and social strength of communities in the United States. For awhile I served on the board of directors of this organization.

Mr. Marlin's extensive writing on urban economics makes him an excellent choice to talk to us today. The organization he represents, the Council on Economic Priorities, is well known to many of us as a leading think tank on military issues, and I have long supported that organization.

It is a great pleasure to have you here, Mr. Marlin.

Representative HAMILTON. Thank you very much, Congressman Scheuer. And then I understand Mr. Greenwood goes next and then Mr. Frisby. We'll go in that order.

STATEMENT OF JOHN TEPPER MARLIN, CODIRECTOR, MacARTHUR FOUNDATION PRODUCTIVE PEACE PROJECT, COUNCIL ON ECONOMIC PRIORITIES, NEW YORK, NY

Mr. MARLIN. Thank you very much, Congressman Scheuer and Mr. Chairman. Thank you for the opportunity to address this committee on the subject of economic adjustment to expected defense cuts. These are timely hearings, which represent a significant contribution to the debate on this important topic.

Whatever Congress settles on as the final level of 1991 defense spending, the cuts will undoubtedly exceed the initial cuts proposed by the President in January. I am speaking on behalf of the Council on Economic Priorities, which has monitored national security strategies and military contracts since its formation in 1969. My conclusions are drawn from a study to be completed in August.

My remarks address three questions:

First, what are the likely economic effects of defense cuts at the local level? Second, what can contractors and communities do in anticipation of impending cuts? And finally, what economic adjustment measures might the Federal Government adopt?

The dramatic reduction in the Soviet military threat has produced a seismic shift in our fear of attack, and offers a chance in a lifetime to cut defense spending in line with new international realities. Many communities properly ask how their economies will be affected as bases are closed and weapon systems are cancelled. Those with heavy dependence on the military may feel the economic equivalent of earthquake tremors. Can effective Federal and

State assistance be readied to help with the planning and adjustment process? It makes ethical, economic, and political sense to devote resources to easing the transition for communities worried about their future after military contracts.

Some resources could be provided by defense contractors themselves and by the communities and States in which the affected plants are located. But the Federal Government could play an important role in planning for, and assisting with, the transition. Who will be most affected depends on local military dependence, defined as a proportion of employment or income derived from military facilities or contracts. It also depends on which bases and contracts are cut and on community economic strength and infrastructure.

Company military dependence may be calculated by looking at defense income as a percentage of total income. A military dependence index for the top 12 1988 military contractors plus Rockwell, which was among the top 10 in 1985, is shown in table A in my prepared statement. It shows the eight contractors of this group who appear to have reduced their dependence on military contracts and one stayed the same and four increased. Four companies have 70 percent or more of their business from commercial sources and therefore show a relatively low dependence on the military. At the other end of the table, however, four companies—including two Generals—General Dynamics and General Motors-Hughes—have four-fifths or more of their income from defense contracts.

State military dependence may be measured as the percent of State income from military sources. Using this measure, the States most dependent on—in other words deriving 8 percent of their income or more from military contracts in 1989—were Alaska, California, Hawaii, Maryland, Mississippi, Virginia, and Washington. The most likely DOD cuts are those the Bush administration proposed in January labeled the “Cheney Cuts” in the tables that I have provided in my prepared statement.

The next table, Table B, in my prepared statement, shows the 10 States we found most affected by these cuts. We added up the 1988 value of prime contracts awarded in each State for each weapons system. The amount of contracts captured by our data was \$5.6 billion. The major omission is the V-22 Osprey, which was in the R&D phase in 1988 and therefore doesn't appear in our database.

As a percent of all 1988 DOD contracts in each State, the Cheney cuts fall most heavily on Arizona, with 36 percent of its military income cut, followed by Missouri, Ohio, Tennessee, and New York. Although detailed information on the V-22 was not available, we were able to obtain from a Boeing official the names of 10 States with the most V-22 prime contracts in 1990, and they are listed in my prepared statement. The V-22 involves at least 88 subcontractors, of which 54 are receiving more than \$1 million, 29 are receiving between \$500,000 and \$1 million, and 5 are receiving under \$500,000.

Cuts in the B-2 bomber, which has to be treated separately because of the way it is handled in the budget, and is now considered too costly by many defense specialists and by many activist organizations, would most affect three States, Washington, California, and Texas, in that order.

Proposed further cuts in weapon systems have been identified, some recommended by William Kaufmann of Brookings and others by the Defense Study Task Force (of the Committee for National Security and the Defense Budget Project) and still others have been predicted by the Washington Analysis Corp. From these lists we have analyzed a geographical distribution of 13 major weapon systems. The total amount of 1988-level spending that we captured was \$11.6 billion. Actual spending levels would be considerably higher.

From this analysis we show in table C of my prepared statement the 10 most affected States. They start with Missouri and they go on to Texas, New Jersey, Arizona, Maine, Connecticut, and so forth. You might want to compare the two tables, tables B and C, and add them up. Then you get a sense of the potential community damage in these affected States.

Local dependence on the military is a factor in predicting the job impact of defense cuts. Job losses will depend on the military dependence of individual companies in the area and the overall military dependence of the locality. But they also depend on the area's economic and infrastructure strength and its ability to offset cuts by effectively mobilizing resources for new productive economic enterprises and activities.

The communities most affected by the Cheney cuts are shown in table D of my prepared statement, which lists 30 communities in 18 States. Three of the four largest prime contract locations are included.

Some contractors are able to adjust to cuts without special assistance from their community. One reason is that they may receive contract cancellation benefits, sometimes in billions of dollars. These benefits could be used to minimize layoffs. Some options open to companies are more socially desirable than others. I list three less desirable options, which are layoffs, diversification within military work, which sometimes involves selling munitions to Third World countries as one thing that was done in the 1970's and is undesirable, and selling the plant for other uses.

The more desirable options open to contractors are worker adjustment programs which enable contractors to soften the blow to employees by offering transitional education, training, and outplacement programs. They could sell the plant to the employees, often using ESOP's, the employee stock ownership plans. And, finally, they can diversify into commercial work or into arms control work. I provide examples of each of these approaches by contractors in my prepared statement.

Some states are organizing their resources to face up to economic adjustment and I give a few examples. The Northeast-Midwest Coalition is planning to prepare a handbook for States and localities on economic adjustment, updating an earlier book that they did on plant closure.

California has had since 1981 an effective economic adjustment team, which monitors the potential for plant closings and seeks to head them off through business retention, plant closure responses, and revitalization programs.

Maryland's Governor Schaefer, who wrote to you about these hearings, and the Maryland Assembly have been exploring possi-

bilities for diversification of defense-dependent companies in the State. One company alone employs 17,000 people, a Westinghouse division.

New York State Governor Cuomo is limited by the \$1½ billion deficit he has to face, but he has formed an industrial cooperation council which is planning appropriate economic adjustment action in conjunction with the State's electronic association.

Ohio Governor Celeste has led a conference on economic adjustment, focusing on the encouragement of small business to generate new jobs.

Most important of all, I would like to draw this committee's attention to a bill that is now sitting on the desk of Washington State Governor Booth Gardner. It was sent to him by the legislature of the State of Washington on March 12, and it would create a program in the State's department of commerce and development to help cope with cuts in defense programs. The bill received bipartisan support in both houses and our contacts in the State expect it to be signed. The main problem with the excellent legislation is that it appropriates only \$200,000 for the program, which may be inadequate. The key provisions of this model bill are:

No. 1, to create a task force to identify communities reliant on DOD spending and track shifts in Federal spending priorities.

No. 2, to assist communities in utilizing State and Federal programs and in coordinating adjustment efforts.

And No. 3, to create a statewide plan for economic development to be developed by a panel representing local governments, business, nongovernment community interests, and the military.

And the Washington State plan incorporates some of the best features of the kinds of programs that we are finding being created all over the country.

Localities with defense-related employment are actively involved in planning for their futures, usually through community or economic development offices such as those in several communities I list in my prepared statement. Each community has its own story and we are accumulating hundreds of these stories for our study.

The common actions taken by such localities, as described by former DOD staff member John Lynch in his new book on economic adjustment are: One, to acknowledge the economic adjustment problem and let it be known; two, to organize for action with a local task force; three, to focus on diversification potential; four, to maintain local economic development offices; and finally five, to anticipate the cuts and respond to them quickly and thoroughly.

Private groups are playing an important role in making all of this possible. Some are associations that assist State and local officials, like the local elected officials group in Irvine, CA, and the National Council for Urban Economic Development here in Washington. Some are rooted in peace lobbying, such as SANE-Freeze, the Council for a Livable World, and Jobs for Peace.

But there's a whole investment potential here that will probably grow as the seriousness of the economic adjustment needs become clearer to more people, we can expect investment bankers, venture capitalists, and privatization groups to take a break from their travels in Eastern Europe to focus on potentially profitable economic adjustment projects right here at home.

The Lockheed battle is one example. The study has just come out which shows that the land on which Lockheed and other defense contractors sits is worth more than the entire value of their stockholders equity. So, these companies are worth more dead than alive.

If anyone is interested in knowing more about what is going on around the country in this area, the first person they should call is Michael Closson at the Center for Economic Conversion in Mountain View, CA.

Now, I get to Federal agencies which is, of course, one issue before the Congress. What should the Federal Government do? At the moment, the leadership source is primarily in the Pentagon, which is not a situation that even the DOD staffers themselves consider entirely healthy.

The Office of Economic Adjustment or OEA within the DOD and the President's Economic Adjustment Committee, called EAC, to which the OEA reports, play the central economic adjustment to defense cuts. They include representatives from a large number of agencies in the Federal Government.

The workload charts indicate that the office faces a dramatic increase in the challenges that it faces, much more serious than the 1979 level when outlays that they mustered together were \$11 million. If the OEA is to provide the kind of economic adjustment assistance that it did in 1979, it will need a multiple increase in its assistance resources from other agencies to cover both the higher workload and inflation.

OEA tracks military contracts and has early warning of when they will be terminated, although it isn't always able to put together the right kind of help quickly enough. It is crucial that the crush of coming cuts involve timely coordination between OEA information and local planning bodies.

The Economic Development Administration is another agency that has been asked by Congress to administer programs assisting localities. It administers title IX, which includes the Dislocated Workers Program. It has the authority to help communities affected by an economic downturn. Pete Perry, Acting Assistant Secretary of Commerce, is aggressively opposed, however, to the very programs that he administers. He minimizes the seriousness of the new base closings and says by way of example that the closing of the Cameron Station in Alexandria, VA, is a boon for developers.

The Department of Labor administers title III of the Job Training Partnership Act, which replaced CETA in 1984. CETA provided an average of \$6 billion a year between 1975 and 1983. The Job Training Partnership Act was funded at a substantially lower level, providing considerably less money to States and localities seeking to address economic adjustment problems.

Finally, the other major source is the Small Business Administration. It has 7(a) loans or 90-percent loan guarantees to commercial banks, which in turn make loans to small businesses. It also provides loan guarantees to certified development companies, which make loans to small businesses. It also has the economic impact disaster loans, which are made directly to small businesses. However, authority for these EIDL's has lapsed.

Other agencies involved include Agriculture, Education, Interior, Justice, Transportation, Health and Human Services, HUD, and EPA. OEA has been going around to these agencies and asking them to help out with particular communities that have problems. It has been very effective at this.

Representative SCHEUER. Has been effective?

Mr. MARLIN. What they have done has been effective. But the problem is that the office has focused on base closings. We're now looking at much broader needs. The OEA has done an effective job in the past, but it's been with the help of groups like EDA. Now the EDA wants to close itself down. The OEA wants to keep it open, but the agency itself wants to close itself down. We have an interesting situation, which I am going to suggest later how to address.

We also have the issue of the Federal labs which ought to be civilianized. The question is to what use do we put these tremendously valuable individuals, these scientists and researchers who could be contributing a lot to our economy? Overall, I urge the Federal Government to give proper thought to the economic adjustment challenge, not only by encouraging the creation of economic adjustment plans in affected States and the communities, but by considering how best to make use of these newly available military resources, especially the human resources.

In particular, I would suggest to the Joint Economic Committee the following ideas: As a thoughtful opinion leader in Congress, the committee is uniquely positioned with its bipartisan and two-house status to take a long and broad view of the economic adjustment issue and to assist other Federal legislators by reminding them both of the dangers and the opportunities presented by defense cuts.

The Economic adjustment bills now before the Congress, which are described in my prepared statement, should be consolidated into one strong bill and passed. Your committee could lend its weight to an appropriate compromise. As many of you know, the Weiss bill provides for significant Federal assistance, but its mandated planning is an obstacle to broader support. The Gejdenson-Mavroules and Oakar bills are incentive oriented, but as written provide a thin coverage of their target populations. A desirable outcome would be a combined Gejdenson-Mavroules-Oakar-Weiss bill of the kind sought in mid-1989.

The next suggestion is that as infrastructure bills come before the Congress, your committee could authorize economic adjustment-related studies or call on the agencies to analyze the economic adjustment-related data of value to other committees considering these legislative options.

Here is a third suggestion. A study of defense subcontractors is urgently needed. The greatest initial impact on States and localities from defense cuts may well be on subcontractors, because they are the last brought on and they are the first dropped, and they are a substantial component of military employment. The State of California estimates that almost half of the State's defense contracting activity is in the form of subcontracting. The dollars are extremely difficult to track for anyone, especially those not in the industry.

For early warning, regional breakdowns of subcontracts are essential. In the 1970's, the information was compiled both by DOD and the Census Bureau. It was eliminated, according to the DOD, by the Office of Management and Budget pursuant to the 1974 Paperwork Reduction Act. The reporting requires just a quarterly postcard from defense subcontractors. Congress should ask and require DOD to publish quarterly subcontract information by amount and location.

This information would be a valuable early warning system for Congress, for Federal economic adjustment officials, for State planning bodies, for labor unions, for business, for local economic development organizations, and others. The committee could review the status of subcontract reporting and recommend a new reporting system.

Next idea—and I've got two more—is study the benefits to productivity from education and training, from civilian applied R&D and particularly the reorienting of Federal labs to civilian research, from small business programs such as incubators and the Federal programs that are related to them and from the EDA programs that I have already mentioned. It would be good to find out and settle the issue of how useful the programs have been. Such studies could be a valuable contribution to the coming debate on how to make the best use of military resources freed up for civilian use.

My final recommendation and perhaps my more important one is that the Joint Economic Committee could take the initiative in forming a blue-ribbon economic adjustment and civilization panel like the one that was formed after World War II to look at similar issues. The OEA and the EAC in the Department of Defense appear to function well enough in relation to base closings, but are properly concerned about extending their reach to cover defense contract cuts and broader cuts and broader issues relating to civilianization of military R&D. A more civilian-oriented agency and committee is needed to address related long-term issues of strategy and policy. So long as an Acting Assistant Secretary argues that his own EDA programs have been wasteful failures, while his DOD counterparts testify consistently that EDA programs have been essential to their work, we have a grotesque bureaucratic tangle that must be addressed strongly, swiftly, and professionally. I believe that a blue ribbon panel would be a good way to start.

The old enemies that we have been confronting in the Communist world have decided to give up their arms race with us to address the real problems of their own people, which are very severe. Some here are concerned that with the collapse of these Communist foes, America will have to invent new foes. But we already have enough real enemies at home. Our real enemies are ignorance, drugs, dilapidated housing, destruction of green space, pollution of our water and air, poisoning of our food, and inadequate transportation and other infrastructure. We should not be distracted by "enemies of convenience."

Thank you.

[The prepared statement of Mr. Marlin follows.]

PREPARED STATEMENT OF JOHN TEPPER MARLIN¹

[Abstract: The defense sky may not be falling just yet, but the ground is shaking under many local communities that are confronted with the need to plan for adjustment to life with fewer military bases and shrinking defense contracts. Contractors, states, and localities around the country have varying degrees of military dependence and vulnerability to cuts. Estimates of the state-by-state impact of weapons cuts are provided. Many of those affected have been making adjustments with intelligence and pluck, often with the help of outside agencies. However, federal economic adjustment assistance of the kind that has been provided since the early 1960s will be needed more than ever in the coming years, and adequate programs should be put in place now for the transition.]

Mr. Chairman, thank you for the opportunity to address this Committee on the subject of economic adjustment to expected defense cuts. Your timely hearings represent a significant contribution to the debate on this important topic. Whatever Congress settles on as the final level of FY 1991 defense spending, the cuts will undoubtedly exceed the initial cuts proposed by the President in January. I am speaking on behalf of the Council on Economic Priorities, which has monitored national security strategies and military contracts since its formation in 1969. My conclusions are drawn from a study to be completed in August.

My remarks address three questions. First, what are the likely economic effects of defense cuts at the local level? Second, what can contractors and communities do in anticipation of impending cuts? Finally, what economic adjustment measures might the Federal Government adopt?

The dramatic reduction in the Soviet military threat has produced a "seismic shift" in our fear of attack, and offers a "Chance in a Lifetime" to cut defense spending in line with new international realities.

Many communities properly ask how their economies will be affected. As bases are closed and weapons systems are cancelled, those with heavy dependence on the military may feel the economic equivalent of earthquake tremors. Can effective

¹ Council on Economic Priorities, 30 Irving Place, 9th Floor, New York, NY 10003; 212-420-1133 or 212-995-9270; FAX 212-420-0988.

federal and state assistance be readied to help with the planning and adjustment process?

It makes ethical, economic, and political sense to devote resources to easing the transition for communities worried about their future after military contracts. Some resources could be provided by defense contractors and by the communities and states in which affected plants are located. But the Federal Government could play an important role in planning for, and assisting with, the transition.

Who will be most affected depends on local military dependence, defined as the proportion of employment or income derived from military facilities or contracts. It also depends on which bases and contracts are cut and on community economic strength and infrastructure.

Company Military Dependence may be calculated by looking at defense income as a percentage of total income. A military dependence index for the top 12 1988 military contractors plus Rockwell, which was among the top ten in 1985 is shown in Table A. It shows that eight contractors appear to have reduced their dependence on military contracts, one stayed the same, and four increased.

Table A: Company Military Dependence, 1988 vs. 1985

<u>Company</u>	<u>Military Dependence (Percent)</u>	
	<u>1985</u>	<u>1988</u>
General Dynamics	88	85
General Motors-Hughes	80	80
Grumman	84	80
Lockheed	88	80
Martin Marietta	60	67
McDonnell Douglas	67	66
Litton	44	48
Raytheon	52	40
United Technologies	28	35
Boeing	35	30
Rockwell	62	30
General Electric	21	10
Tenneco	7	8

Four companies with 70 percent or more of their business from commercial

sources show a relatively low dependence on the military. At the other end of the table, however, four companies (including two Generals) derive four-fifths or more of their income from defense contracts.

State Military Dependence may be measured as the percent of state income from military sources. Using this measure, the states most dependent on (i.e., deriving 8 percent of their income or more from) military contracts in 1989 were Alaska, California, Hawaii, Maryland, Mississippi, Virginia, and Washington.

The most likely DoD cuts are those the Bush Administration proposed in January, labeled "Cheney Cuts". Table B shows the ten states we found most affected by these cuts, by adding up the FY 1988 value of prime contracts awarded in each state for each weapons system. The amount of contracts captured by our data search was \$5.6 billion. The major omission is the V-22 Osprey, which was in an R&D phase in FY 1988 and therefore doesn't appear in our database. As a percent of all FY 1988 DoD contracts in each state the Cheney Cuts fall most heavily on Arizona, with 36 percent of its military income cut, followed by Missouri, Ohio, Tennessee, and New York.

Table B: Ten States Most Affected by "Cheney Cuts"

<u>State</u>	<u>State Defense Dependence</u>	<u>Cuts as Percent of DoD Contracts</u>
Arizona	6.4	36.3
Missouri	7.1	22.4
Ohio	5.0	17.1
Tennessee	4.2	16.3
New York	6.2	12.3
Vermont	5.4	9.2
Michigan	3.9	8.6
Connecticut	8.7	6.7
Illinois	4.0	5.6
Florida	5.8	3.8

Although detailed information on the V-22 Osprey was not available, we were able to obtain from a Boeing official the names of the ten states with the most V-22 prime contracts in FY 1990. They are, in descending order: New York, California, Pennsylvania, Texas, Georgia, Utah, Michigan, Alabama, Kansas, and New Jersey. The V-22 involves 68 subcontractors, of which 54 are receiving more

than \$1 million, 29 are receiving between \$500,000 and \$1 million, and five are receiving under \$500,000.

Cuts in the B-2 bomber, which is now considered too costly by many defense specialists and by many activist organizations, would most affect three states: Washington, California, and Texas, in that order.

Proposed Further Cuts in weapons systems have been identified, some recommended by the Congressional Budget Office and others by the Defense Study Task Force of the Committee for National Security and Defense Budget Project. Still others have been predicted by Washington Analysis Corporation. From these lists we have analyzed the geographical distribution of 13 major weapons systems. The total amount of FY 1988-level spending that we captured was \$11.6 billion -- actual spending levels would be considerably higher.²

From this analysis we show in Table C the ten most affected states: Missouri, Texas, New Jersey, Arizona, Maine, Connecticut, Massachusetts, Louisiana, New York, Virginia, and Maryland.

Table C: Ten Most Affected States, "Other Cuts"

<u>State</u>	<u>State Defense Dependence</u>	<u>Cuts as Percent of DoD Contracts</u>
Missouri	7.1	34.8
Texas	5.6	28.0
New Jersey	5.1	19.0
Arizona	6.4	18.0
Maine	7.0	16.3
Connecticut	8.7	14.6
Massachusetts	7.2	14.6
Louisiana	5.4	12.7
New York	6.2	10.9
Virginia	10.8	10.9
Maryland	8.7	10.8

² For example, only \$328 million out of \$3.9 billion spent on SDI is included; the other \$3.6 billion was spent on R&D; SDI R&D is a whopping 39 percent of total DoD R&D. The weapons systems included in the 'Other Cuts' are the MX Missile, SDI, F/A-18, DDG-51 'Aegis' Cruiser, E-2C, SSN Submarine, SRAM, AMRAAM, Bradley Fighting Vehicle, OV-1, LSD, F-16, JSTARS.

Local Dependence on the military is a factor in predicting the job impact of defense cuts. Job losses will depend on the military dependence of individual companies in the area and the overall military dependence of the locality. But they also depend on the area's economic and infrastructure strength and its ability to offset cuts by effectively mobilizing resources for new productive economic enterprises and activities.

Communities most affected by the Cheney Cuts are shown in Table D, which lists 30 communities in 18 states. Three of the four largest prime contract locations are included.

Table D: 30 Key Work Locations Affected by Cheney Cuts, FY 1991

AZ: Mesa, Tempe, Tucson
 CA: Canoga Park, Downey, El Segundo, Huntington Beach, Newport Beach
 CT: East Hartford, Stratford
 FL: Stuart
 IN: Indianapolis
 MA: Lowell, Lynn
 MD: Baltimore
 ME: Saco
 MI: Warren
 MN: Minneapolis, Minnetonka
 MO: St. Louis (2nd highest prime contracts, \$4.7 billion, FY 1988)
 NJ: Nutley
 NM: Albuquerque
 NY: Bethpage (4th highest prime contracts, \$2.7 billion, FY 1988)
 OH: Lima
 PA: Philadelphia, York
 TX: Dallas, Fort Worth (3rd highest prime contracts, \$3.4 billion, FY 1988)
 WA: Renton, Seattle

Some contractors are able to adjust to cuts without special assistance from their community. One reason is that they may receive contract cancellation benefits, sometimes in \$billions. These benefits can be used to minimize layoffs. Some options open to companies are more socially desirable than others.

Less Desirable Options for companies are those that make no provision for employee adjustment or which serve to increase global tensions.

- Layoffs are the first action usually taken by a contractor who receives a cutback notice. This action permits contractors to continue operating with smaller incomes, but puts the burden of adjustment entirely on employees. An example of this approach is Grumman Aerospace in Bethpage, N.Y. which is considering cutting as many as 5,000 employees.

- Diversifying Within Military Work is another contractor option. One bad idea followed by companies in the 1970s was to fill up the slack from DoD cuts by making arms for the Third World. This is not a socially desirable form of diversification.

- Selling the Plant for Other Uses may be good for a community's industry by providing good space for new manufacturing or other uses. A recent report says that the land on which southern California defense contractors sit is worth more than the total value of their stockholders' equity, which explains the proxy battle over Lockheed. The company is worth more dead than alive. But dismantling a plant or a company means the employees will be out of work.

More Desirable Options take into account the future of the employees, and work to reduce rather than increase global tensions.

- Worker Adjustment Programs enable contractors to soften the blow to employees by offering transitional education, training, and outplacement programs. Involving employees can also assist in the company's adjustment. Good examples of worker adjustment programs are General Motors-Hughes paying employees to take courses and Rockwell's Palmdale, Calif. facility which launched an early, well-coordinated marketing program and brought in four companies to pick up some of the laid-off employees.

- Selling the Plant to Employees, notably through Employee Stock Ownership Plans (ESOPs), can be good for the company and also for employees. Government incentives for this purpose are already in place, and some states like New York encourage ESOP growth. ESOPs develop incentives for worker productivity and don't require government outlays. A responsible ESOP plan will plan for adequate management and transition time. A company can be sold to employees in parcels. For example, when the Ford plant closed in Oakton, Calif. the servicing of fire trucks was taken over by employees who formed a business with county help.

Table E: Examples of Contractor Adjustment Approaches

Less Desirable

Layoffs: Bell/Boeing*, Fort Worth, TX and Philadelphia, PA: Possible 2,500 cuts.
 Grumman Aerospace*, Bethpage, NY: Possible 5,000 cuts.
 McDonnell Douglas*, Long Beach, CA: 2,500 cuts.

Diversifying within Military Work: Emerson Electric*, MO: Global sales.

Selling Military Units: Chrysler* and Ford*, Detroit, MI.

More Desirable

Worker Adjustment Programs: General Motors-Hughes*: Paid employee education.
 Rockwell* (B-1), Palmdale, CA: Early marketing brought new companies.

Diversifying into Commercial Work: Kaman Corp.*, Bloomfield, CT: Commercial aviation.

Texas Instruments, Dallas, TX: Adapting military sensor technology to autos.

Diversifying into Arms Control Work: E-Systems*, TX

*Top 100 contractor

• Diversifying into Commercial Work can be difficult because defense-oriented employees don't necessarily adjust quickly to doing commercial work. Boeing, for example, has historically found it easier moving people from commercial aerospace to military contracts than the other way around. Commercial work requires a strong redirection of sales efforts and a heightened consciousness of cost. But many companies have managed it, including Frisby Airbourne, represented here today. Another example of diversification is Bell Industries, a half-billion-dollar public company based in Los Angeles, which went from 40 percent military work a decade and a half ago to 4 percent military today.

• Diversifying into Arms Control Work could be a growth industry when the CFE and START treaties are signed, probably before the end of 1990. This work entails substantial photographic, communications, and on-site components.

Some States are Organizing their resources to face up to economic adjustment

challenges.

- The Northeast-Midwest Coalition is planning to prepare a handbook for states and localities on economic adjustment.
- California has had since 1981 its effective California Economic Adjustment Team, which monitors the potential for plant closings and seeks to head them off through business retention, plant closure response, and revitalization programs.
- Maryland's Governor Schaefer and the Maryland Assembly have been exploring possibilities for diversification of defense-dependent companies in the state.
- New York State Governor Mario Cuomo's Industrial Cooperation Council is planning appropriate economic adjustment action in conjunction with the state's Electronic Association.
- Ohio Governor Celeste has led a conference on economic adjustment, focusing on the encouragement of small businesses to generate new jobs.
- Washington State Governor Booth Gardner has had on his desk since March 12 a bill (SHB 2706, "Relating to the Promotion of Economic Diversification for Defense-Dependent Industries and Communities") that would create a program in the state's Department of Commerce and Development to help cope with cuts in defense programs. The bill received bipartisan support in both houses and our contacts in the state expect it to be signed. The main problem with the excellent legislation is that it appropriates only \$200,000 for the program, which may be inadequate. The three key provisions of this model bill are:
 1. Create a task force to identify communities reliant on DoD spending and track shifts in federal spending priorities.
 2. Assist communities in utilizing state and federal programs and assisting in coordinating adjustment efforts.
 3. Create a statewide plan for economic development to be developed by a panel representing local governments, business, non-government community interests, and the military.

Localities with defense-related employment are actively involved in planning for their futures, usually through community or economic development offices such

as those in Mesa, Ariz.; El Segundo, Calif.; East Hartford, Conn.; Stratford, Conn.; Martin County, Fla.; Warren, Mich.; Albuquerque, N.M.; and Burlington, Vt. Each community has its own story and we are accumulating hundreds of these stories for our study. The common actions taken by successful localities, as described for example by former OEA associate director John Lynch in his new book, are to: (1) Acknowledge the economic adjustment problem and let it be known; (2) Organize for action with a local task force; (3) Focus on diversification potential; (4) Develop alternative use plans; (5) Anticipate cuts, and respond to them quickly and thoroughly.

Private Groups are playing a valuable role in bringing economic adjustment issues to the fore. Some are associations that exist to assist state and local officials, like Local Elected Officials in Irvine, Calif., and the National Council for Urban Economic Development in Washington. Some are rooted in peace lobbying, such as SANE-Freeze, the Council for a Livable World, and Jobs for Peace. As the seriousness of the economic adjustment needs become clearer to more people, we can expect investment banking, venture capital, and privatization groups to take a break from their travels in Eastern Europe to focus on potentially profitable economic adjustment projects in the United States. The Lockheed battle is a possible harbinger of financial donnybrooks to come. The President's brother, Prescott Bush, is co-chairman of the Washington-based Privatization Council, which has a strong interest in infrastructure projects and includes many members with expertise and contacts applicable to infrastructure project development. For people who want to immerse themselves in information about current economic adjustment projects, their first call should be to Michael Closson at the Center for Economic Conversion in Mountain View, Calif.

Federal Agencies are deeply involved in economic adjustment issues, but the only leadership source appears to be in the Pentagon, which is not a situation that the DoD staff themselves consider healthy.

The Office of Economic Adjustment (OEA) within DoD and the President's [Interagency] Economic Adjustment Committee (EAC) to which OEA reports plays a central role in community adjustment to defense cuts. The DoD-headed EAC includes representatives from OMB, HUD, Labor, Commerce, and other agencies indicated in the EAC Support table.

As the OEA workload charts indicate, the office faces a dramatic increase in the challenges that it faces -- more serious than the 1979 level when outlays were over \$11 million. If OEA is to provide the kind of economic adjustment assistance

it did in 1979, it will need a multiple increase in funding to cover both the higher workload and inflation. OEA tracks military contracts and has early warning of when they will be terminated, although it isn't always able to put together the right kind of help quickly enough to do much good. It is crucial that the crush of coming cuts timely coordination between OEA information and local planning bodies be maintained.

The Economic Development Administration (EDA) in the Department of Commerce administers the Title IX (of Public Works and Economic Development Act) authority to help communities affected by an economic downturn. Pete Perry, Acting Assistant Secretary of Commerce for Economic Development, is aggressively opposed to the very EDA programs he administers. He minimizes the seriousness of the new base closings and says by way of example that the closing of Cameron Station in Alexandria, Va. is a boon for developers. The employees who are being let go are another matter.

The Department of Labor administers Title III of the Job Training and Partnership Act (JBTA), which replaced the Comprehensive Employment and Training Act (CETA) in FY 1984. CETA provided an average of about \$6 billion a year between FY 1975 and FY 1983. JBTA was funded at a substantially lower level, providing substantially less money to states and localities seeking to address an economic adjustment problem.

Small Business Administration (SBA) programs relevant to economic adjustment are of three kinds: (1) The 7(a) loans or 90-percent loan guarantees to commercial banks, which in turn make loans to small businesses, (2) 100-percent loan guarantees to development companies, which make loans to small businesses, and (3) Economic Impact Disaster Loans, which are made directly to small businesses.

Other Agencies. The EAC Support table shows that economic adjust efforts have involved, besides DoD, EDA (Commerce), Labor, and SBA, virtually every other major agency -- Agriculture, Education, Interior, Justice, Transportation, Health & Human Services, HUD, and EPA. Besides the need to sort out the involvement of these agencies in the coming years, DoD faces a major problem in the civilianization of personnel in the Defense Advanced Research Projects Agency. The federal labs need to shift to civilian projects and this task should properly be directed by a civilian agency. A stronger civilian R&D function is desperately needed for the nation's industrial base and some freed-up military resources could provide an immensely valuable contribution to this function. This thorny problem is just one of the many difficult tasks involved in economic adjustment.

Overall, I urge the Federal Government to give proper thought to the economic adjustment challenge, not only by encouraging the creation of economic adjustment plans in affected states and communities, but by considering how best to make use of newly available military resources, especially human resources.

The Joint Economic Committee, as a thoughtful opinion leader in the Congress, uniquely positioned by virtue of its bipartisan and two-house status, should take a long and broad view of the economic adjustment issue, assist other federal legislators by reminding them of both the dangers and the opportunities presented by defense cuts.

- Economic Adjustment Bills now before the Congress, described in my written testimony, should be consolidated into one strong bill and passed. Your Committee could lend its weight to an appropriate compromise. The Weiss bill, H.R. 101, provides for significant federal assistance, but its mandated planning is an obstacle to broader support. The Gejdenson-Mavroules and Oakar bills are incentive-oriented, but as written provide thin coverage of their target populations. A \$10 million defense contract minimum for assistance, for example, would cover only 0.8 percent of contracts. The IAM recommends the floor be lowered to \$500,000, which would still cover only 15 percent of contracts (but would include 70 percent of their value). A desirable outcome would be a combined Gejdenson-Mavroules-Oakar-Weiss bill of the kind sought in mid-1989.

- As Infrastructure Bills come before the Congress, your Committee could authorize economic adjustment-related studies or call on agencies to analyze economic adjustment-related data of value to other committees considering legislative options. For example, when the Airport Development Bill is considered, the obstacles in the way of possible joint uses between civilian and military aviation might be reviewed. Low- and moderate-income housing potential might be identified in the termination of the military use of barracks.

- A Study of Defense Subcontractors is urgently needed. The greatest initial impact on states and localities from defense cuts may well be on subcontractors, because they are the last brought on and are the first dropped, and are a substantial component of military employment. The State of California estimates that almost half (47 percent) of the state's defense contracting activity is in the form of subcontracting. The dollars are extremely difficult to track for anyone, especially those not in the industry. For early warning, regional breakdowns of subcontracts are essential. In the 1970s, the information was compiled both by

DoD and the Census Bureau. It was eliminated, according to DoD, by the OMB pursuant to the 1974 Paperwork Reduction Act. The reporting requires just a quarterly postcard from defense subcontractors. Congress could ask and require DoD to publish quarterly subcontract information by amount and location. This information would be a valuable early warning system for Congress, federal economic adjustment officials, state planning bodies, labor unions, business, and local economic development organizations. The JEC could review the status of subcontract reporting and recommend a new reporting system.

- Study Benefits to Productivity from education and training, civilian applied R&D (in particular the reorienting of federal labs to civilian research), from small business programs such as incubators and the federal programs related thereto, and from EDA programs. Such studies could be valuable contributions to the coming debate on how to make the best use of military resources freed up for civilian use.

- Form a Blue-Ribbon Economic Adjustment and Civilianization Panel like one formed after World War II to look at similar issues. The OEA and EAC in the DoD appear to function well enough in relation to base closings, but are properly concerned about extending their reach to cover defense contract cuts and broad issues relating to civilianization of military R&D. A more civilian-oriented agency and committee is needed to address related long-term issues of strategy and policy. So long as an Acting Assistant Secretary argues that his own EDA programs have been wasteful failures, while his DoD counterparts testify consistently that EDA programs have been essential to what they do, we have a grotesque bureaucratic tangle that must be addressed strongly, swiftly, and professionally.

The Old Enemies we have been confronting in the Communist World have decided to give up their arms race to address the real problems of their people. Some are concerned that with the collapse of our Communist foes, America will have to invent new ones. But we already have enough real enemies at home. Our real enemies are ignorance, drugs, dilapidated housing, destruction of green space, pollution of our water and air, poisoning of our food, and inadequate transportation and other infrastructure. We should not be distracted by "enemies of convenience."

Representative HAMILTON. Thank you, Mr. Marlin.
Mr. Greenwood, please proceed.

**STATEMENT OF RICHARD GREENWOOD, SPECIAL ASSISTANT TO
THE INTERNATIONAL PRESIDENT, INTERNATIONAL ASSOCIATION
OF MACHINISTS AND AEROSPACE WORKERS**

Mr. GREENWOOD. Thank you, Mr. Chairman.

The International Association of Machinists sincerely appreciates this opportunity to present our views here today. As you may know, some 125,000 to 150,000 members in the IAM are engaged in military production either in procurement production, Federal arsenals, or servicing military bases. We include in our membership not only highly skilled and precision machinists, designers, but we have a large component of professional engineers which we represent in military production.

Mr. Chairman, we think that it's important for the committee to understand why we believe legislation is necessary. Call it defense economic adjustment, economic conversion, diversification, whatever we will. We feel that there is a Federal responsibility in defense economic adjustment for the reason that it was in the interest of national security that defense dependent communities and defense dependent work force were in essence drafted into producing for that national security. Therefore, as the cold war winds down, national security requirements may no longer be needed to the extent that they have been, then we believe there is a Federal responsibility to help alleviate and mitigate the damages and the negative effects of drawing our commitment to national security.

In the machinists union we've always had a rather pragmatic definition of defense economic adjustment or conversion. I think it's important to understand what this is. It's true that over the past 15 years we have been among the front ranks of those who have called for reductions in military spending and have warned against the excesses of military spending. In fact, it was in conjunction with the Council on Economic Priorities back in 1982-83 that we produced a study that was entitled "Cost and Consequences of Mr. Reagan's Military Buildup" which I believe busted a lot of records for circulation of publication in those early days.

Aside from the excesses of military spending and its opportunity costs on the civilian side of the ledger over these past, particularly, 10 years, we've always said we need a defense economic adjustment program whenever and for whatever reason defense requirements and production are cut back, transferred, realigned, canceled, or terminated. We believe that in those cases a contingency program should be in place to make the impacted businesses, communities, and the defense dependent work force economically viable and whole.

You know, there's a kind of theoretical argument that has been the undertow here for the past year and a half on this issue. It is whether or not Keynes' economic theory is dead, and we believe that in the case of military spending as most proponents of that military spending have explained themselves at least, that if military spending is Keynes' going in, then we cannot deny or discount that it is Keynes' when it is coming out. So, we would like to em-

phasize that there are ramifications beyond the narrow defense sector and the defense impacted communities and businesses.

John Marlin has just given you a list of the defense driven States. To the list that he gave you we could add others, but I would just point out that Georgia, Illinois, and New Mexico are three States that probably should be added to the list that John Marlin has given you.

As we look around the country we ask which States are dealing with the problem. There is much pending legislation. In addition to that in Washington which our District Lodge 751 people have had a large part in promoting in the State of Washington. California now has legislation pending and has had legislation on the table every year for at least the past decade. We just received a letter from the National Space Council chaired by Hugh Downs and the president of the National Space Council in our offices yesterday. International president Corpeus is invited to attend an economic conversion meeting in California in June. The National Space Council is looking to conversion projects as the military cuts impact on that industry. President Corpeus has assured me that he will be there.

Oregon has legislation, New Hampshire has legislation on the books—nothing enacted—Maine, Massachusetts, Connecticut, Rhode Island, and Minnesota, and, of course, Maryland as you mentioned. All have legislation pending to do something about the adjustments that are going to be necessary.

You've asked in your letter of invitation, Mr. Chairman, where are the problems occurring now that are defense related? And I would first of all refer you to a National Journal article if you haven't already seen that January 13, 1990, there is quite a lengthy discussion of these pending cuts. One in particular is entitled "Risks by Region." Other than that, we have for the past couple of weeks—in fact the past month—trying to round up places where our membership is involved and where we are being negatively affected right now.

We look at Georgia and Martin-Marietta, cancellation and termination of the C-5B program where we had 5,000 people put out there. A year and a half to two years ago they still have not been recalled. We tried to work out a worker loan program with the Boeing Corp. up in Seattle. Boeing was faced with back orders on the commercial side and was short of some skilled workers, so we were able to facilitate a worker loan program of about 400 of those Martin-Marietta machinists and sent them up to Seattle to help out the Boeing Corp. for awhile. That program has been in place, but it doesn't take care of about 4,500 other Georgia machinists.

Pennsylvania, the Chamberlain Corp. operates and manufactures artillery shells in a federally owned facility. The pending CFE agreements and talks have dried up orders there. We have a skeleton crew of about 175 people out of a work force of 600.

South Montrose Park, PA, the Allied-Signal Corp. makes fighter cockpit instrument panels, due probably to the F-14 talk we have lost about 300 members there in the past 6 months.

Kansas, Washington, Boeing complex. Boeing is in the process of reorganizing its military contract bases. Business has all been centered in Wichita over these past many years and it is now reorga-

nizing, shipping its military business up to Seattle and going to be sending some of its commercial business down to Wichita. In the meantime, we have a displacement of about 4,000 people in Seattle. That has been going on now for about a month. We don't know how much longer that will last. We've had a displacement of 100 professional engineers in Wichita and more are anticipated as well as production workers in Wichita.

Arizona, the Laurel Defense Systems, Inc., used to be the Good-year Litchfield Plant, has lost 1,400 members over the past year and a half. We now have a skeleton crew of 84 people working there. They lost the spy plane radar contract, they lost the MX carrier system business and they thought they would replace this with an avionics contract with the McDonnell Douglas Corp. for the MD-11, but at the last minute McDonnell Douglas sent that avionics contract to Italy.

California where 12 of 100 defense workers in the Los Angeles region are defense dependent. We know about the B-1B Rockwell program, a work force reduction of 7,800 to 1,600 in 2 years—that's a United Auto Workers organized plant, not the IAM. But that was a tremendous impact there.

Pomona, the General Dynamics Corp. has the Fellex and the Standard Missile, we've lost 1,400 members as a result of the INF treaty.

Los Angeles Lockheed plant, 350 plant we call it, that's down by 5,000 over the past 3 years. Our Los Angeles District 94, which consists of small job shops, supplying and servicing the major contractors has lost tremendous employment. We have at least two small shops now threatened with extinction. One is Lucas Western and the other is a McDonnell Douglas subsidiary called Acktron.

The Cheney cuts, the Long Beach Naval Shipyard, we have 5,000 on the block. That's closed. Already at the San Pedro Todd Shipyard we've lost 5,000 workers there due to loss of contracts and Todd is now in chapter 11. What work remains at Todd has gone to Bath, ME, and Osceola, MS. The problem is that workers do not follow contract jobs.

Sacramento Aerojet has just lost 100 people and expects to lose more due to reductions in manufacture of the Titan engine, electronic components, peacekeeper solid fuel rocket engine.

New Mexico Laboratories and the R&D that is taking place on this defense initiative are all on the block. And we have in Long Island the Grumman Corp. which is an unorganized plant, it's a nonunion plant. But the F-14 is threatening it. I understand that the way the engineers and the production workers there are being dismissed is not a very pretty picture. They are given termination on very short notice with very little preparation other than the perfunctories that employers usually go through and it's not a very pretty picture. We certainly empathize and sympathize with those people, even though they are nonunion.

Those are procurement cuts I have largely been talking about. We have to distinguish between the procurement side and the base closing side in this whole downsizing. We have about 20,000 members servicing those bases that are on the list of Cheney cuts, that is the earlier list. We don't know how it will shake out later on.

If we want to go from the specific and get to the macro effects I would refer to you to exhibit B, table 2 of our prepared statement.

Representative HAMILTON. Exhibit B, what?

Mr. GREENWOOD. It's exhibit B, table 2 in the prepared statement. It would be at the back of the prepared statement. These tables were derived from a study done for the U.S. Conference of Mayors at the end of 1988. They show the impact of a \$30 billion cut across 48 industrial sectors. Table 2 shows the impact of that \$30 billion cut averaged out in the years 1986 through 1990 by the industrial sector. And you will note that if we just take \$30 billion out of the defense budget and put nothing back, we will show declines in employment in every one of those industrial sectors. The sectors taking the greatest hits, of course, are those in primary metals, fabricated metal products, nonelectrical machinery, electric and electronic equipment, transportation equipment other than motor vehicles, construction, and truck transportation. Very interesting to note how hard the services are hit here; insurance, real estate, eating and drinking places, retail businesses, and wholesale businesses. The service sector is a really big loser if you just take \$30 billion out and put nothing back. That demonstrates to us the dependency of services on manufacturing.

If we go on to the next table that I would like to demonstrate here it would be exhibit C in my prepared statement. This table demonstrates what happens if after you cut \$30 billion you put all of it back into education and urban programs, non-trust-fund programs. And you see, all of those negatives from the cut as one would expect have become positives. That's very logical, but it is also very important because when we go to the next table, that is exhibit D and we compared these two, then we have the net effects of shifting \$30 billion from defense production or the defense side of the ledger into the wholly civilian side and we can see where the negatives and the positives will show up. The net effect is that we will have a net gain in jobs by making that simple transfer. That shows the benefit, I think, for the increased multiplier effect of spending in the civilian sector.

Now, we would still have—no doubt about it—we would still have some of those manufacturing sectors that would come out losers. But we believe that with the right mix of a reinvestment program of those defense cuts that we could make up for those losses. And I will be talking about that just a bit later.

You may ask, Mr. Chairman, what are unions doing to help themselves? Well, as you may know unilaterally there is not a whole lot we can do. Unfortunately, defense economic adjustment, economic conversion, and so forth are not under the law bargainable issues. If management doesn't want it on the bargaining table then it can't get there. Those are management prerogatives, narrowly defined, jealously guarded, strictly enforced in today's labor relations climate.

Shareholders and managers have virtually all decisionmaking powers with respect to investment, disinvestment, product design and development, marketing, organization of the enterprise and, of course, management's rights and prerogatives relations. But there are some things that we've been doing at least in the IAM that are some self-help things, minuscule perhaps but nevertheless helpful.

First of all, we have prepared a video which is in distribution now to all of our affiliates throughout the country, preparing them for the cutback in job losses, trying to target the areas where we think they are going to be hit, tell them where to start looking for help through the Workers Advance Notification and Training Act to the Economically Dislocated Workers Act to the unemployment compensation to the trade adjustment assistance, if that's necessary, showing them where that help can be had. We have an educational and technology center in St. Mary's County, MD. We put about 3,000 of our members through there a year in week-long schools of one sort or another. Each one that goes through that education and tech center is given at least 6 hours training and introduction to our computer lab there, which is an attempt to get their skills upgraded and familiarize themselves with the new stuff that's coming into the workplace.

We also have a tech line operation out of that center. It's a computerized communication and information system that is networked all around the country and with our membership in Canada. Since January, we have been trying to link up with the U.S. Employment Services Interstate Job Bank and put that on our tech line so that we could have in our district and our local offices around the country a list of these hard-to-fill jobs that the U.S. Employment Service has. Our members when faced with these cutbacks and job losses could simply go into their union office and bring it up on the screen, see what's available around the country and whether or not they can meet the qualifications and then go down to the employment office and specifically apply for that job if they're interested.

However, since we have had initial discussions and had to send a letter requesting that we link up with this service on January 29, we've had no response from the Department of Labor and we don't know whether we are going to get that built in or not.

We have a department that constantly surveys and searches for education and training grants. The problem there is that we catch them as catch can. What is really needed, in our estimation, if we just had one central place that we could go either federally, state-wide, or even locally much as the unemployment services are organized, where we know these grant and education and training programs are going on; community colleges, State sponsored, there's thousands of them out there, but we have to catch them as catch can. Those that we have applied for so far we have not been successful except with one that we have with probably a corporation that didn't even need it in the first place, but it was the Boeing Corp.—that's a training and upgrading program.

I won't go through the States which John Marlin went through. I would just like to say that over the past 15 years that we've become very familiar with the history of this Federal legislation and as it was mentioned earlier in the Arms Control and Disarmament Agency, its charter was to develop an economic plan to go along with cuts in military spending and along with disarmament.

We have that old blueprint for peace published in 1963, I believe, or 1965. We still have that as sort of our charter document.

In 1979, the machinists sponsored the Dodd-McKinney amendments to the Public Works bill, and those amendments passed the

House of Representatives on a unanimous consent. But were stymied in a dispute in the conference committee that had nothing to do with conversion or defense economic adjustment. That was a year when the House and the Senate were at odds over the Public Works bill and the House was at odds with the Carter administration. And as a result for the first time in history, I believe, Congress did not pass a Public Works bill and our Dodd-McKinney amendments died with the Public Works bill that year.

The Dodd-McKinney amendments provided a 5-year pilot program for defense economic adjustment. That program included 1 year advance notification of pending cuts and recisions and transfers and the like. It also provided some income on health maintenance for dislocated defense workers. It provided for education and training. It provided for alternative production planning grants, and it even provided for rent supplements, mortgage assistance, and relocation assistance with a limit of \$6,700 per year which tells you what the thinking of 10 years ago was perhaps as compared to today. But the Dodd-McKinney amendments we believe could stand as a useful model for legislation we may be looking at now.

Current proposals include the Weiss bill, H.R. 101. Quite frankly, that bill was authored back in 1977 in the machinist union building here. It was originally the McGovern-Mathias bill and about six unions, three or four public interest groups, and staff people from Senator McGovern's office and Senator Mathias' office, we put that bill together.

In 1980, after Senator Mathias retired and after Senator McGovern had been defeated, Representative Weiss picked it up and has kept it alive all of these years. It has been a valuable educational tool. Frankly, we look upon it now as too bureaucratic, it's too rigid, it calls for mandatory alternative use planning. We don't believe mandatory alternative use planning is either desirable or necessary. I can explain that if you have any questions. We do believe in the concept of alternative use planning, however.

The Gejdenson-Mavroules bills, each had their own and then they went together. The problem with that bill is that it has a high threshold, something like a \$10 million contract before any assistance can come into play. If we use a \$10 million threshold, according to DOD's own figures, we are excluding 99.2 percent of all prime contracts from the program.

The subcommittee staff bill, the Economic Stabilization Subcommittee staff bill which has been introduced by Representative Oakar has much the same problem. It has very high triggers and very high thresholds before any assistance would come into play, which would practically preclude any, and I repeat any, defense dependent community, however large or small, from getting any assistance under that program.

The Pell bill, S. 2097 had some good features. One of the better features of it is that it calls for a 10-percent set-aside from the cuts to be devoted to some adjustment assistance.

Representative Matsui, we are talking about base closings now. He is about to introduce a bill for just base closing. Ten percent of the money authorized for base closing realignment and adjustment would be set aside for education training, relocation and that sort of assistance for civilian workers on military bases who may be dis-

placed. We think the set-aside concept is very, very useful and could be used in a number of other ways.

Representative Aspin, we understand, is preparing his own bill and according to conversations with Representative Matsui's staff they anticipate that his little piece of that legislation will be incorporated in there. He hopes to have it incorporated in Representative Aspen's bill.

We will keep in the machinists union, after inventing and reinventing this wheel probably a dozen times over the past 15 years, we will opt now to let the Office of Economic Adjustment in DOD continue taking care of the base closings. They've had 25 years of experience or more with it now. Apparently, they like to do that. They, by their own testimony, they don't want to get into the procurement cuts. They don't even like to deal with them.

And, so we would say, and last year we would have taken a different position, but we would have said, "No, we don't want the Office of Economic Adjustment handling any of this because it's the Pentagon and we're talking about civilian production now in the civilian side and think it ought to go all over there, and we could transfer OEA's operation over to EDA." But now it just seems that it's come down to where practically we've got to say, yes, OEA does a pretty good job with base closures. And it likes to do that work.

But it needs more manpower and it needs more money in the face of what's coming down. But we would move procurement cuts to the other side. Again, we would try to put that through a reinvestment strategy which we really believe we have to have and the Economic Development Administration would be the desirable existing agency. I can't think of any other one that has had the experience or that is in place that knows about economic development or is supposed to know and was created for that purpose and that has handled all of these adjustment problems since the 1960's. I think first it was the Area Redevelopment Administration and then the Economic Development Administration was created in the great 89th Congress.

But our reinvestment strategy would focus in three or four areas: We would apply a lot of leading edge military technologies to the Nation's physical infrastructure, to the R&D, the research and development and equipment manufacture to clean up our staggering environmental problems. And we would invest in the human resources of displaced workers and education training and retraining while maintain some income and health insurance coverage during that period.

We would give planning grants directly to businesses if they want them and to communities and they will uncover, we believe that they will uncover the markets for this infrastructure rebuilding process and for the environmental cleanup and for rebuilding the manufacturing base if we give that mission to EDA and say, here's what we want you folks to do. If they just take a survey of their local needs in these three areas, infrastructure, environment, and manufacturing base, we think they will discover the potential markets and the impacted defense contractor will get busy and get after developing markets. Then, of course, the income maintenance

and health insurance coverage would sustain the displaced workers while they're in training or retraining.

Some people say, why can't you folks just get along with just unemployment compensation and a little bit of—

Representative HAMILTON. Mr. Greenwood, I am going to have to interrupt you. I apologize, particularly to Mr. Frisby because of my departure and say that I look forward to the opportunity, Mr. Frisby, to review your testimony and I am sorry that I do not have the opportunity to ask some questions which I wanted to do. I want you to complete your statement, Mr. Greenwood, and my apologies for leaving. Congressman Scheuer will take over. Thank you.

Representative SCHEUER [presiding]. Please continue.

Mr. GREENWOOD. Thank you. Well, some people say why can't you just get along with unemployment compensation and education and training. Well, in exhibit A in the prepared statement is a table of unemployment payments, exhibit A in the prepared statement. It shows the payments for unemployment compensation. And the average weekly benefit as a percentage of the average weekly wage that is paid in the United States is 35 percent. Which means that if we settle for unemployment compensation after we're laid off, we're reducing our standard of living by two-thirds.

That is one of the reasons we have asked for something a little more than unemployment compensation. And besides we have to ask, well, without a reinvestment program, what do we educate and train for? I always say, how do we deliver the program. And we believe, as I mentioned earlier, that we can use existing legislation.

We can give the Economic Development Administration a mission under title IX and we also give the Small Business Administration under its programs a mission devoted to those three areas. And we can give the income maintenance to the Department of Labor and the U.S. Employment Service; the health insurance coverage say to the Human Health Services Department, and we can use the existing Warren legislation, the Economic Development Adjustment Assistance Act and even maybe the TAA to put the program into effect with some improvements and some minor language changes.

Representative SCHEUER. Mr. Greenwood, you've been testifying for about a half an hour.

Mr. GREENWOOD. I'm sorry, sir.

Representative SCHEUER. It's been extremely interesting and we benefited from it. We appreciate it very much. But we do have to get on to our last witness and then hopefully have some time left for questions.

Mr. GREENWOOD. I'm sorry.

Representative SCHEUER. If in the next couple of minutes you could wind it up, that will be appreciated.

Mr. GREENWOOD. I shall.

At the back of the prepared statement we have tried to answer the question where would the money come from, and I would urge you to look at that. We also have two proposals, one more complex and one less complex which are in legislative form, neither of which have been introduced which might show how this legislation

could be. I apologize for the lengthy discussion, Congressman Scheuer, but I would urge you to look at our testimony.

Thank you very much.

[The prepared statement of Mr. Greenwood, together with attachments, follows:]

PREPARED STATEMENT OF RICHARD GREENWOOD

Mr. Chairman:

Members of the Committee:

The IAM genuinely appreciates the opportunity to make this presentation to the Joint Economic Committee and we sincerely thank you for the invitation.

Our union represents somewhere between 125,000 and 150,000 members employed in military contract and subcontract work, in federally-owned arsenals and shipyards, and who provide a number of services on military bases. We estimate some 22 to 25 percent of our membership is engaged in the production of goods and services for the military.

We don't want the American people to ever forget - when this nation asked defense workers and their trade unions to produce in the interest of national security - we produced - even when the Pentagon and contractors forced wage concessions on us, tried to bust our union in too many instances, and shipped our Pentagon tax revenues, technologies, defense work and jobs overseas, in other instances.

We produced anyhow. But now the military procurement budget is being cut. Military bases are going to be closed. Troops in Europe will be coming home.

Democratic reforms and economic reforms are sweeping the Soviet Union and East Bloc nations, as they democratize and demobilize and down-size their military.

And we think that's great. For nearly 50 years, we've been hoping, producing and waiting for that to happen. Now it's happening. We should be calling it a victory.

But it will be a hollow victory for us, if our dedicated and loyal defense communities are abandoned and workers are thrown to the back of unemployment lines.

Defense Economic Adjustment/Conversion means giving American taxpayers a return on their long burdensome investment in the Cold War battle, with a sizable, healthy Peace Dividend invested in the nation's future.

There are those who say Unemployment Compensation is enough for defense workers. Only about one-third of the unemployed people in this country qualify for Unemployment Compensation. Those that do, receive only one-third to less than one-half of the average weekly wage they were earning when they were working and producing for our national security.

(Exhibit A Attached).

And the unemployed are stripped of health insurance coverage and access to family health care.

Unemployment Compensation is no reward for producing to win the Cold War. By itself, it is a penalty; not a reward!

Some say unemployed defense workers should be happy with whatever education and training programs there may be at the state and local levels. And I can tell you that those that do exist are few, badly underfunded and too expensive for the unemployed to pay for.

The Department of Labor informs us that the Economic Dislocated Workers Adjustment Assistance Act (EDWAA) program, hinged to the Joint Partnership Training Act (JTPA) can only accommodate about 100,000 workers at its current funding level, and it is carrying a full load.

And even if we do have job training programs, without an investment or reinvestment strategy, for what jobs are we going to educate and train/retrain?

The Department of Defense has a small program to help defense communities plan conversion of their military bases, but no direct worker assistance. By the Pentagon's own testimony in Congress, it takes 2 to 5 years to successfully convert a military base. People can go hungry, lose their homes, and means of transportation, abuse their kids and spouses, divorce, go insane, commit suicide and resort to crime within 2 to 5 years.

Unemployed people need income maintenance, health care coverage, education and training NOW, not 2 to 5 years down the road.

This thing is bigger and more far reaching than the defense sector alone. It's like the flood plain of a river, that spreads into civilian education, housing, social services and all other industrial sectors, too.

If the military budget should be cut by \$15 billion this year - and that's what some of the less timid congressional leaders are talking about- then that means some 390,000 workers - defense and non-defense - across the board - could lose their jobs over the next year. That's the downstream effect of taking \$15 billion out of the economy, if nothing is put back into the economic flow.

If military spending validated Lord Keynes going in, then its negative effects cannot be discounted or denied when it is pulled out.

The figures just used are derived from a study done by Employment Research Associates, Lansing, Michigan, using an econometric Multiregional Forecast Simulation model, developed by Regional Economic Models, Inc. (REMI) of Amherst, Massachusetts. The Study was done for the U.S. Conference of Mayors.¹ We believe this model is more precise than those of the Big Three Econometric forecasters, since it utilizes more sophisticated and up-to-date Input-Output data.

¹ U.S. Conference of Mayors, A Shift in Military Spending to America's Cities: What It Means to Four Cities. Prepared by Employment Research Associates, Lansing, Michigan, 1988.

The study shows that if those \$15 billion cut from the defense establishment, were reinvested in education and urban programs then the job losses would be turned into job gains. Here's how the employment picture would change, as demonstrated by that study.

(Exhibit B).

Table 2 shows the impact of a \$30 B cut from the military budget on 48 industrial sectors, if there is no reinvestment of those cut defense dollars.

Major losers are:

Primary Metals
 Fabricated Metal Products
 Non Electrical Machinery
 Electric and Electronic Equipment
 Transportation Equipment (other
 than motor vehicles)
 Construction
 Truck Transportation
 Insurance }
 }
 Real Estate }
 }
 Eating & Drinking Places } *
 }
 Retail Businesses }
 }
 Wholesale Businesses }

* Service Sector

Big loser!

Demonstrates dependency

of Services on

Manufacturing!

Add up them all and we have a job loss of 788,690. That's 26,290 jobs lost per \$1 Billion Cut - direct and indirect.

However, if that \$30 billion cut was reinvested in Education/Training, mass transit, housing, community development, public health and social services (none of which are trust-funded programs) then the employment picture changes dramatically, as Table 3 demonstrates.

(Exhibit C)

(Exhibit D)

Table 4 summarizes the net results of cutting defense then reinvesting \$30 Billion. We have a net gain of 41,290 jobs. (Incidentally, these Industrial Sector Tables were not included in the report to the Mayor's Conference).

Under this study's reinvestment priorities, some sectors are still going to be losers, particularly in metals and electronic manufacturing. But if we altered our investment strategy, from one dedicated to Education/Training and strictly urban programs, to an investment strategy that also focused on rebuilding the nation's physical infrastructure and developing competitive consumer electronics and ship building industries, along with environmental cleanup and pollution prevention, that would turn those negatives into positives, too.

During this era of federal cuts and a freeze on corporate and top bracket income taxes, defense-dependent local communities and states are being forced to raise their own taxes to cover their increasing shortfalls in revenues. Without a federal reinvestment strategy, they will be hard put to withstand the loss of jobs, incomes and tax revenues that military budget cuts will surely cause.

If nothing is put back, the river will dry up.

To change the metaphor and to paraphrase a contemporary political leader,

"A thousand little black holes in this fragile economy can add up to a great big blackout, or brownout at the least."

The federal government must reinvest military budget cuts in the civilian economic mainstream.

In the IAM's view, a reinvestment program would place some of those defense cuts back into the educational, physical and social infrastructures, and plow back investment in the civilian industrial and manufacturing base.

God knows the country's industrial and manufacturing base - or what's left of it - needs rebuilding -

- in machine tools and machine manufacturing

- in consumer electronics

- in safe airports

- in safe roads, new and safe bridges

- in improved waterways and harbors and inland and coastal waterway craft

- in new safe commercial shipbuilding in USA shipyards

- in leak proof double-hull and double-bottom oil tankers

- in research and development
for the equipment
necessary to clean up our
staggering land, air and water
environmental problems and to
manufacture that equipment to
prevent those hazards in the
future.

If we apply the leading edge
technologies developed for military
purposes, to the modernizing and upgrading
of our own domestic industries, and the
infrastructure, including the education and
skill base those industries depend upon,
then we could produce for ourselves and
export again in world trade, instead of
depending on so many imports - and going
deeper and deeper into private corporate
and government fiscal debt, and becoming
dependent upon foreign capital.

In the IAM's view, a workable Defense Economic Adjustment Program has at least three essential features:

- 1) Reasonable Advance Notice (more than 60 days -- 1 year or more is preferable) to affected businesses, employees and their communities so they can prepare for an orderly economic transition from military dependency to useful civilian production.

- 2) Planning Grants to affected businesses, employees and their trade unions, their State and local governments, and to implant alternative production planning committees, should their military contract work stop or be cut back, whatever the reason.

- 3) **Employee Adjustment Grants to States, local government, businesses and employees and their trade unions for education, training and retraining for alternative jobs and production; and to maintain their incomes and family health benefits while enrolled in such programs, and to provide new job opportunity and job placement services, along with pension plan transfer rights.**

Now that we've outlined the legislative program, the major question is: how much will it cost?

The most expensive piece of the program will be income and health benefit assistance to unemployed workers.

In an effort to get some realistic numbers injected into the discussion, the IAM has developed four Defense budget cut scenarios, with three options for direct worker assistance.

(Exhibit E -- attached).

Worksheet #1 shows the four Defense cut scenarios or levels. Assumption No. 3 quantifies the first Income and Health Assistance option. We call it the 90% option with a \$25,000 cap per worker/per year. Our base compensation rate is \$18 per hour.

(In the interest of the Joint Committee's time, I won't discuss the methodology. It is clear and straight forwardly explained. Each of these worksheets are attached to our printed testimony).

To summarize Worksheet #1, a \$5 Billion Cut displaces 110,000 workers and with a 90% assistance option computed at the \$25,000 maximum payment, would cost \$2.062 Billion.

The \$7 Billion Cut would cost \$2.887 Billion for 154,000 workers.

The \$10 Billion Cut -- \$4.120 Billion for 220,000 workers.

A \$15 Billion Cut would put 330,000 workers on the streets and cost \$6.188 Billion to provide them income and health insurance coverage at 90% of their previous \$18/hour earnings.

Page 2 of Worksheet #1 shows what happens if we add one thousand community grants at \$250,000 each. The cost increases by \$250 million.

(Exhibit F -- attached).

Worksheet #2 assumes an 80% of income program.

(Exhibit G -- attached).

A \$5 billion cut would require \$2.471 billion.

A \$7 billion cut -- \$3.461 billion.

A \$10 billion cut -- \$4.942 billion.

The \$15 billion cut would cost \$7.353 for income and health benefit payments.

Again we add the cost of the community grant program, using the same assumption as on Worksheet #1.

Worksheet #3 opts for a 70% of income program.

(Exhibit H -- attached).

A \$5 billion cut would cost \$2.162 billion.

A \$7 billion cut -- \$3.027 billion.

A \$10 billion cut -- \$4.324 billion.

A \$15 billion cut -- \$6.484 billion.

Costing-out each of these options assumes an extreme worst-case scenario; i.e., every worker displaced would be unable to find another job, or take an early retirement, etc.

As you can see, depending upon the budget cut level and the option selected, a realistic income and health benefit assistance program would cost from about \$2 billion on the low end to \$7.3 billion on the high end.

However, if the market's "invisible hand" will operate in even 3 or 4 cases out of 10, then these worst-case costs would be significantly reduced.

We would point out that it is the IAM's view that any unemployed defense worker, in order to qualify for assistance over and above regular Unemployment Compensation; would be required to enroll in a certified education/training or retraining program.

The way we see it, these are remarkably low cost figures, when it is understood that we are investing in human resources, our national education and skill base and at the same time directing those community planning grants toward developing markets and producing products to rebuild our crumbling infrastructure, our badly maligned and neglected environment, and toward becoming competitive in some critical sectors of our manufacturing base.

We are confident the return on this low-billion dollar investment would be repaid rapidly, in terms of the nation's economic performance, its ability to balance its fiscal budget and international balance of payments and its quality of life through improved living standards, rather than declining ones.

(Exhibit I -- attached).

Finally, Worksheet #4 offers some reasonable suggestions as to where the money would come from to pay for the entire program.

There are several ways to deliver a program like this. It can be done through a few pieces of existing legislation such as the WARN system, the Unemployment Compensation System, the EDWAA and TAA programs and certain Titles of the Economic Development Act. Or a whole new delivery system could be constructed, but that isn't necessary.

It is the IAM's belief that a workable Defense Economic Adjustment Program should be a) revenue neutral, b) should delegate planning to the local and impacted business level, and c) should not require a new or additional federal bureaucracy to administer it.

A successfully Defense Economic Adjustment Program would save jobs, create new ones, educate and retrain workers, including engineers and managers, and apply leading edge technologies to preserve, modernize and expand the U.S. manufacturing base and to rebuild the nation's old and decrepit physical infrastructure.

Defense Economic Adjustment would preserve and promote our private enterprise/market economy and greatly enhance U.S. industrial competitiveness in today's global economy.

For the record and the Joint Economic Committee's perusal, Mr. Chairman, the IAM offers two Legislative proposals (attached), which we in the IAM, with the help of several other unions, have drafted. The first conforms rather closely to the 90% plan I discussed earlier. The second proposal is much less complicated and more flexible.

Thank you.

EXHIBIT A

Unemployment Insurance Under State Laws, Jan. 1, 1990¹

	Unemployment Insurance System	Unemployment Insurance System	Average Weekly Wage Paid to Labor Force (1989)	Average Weekly Wage in Civilian Economy (1989)	Average Weekly Benefit as a Percentage of Average Weekly Wage (1989)	Percent of Unemployed Receiving Unemployment Benefits	Average Duration of Unemployment (by State)	Percent of Unemployed Receiving Unemployment Benefits (1989)	Average Duration of Unemployment (by State)	Percent of Unemployed Receiving Unemployment Benefits (1989)	Unemployment Rate (1989)
United States	\$ --	\$148	\$418	55%	23%	23%	2.1%	0.8%	\$ 7,000		
Region I	Michigan	275	195	467	42	30	15-26	32	3.8	1.4	9,500
	Wisconsin	225	158	381	41	34	13-26	22	3.1	1.4	10,500
	Illinois	195-290	156	454	34	28	26	33	3.0	1.1	9,000
	Indiana	95-161	105	304	27	21	9-26	22	1.4	0.5	7,000
Region II	Kansas	218	165	384	45	33	10-26	30	2.5	1.1	8,000
	Arkansas	218	131	325	40	28	10-26	25	2.1	1.0	7,800
	Oklahoma	197	143	354	39	19	20-26	33	2.4	1.1	8,500
	Missouri	180	126	380	33	31	11-26	28	1.7	0.5	7,000
Region III	District of Columbia	253	202	553	37	49	25	49	1.8	0.5	8,000
	Pennsylvania	280-288	178	414	43	46	18-25	23	3.5	1.3	8,000
	West Virginia	245	143	372	38	25	26	23	2.3	0.9	8,000
	Delaware	225	166	428	39	37	24-26	11	2.5	1.0	8,500
	Maryland	205	166	419	40	24	26	23	1.3	0.4	7,000
Virginia	178	141	399	35	19	12-26	15	0.7	0.3	7,000	
Region IV	Texas	217	150	405	39	17	9-26	39	2.7	0.9	9,000
	Louisiana	181	102	370	28	22	9-26	32	3.3	1.4	8,500
	Mississippi	145	106	315	34	24	13-26	28	1.3	0.8	7,500
Region V	North Carolina	298	150	358	42	30	13-26	13	0.8	0.4	11,100
	Florida	200	142	375	38	20	10-26	37	0.8	0.3	7,500
	Georgia	175	130	353	35	21	9-26	21	1.5	0.6	8,500
	South Carolina	185	123	347	35	26	15-26	19	1.9	0.8	7,000
	Alabama	150	110	380	31	23	15-26	19	1.8	0.8	8,000
Region VI	Nevada	258	170	383	44	44	26	17	1.3	0.9	18,800
	Nevada	194	153	398	39	28	12-26	21	1.4	0.8	13,300
	California	190	123	485	28	41	14-26	29	2.3	0.7	7,500
Region VII	New Jersey	279	188	468	38	48	15-26	36	2.0	0.9	13,800
	New York	245	171	507	34	78	26	34	1.8	0.5	7,800
	Puerto Rico	110	78	228	33	17	20	55	0.4	0.3	7,800
Region VIII	Massachusetts	272-408	207	458	44	45	10-26	32	2.3	0.8	7,800
	Rhode Island	258-323	173	390	44	68	15-26	28	2.8	1.4	13,800
	Connecticut	282-302	184	509	36	45	26	20	1.8	0.5	7,100
	Maine	180-270	148	350	42	48	15-26	20	2.3	0.9	7,000
	Vermont	178	140	381	39	34	26	12	3.0	1.2	6,000
	New Hampshire	182	128	401	32	24	26	2	0.8	0.3	7,000
	Montana	238	158	375	42	38	8-26	22	3.1	1.9	18,000
Region IX	Washington	237	158	399	39	38	18-26	29	2.8	1.8	18,200
	Idaho	200	130	337	39	41	10-26	27	2.2	1.5	17,400
	Wyoming	200	160	345	38	24	9-26	33	1.5	1.1	18,200
	Utah	190	122	319	38	24	9-26	27	2.8	0.9	8,000
	Alaska	188-280	157	537	29	36	18-26	42	4.8	3.3	21,300
Region X	Kentucky	188	128	355	35	26	15-26	20	2.0	0.7	8,000
	Ohio	184-291	125	414	30	27	20-26	22	2.8	0.9	8,000
	Tennessee	190	110	355	30	38	12-26	28	1.8	0.8	7,000
Region XI	Colorado	224	181	412	39	24	13-26	32	1.8	0.8	10,000
	Utah	214	157	358	44	21	10-26	28	1.8	0.9	14,000
	Wyoming	200	160	345	44	18	12-26	28	3.2	1.8	16,400
	New Mexico	170	125	345	35	23	18-26	32	1.8	1.0	11,500
	Arizona	158	127	352	32	23	12-26	30	1.2	0.4	7,000
Region XII	Minnesota	258	170	414	43	29	10-26	29	2.1	1.0	12,900
	North Dakota	187	125	314	40	21	12-26	40	2.4	1.3	11,500
	Iowa	181-222	153	345	44	24	11-26	22	2.0	1.1	11,900
	South Dakota	140	118	291	40	12	18-26	11	0.8	0.2	7,000
	Nebraska	134	117	327	38	22	20-26	25	1.5	0.8	7,000

¹ Based on ending December 1989-based data available.
² Where two figures are shown, the larger represents the dependent/unemployed ratio.
³ Where two figures are shown, the larger represents the average weekly benefit.
⁴ Unemployment benefit is a specified percentage of average weekly covered wages and is expressed annually, or in a few States semi-annually. Since the base year used for setting the benefits is the immediately anterior 1988, the percentage figure may vary from statutory percentages.
⁵ For the latest results consult March 1990.

AMERICAN PRODUCTIVITY OF LABOR AND GROWTH OF INDUSTRIAL ORGANIZATION
 215 15th STREET, N.W., WASHINGTON, D.C. 20036
 Publication No. 89-0000-0

LEAD COMPANIES
 President

THOMAS & BRADY

Table 2

Impact Upon Non-Farm Employment (in thousands) of \$30 Billion
Annual Cut From Military Budget 1986-1990

S.I.C. CODE	Industry	Average Annual Employment Impact 1986-1990
(24)	LUMBER	-4.641
(25)	FURNITURE	-4.237
(32)	STONE, CLAY & GLASS ETC.	-5.103
(33)	PRIMARY METALS	-11.820
(34)	FABRICATED METAL PRODUCTS	-23.647
(35)	NON-ELEC MACHINERY	-27.421
(36)	ELECTRIC AND ELECTRONIC EQUIP.	-52.520
(371)	MOTOR VEHICLES	-6.550
(R37)	REST TRANSPORTATION EQUIP.	-75.536
(38)	INSTRUMENTS	-9.196
(39)	MISC. MANUFACTURES	-2.902
(20)	FOOD	-6.156
(21)	TOBACCO MANUFACTURES	-0.228
(22)	TEXTILES	-4.030
(23)	APPAREL	-5.785
(26)	PAPER	-3.898
(27)	PRINTING	-8.972
(28)	CHEMICALS	-5.923
(29)	PETROLEUM PRODUCTS	-1.383
(30)	RUBBER	-6.815
(31)	LEATHER	-0.955
(10-14)	MINING	-9.797
(15-17)	CONSTRUCTION	-46.453
(40)	RAILROAD TRANSPORTATION	-2.148
(42)	TRUCKING	-11.695
(41)	LOCAL/INTERURBAN TRANSPORTATION	-1.177
(45)	AIR TRANSPORTATION	-4.375
(44, 46-47)	OTHER TRANSPORTATION	-4.456
(48)	COMMUNICATIONS	-9.262
(49)	PUBLIC UTILITIES	-5.559
(60)	BANKING	-9.009
(63+64)	INSURANCE	-11.354
(61+62)	CREDIT & FINANCE	-8.132
(65, 69)	REAL ESTATE	-18.376
(58)	EATING & DRINKING	-36.519
(R52)	REST OF RETAIL	-67.685
(50-51)	WHOLESALE	-45.207
(70)	HOTELS	-10.397
(72, 76)	PERSONEL AND REPAIR SERVICES	-15.011
	PRIVATE HOUSEHOLD	-6.695
(75)	AUTO REP/SERV	-6.307
(73)	MISC. BUSINESS SERVICES	-67.182
(79)	AMUSEMENT & RECREATION SERVICES	-6.356
(78)	MOTION PICTURES	-1.516
(80)	MEDICAL	-27.353
(81)	MISC. PROFESSIONAL SERVICES	-38.792
(82)	EDUCATION (private)	-17.085
(83)	NON-PROFIT ORG.	-17.870
(07-09)	AGRI/FORESTRY/FISHERY SERVICES	-5.050
	TOTALS	-788.690

Table 3

Impact Upon Non-Farm Employment (in thousands) of \$30 Billion
Added Annually to Education and Other Urban Programs 1986-1990

S.I.C. CODE	Industry	Average Annual Employment Impact 1986-1990
(24)	LUMBER	7.935
(25)	FURNITURE	4.793
(32)	STONE, CLAY & GLASS ETC.	7.067
(33)	PRIMARY METALS	6.602
(34)	FABRICATED METAL PRODUCTS	14.036
(35)	NON-ELEC MACHINERY	17.304
(36)	ELECTRIC AND ELECTRONIC EQUIP.	13.835
(371)	MOTOR VEHICLES	8.024
(R37)	REST TRANSPORTATION EQUIP.	9.143
(38)	INSTRUMENTS	7.050
(39)	MISC. MANUFACTURES	3.316
(20)	FOOD	8.377
(21)	TOBACCO MANUFACTURES	0.230
(22)	TEXTILES	4.111
(23)	APPAREL	6.106
(26)	PAPER	5.400
(27)	PRINTING	15.145
(28)	CHEMICALS	9.239
(29)	PETROLEUM PRODUCTS	1.230
(30)	RUBBER	6.598
(31)	LEATHER	0.777
(10-14)	MINING	9.508
(15-17)	CONSTRUCTION	74.323
(40)	RAILROAD TRANSPORTATION	2.427
(42)	TRUCKING	14.067
(41)	LOCAL/INTERURBAN TRANSPORTATION	6.350
(45)	AIR TRANSPORTATION	3.861
(44, 46-47)	OTHER TRANSPORTATION	3.160
(48)	COMMUNICATIONS	10.644
(49)	PUBLIC UTILITIES	6.829
(60)	BANKING	9.182
(63+64)	INSURANCE	14.025
(61+62)	CREDIT & FINANCE	9.142
(65, 69)	REAL ESTATE	21.361
(58)	EATING & DRINKING	27.592
(R52)	REST OF RETAIL	85.092
(50-51)	WHOLESALE	48.344
(70)	HOTELS	8.826
(72, 76)	PERSONEL AND REPAIR SERVICES	18.931
	PRIVATE HOUSEHOLD	7.973
(75)	AUTO REP/SERV	7.905
(73)	MISC. BUSINESS SERVICES	56.203
(79)	AMUSEMENT & RECREATION SERVICES	7.329
(78)	MOTION PICTURES	1.962
(80)	MEDICAL	119.645
(81)	MISC. PROFESSIONAL SERVICES	35.309
(82)	EDUCATION (private)	6.007
(83)	NON-PROFIT ORG.	37.951
(07-09)	AGRI/FORESTRY/FISHERY SERVICES	9.713
	TOTALS	819.980

Table 4

Net Impact Upon Non-Farm Employment (in thousands) of Shifting \$30 Billion Annually 1986-1990 from Military Spending to Education and Other Urban Programs (Table #2 Plus Table #3)

S.I.C. CODE	Industry	Net Employment Impact of Expenditure Shift 1986-1990
(24)	LUMBER	3.293
(25)	FURNITURE	0.556
(32)	STONE,CLAY & GLASS ETC.	1.965
(33)	PRIMARY METALS	-5.218
(34)	FABRICATED METAL PRODUCTS	-9.612
(35)	NON-ELEC MACHINERY	-10.117
(36)	ELECTRIC AND ELECTRONIC EQUIP.	-38.685
(371)	MOTOR VEHICLES	1.474
(R37)	REST TRANSPORTATION EQUIP.	-66.393
(38)	INSTRUMENTS	-2.145
(39)	MISC. MANUFACTURES	0.414
(20)	FOOD	2.221
(21)	TOBACCO MANUFACTURES	0.001
(22)	TEXTILES	0.081
(23)	APPAREL	0.321
(26)	PAPER	1.502
(27)	PRINTING	6.173
(28)	CHEMICALS	3.316
(29)	PETROLEUM PRODUCTS	-0.153
(30)	RUBBER	-0.217
(31)	LEATHER	-0.177
(10-14)	MINING	-0.288
(15-17)	CONSTRUCTION	27.870
(40)	RAILROAD TRANSPORTATION	0.279
(42)	TRUCKING	2.372
(41)	LOCAL/INTERURBAN TRANSPORTATION	5.173
(45)	AIR TRANSPORTATION	-0.514
(44,46-47)	OTHER TRANSPORTATION	-1.297
(48)	COMMUNICATIONS	1.382
(49)	PUBLIC UTILITIES	1.270
(60)	BANKING	0.172
(63+64)	INSURANCE	2.671
(61+62)	CREDIT & FINANCE	0.960
(65,69)	REAL ESTATE	2.984
(58)	EATING & DRINKING	-8.927
(R52)	REST OF RETAIL	17.407
(50-51)	WHOLESALE	3.137
(70)	HOTELS	-1.571
(72,76)	PERSONEL AND REPAIR SERVICES	3.920
	PRIVATE HOUSEHOLD	1.277
(75)	AUTO REP/SERV	1.598
(73)	MISC. BUSINESS SERVICES	-10.979
(79)	AMUSEMENT & RECREATION SERVICES	0.974
(78)	MOTION PICTURES	0.347
(80)	MEDICAL	92.291
(81)	MISC. PROFESSIONAL SERVICES	-3.483
(82)	EDUCATION (private)	-11.079
(83)	NON-PROFIT ORG.	20.081
(07-09)	AGRI/FORESTRY/FISHERY SERVICES	4.663
	TOTALS	41.290

Exhibit EWorksheet #1
Page 1 of 2**Estimated Cost of Defense Worker Adjustment Assistance Program**

- Assumption #1:** \$1 Billion Cut directly puts 22,000 people out of work. (Actual figure is 23,755, based on 1983 data for six military products. Since 1983 there have been increases in labor displacing technologies, offshore procurement and a decline in the Ship Building Industry).
- Assumption #2:** Average hourly compensation per worker (wage & health care) \$18/hr. Average annual income at \$18/hr for 2,080 hours = \$37,440. Includes professional engineers, skilled crafts and technicians, production and maintenance and clerical pay).
- Assumption #3:** Adjustment Assistance Payment/worker = 90% of his/her average weekly wage with a \$25,000 maximum/yr., whichever is less.
- Assumption #4:** Regular Unemployment Compensation Payment for 26 weeks to each worker will be made and deducted from Adjustment Assistance Payments. UC Payments vary from State-to-State but range from 50% to 66 2/3% of Statewide average weekly wage not individual's average weekly wage. Therefore, deduct Total Adjustment Assistance Cost by 1/4.

Math Computation is: \$18/hr. X 40 hr. wk. X 52 wks/yr X .90 or cap at \$25,000, whichever is less; subtract 1/4 of the above product or from \$25,000, for UC payment = Total Income & Health Adjustment Assistance cost per worker.

To estimate the total cost of a national Defense Worker Adjustment Assistance Program, we can use four budget cut assumptions and assume the maximum of \$25,000 payment/worker/year, as follows:

- \$5 B Cut displaces 110,000 workers at total cost of = \$2.062 B
- \$7 B Cut displaces 154,000 workers at total cost of = \$2.887 B
- \$10 B Cut displaces 220,000 workers at total cost of = \$4.120 B
- \$15 B Cut displaces 330,000 workers at total cost of = \$6.188 B

Exhibit FWorksheet #1
Page 2 of 2

Add: Community Planning & Alternative Use Planning Grants - \$250 M
(Assume 1,000 grants at \$250,000 each
in each of 4 cases above)

Total Cost Of 90% Program With \$25,000 Cap With Community Grants:

\$5 B cut	\$ <u>2.312 B</u>
\$7 B cut	<u>3.137 B</u>
\$10 B cut	<u>4.370 B</u>
\$15 B cut	<u>6.438 B</u>

Exhibit G

Worksheet #2

Estimated Cost of Defense Worker Adjustment Assistance

Change Assumption #3 on Worksheet #1 to read:

Use existing Trade Adjustment Assistance Act formula, which provides up to 80% of individual workers average weekly income before (s)he was laid-off on the condition that (s)he is enrolled in education/training program (80% of average annual income is \$29,952).

All other assumptions remain the same as on Worksheet #1.

Math Computation is: 18/hr. X 40 hr wk X 52 wks/yr
 X .80; Subtract 1/4 of product
 for UC payment = Total income
 and health benefit adjustment assistance
 per worker.

Using the four Defense Budget Cut Assumptions on Worksheet #1, we get the following cost estimates for the 80% program without \$25,000 cap:

\$5 B Cut displaces 110,000 workers at total cost of = \$2.471 B
 \$7 B Cut displaces 154,000 workers at total cost of = \$3.461 B
 \$10 B Cut displaces 220,000 workers at total cost of = \$4.942 B
 \$15 B Cut displaces 330,000 workers at total cost of = \$7.353 B

Add: Community Planning & Alternative Use Planning Grants = \$250 M

(Assume 1,000 grants at \$250,000 each
 in each of 4 Budget Cut cases)

Total Cost Of 80% Program With Community Grants:

\$5 B cut	<u>\$2.721 B</u>
\$7 B cut	<u>3.711 B</u>
\$10 B cut	<u>5.192 B</u>
\$15 B cut	<u>7.603 B</u>

Exhibit H

Worksheet #3

Estimated Cost of Defense Worker Adjustment Assistance

Change Assumption #3 on Worksheet #1 to read:

Using existing Trade Adjustment Assistance Act formula, at 70%, instead of 80%, of individual worker's average weekly income before (s)he was laid-off on the condition that (s)he is enrolled in education/training program (70% of average annual income is \$26,200).

All other assumptions remain the same as on Worksheet #1.

Math Computation is: 18/hr X 40 hr wk X 52 wks/yr
X .70; Subtract 1/4 of product for UC payment = Total income and health benefit adjustment assistance per worker.

Using the four Defense Budget Cut Assumptions on Worksheet #1 we get the following cost estimates for the 70% program without \$25,000 cap:

\$5 B Cut displaces 110,000 workers at total cost of = \$2.162 B
\$7 B Cut displaces 154,000 workers at total cost of = \$3.027 B
\$10 B Cut displaces 220,000 workers at total cost of = \$4.324 B
\$15 B Cut displaces 330,000 workers at total cost of = \$6.484 B

Add: Community Planning & Alternative Use Planning Grants = \$250 M
(Assume 1,000 grants at \$250,000 each in each 4 Budget Cut cases)

Total Cost Of 70% Program With Community Grants:

\$5 B cut	\$ <u>2.412 B</u>
\$7 B cut	<u>3.277 B</u>
\$10 B cut	<u>4.574 B</u>
\$15 B cut	<u>6.734 B</u>

Exhibit I

Worksheet #4

Where would the money to pay for the program come from?

These are several options and combinations:

- 1) Set aside 2.5% of DOD-DOE Procurement Budgets.
(Exclude Personnel & Family Housing from DOD).

Based on \$180 Billion total Procurement,
this set aside would yield \$4.5 B.

- 2) Capture 1/3 of DOD & DOE Budget Cuts.

A \$5 B cut would yield \$1.67 B

A \$7 B cut would yield \$2.33 B

A \$10 B cut would yield \$3.33 B

A \$15 B cut would yield \$4.96 B

This would permit 2/3 of Cuts for Deficit
reduction and/or other purposes.

- 3) DOD currently has some \$128 B in unobligated and unspent funds (FY 90). They are divided between military and civil defense. These are idle funds that will have to be used in out years, but in the meantime could be productively used for Defense Economic Adjustment/Conversion through Interagency Lending, with repatriation at the end of 2, 3 or 5 years.
- 4) Of course we can always ask for the use of the \$43 B DOD secret slush fund Representative Dingell has just discovered. (See Detroit Free Press, 3/9/90 p. A-1).

Summary of Defense Economic Adjustment Proposal #2

5-year experimental program

1-year advance notice to business, communities and workforce

Alternative Production and Job Creation Planning Grants

Provides maximum \$100,000 grants to impacted business or if contractor opts to forego, the local government can apply for the grants.

Worker income maintenance and continued health insurance coverage up to 2 years.

Income maintenance at 70% of individual's average weekly earnings

(Unemployment Compensation + the difference)

Health and Medical Insurance Coverage continued as provided at time of unemployment.

Defense Economic Adjustment Proposal #2

A bill to amend the Defense Authorization Act in order to strengthen the nation's industrial base and preserve defense production skills whenever and for whatever reason economic dislocations occur in military production and servicing contracts, and other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, this amendment, which shall be cited as the Defense Economic Adjustment Act of 1990.

- I. The purposes of the Act are to:
 1. minimize at the local community level the economic impact of military spending cuts and cessation, cutback, termination, or transfer of military contract work;
 2. provide contractors, local communities and workers affected by cessation of military production and supply contracts, with the means to make plans for alternative production and job creation in order to make the affected enterprise, the affected workforce and the affected economy viable and whole;
 3. provide advance notice to contractors, and employees and communities of impending military base closures, and military contract cancellations, terminations, transfers or cutbacks and rescissions;

4. in the event of unemployment, provide military contract employees with income and health benefit protections commensurate with levels earned and/or contained in collective bargaining contracts at the time of the dislocation;
5. in the event of unemployment, provide dislocated or displaced workers with education, training and retraining opportunities for re-employment in alternative production provided by the affected enterprise or community; and for other related purposes.

II. Definitions

"Military Contractor" means any firm performing procurement, supply or service production for the Department of Defense, Department of Energy, National Aeronautics and Space Administration, or any other military related agency or program, or prime military contractor.

"Military Contract Employee" means any individual working for hire on a wage or salary basis for a military contractor or subcontractor.

"Military Contract" means any procurement, production, supply or service contract between a privately-owned or a publicly-owned firm or another agency of the federal government and the Department of Defense, Department of Energy, or National Aeronautics and Space Administration, valued at two hundred fifty thousand dollars

(\$250,000) or more.

"Secretary" means the Secretary of Defense.

- III. a. The Congress hereby authorizes the Secretary of Defense to implement a five-year experimental program beginning in 1990 to provide one year advance notice of impending defense contract terminations, transfers, reductions and recisions except for national security reasons as the Congress may determine, a lesser time may be deemed essential, such advance notice to be communicated to affected military contractors and local community officials.
- b. upon receipt of advance notice, the affected military contractor may apply to the Secretary for a \$100,000, or less, alternative production and job creating planning grant, or, should a contractor fail to apply for such grant, after 90 days of advance notification from the Secretary, the local government in which the contract work is located, may apply for the grant. Such job creation and alternative production grants may also be used for purposes of education and job skill training and retraining.

any such grant approved shall be administered by the Economic Development Administration, Department of Commerce, except in the event of a military base closing, which shall be administered

by the Department of Defense, Office of Economic Adjustment.

- c. 1. Any hourly wage or salaried employee who suffers loss of employment due to a military contract termination, transfer, reduction or rescission shall automatically be eligible for a weekly income maintenance payment at least equal to seventy percent (70%) of his or her average weekly earnings for the year immediately prior to the time of unemployment, and such employee shall also automatically be eligible for continuation of health and medical insurance coverage provided at the time of unemployment. Any Unemployment Compensation payment which an unemployed worker may receive shall be computed in the 70 percent income maintenance payment. The Department of Labor shall administer this section of the Act.
2. Each such employee shall be eligible to receive income maintenance and medical and health benefit coverage for a period not to exceed two years, or until employed full time in another job, whichever occurs first.

IV. There is hereby authorized to be appropriated such sums as are necessary to fulfill the purposes of this Act.

Cost of Bill

Assumption #1: \$1 Billion Cut directly puts 22,000 people out of work. (Actual figure is 23,755, based on 1983 data for six military products. Since 1983 there has been increases in labor displacing technologies, offshore procurement and a decline in the Ship Building Industry).

Assumption #2: Average hourly compensation per worker (wage & health care) \$18/hr. Average annual income at \$18/hr for 2,080 hours = \$37,440. Includes professional engineers, skilled crafts and technicians, production and maintenance and clerical pay).

Assumption #3: Regular Unemployment Compensation Payment for 26 weeks to each worker will be made and deducted from Adjustment Assistance Payments. UC Payments vary from State-to-State but range from 50% to 66 2/3% of Statewide average weekly wage not individual's average weekly wage. Therefore, deduct Total Adjustment Assistance Cost by 1/4.

Math Computation: 18/hr X 40 hr wk X 52 wks/yr
X .70; Subtract 1/4 of product for UC payment = Total income and health benefit adjustment assistance per worker.

Therefore:

\$5 B cut displaces 110,000 workers at total cost of \$2.162 B
 \$7 B cut displaces 154,000 workers at total cost of \$3.027 B
 \$10 B cut displaces 220,000 workers at total cost of \$4.324 B
 \$15 B cut displaces 330,000 workers at total cost of \$6.484 B

Add: \$100 Million for Business and Community grants to each of the above totals.

Depending upon the size of the cut, this bill will cost from \$2.262 Billion to \$6.584 Billion, in a worst case scenario. If the market's "invisible hand" will show itself in just 3 out of 10 cases, then these cuts can be significantly reduced.

Trade Union Bill

Establishes Defense Economic Adjustment Commission

Secretary of Commerce >Co-Chairs
 Secretary of Labor
 Secretary of Defense
 Secretary of Energy
 3 trade union reps >appointed by President
 3 business reps

Coordinates activities and executes programs through
 Economic Development Administration - Dept. Commerce

Transfers DOD's OEA to EDA.

Requires DOD to give 1-year advance notice of pending or proposed
 changes in Defense spending, procurement, service and supply
 contract, base closures

Provides Community Economic Adjustment Planning Grants

to any "substantially and seriously affected community."

100 or more unemployed by defense cuts or base closures
 1/3 of workforce if total is less than 100

Grant goes to Local Government --

on condition that it require impacted business or
 facility to establish an Alternative Production and Use
 Committee

Contractor can refuse to establish Alternative
 Production and Use Committee --

but forfeits indemnity and other adjustment
 payments -

Workers and local government can apply after
 90 days if contractor doesn't.

Entitles any worker who loses job due to Defense cuts and
 closures to:

2 years income maintenance at 90% of average weekly wage
 (UC + the difference)
 2 years vested pension credit
 2 years health and hospital insurance coverage
 Education, training and retraining
 Job search and relocation expenses

Community and Employee Defense Economic Adjustment Fund

2.5% of DOD & DOE budgeted authority each year

(excludes Personnel and Family Housing)

or

1/3 of DOD and DOE cuts, whichever is greater

Safeguards collective bargaining agreements.

**A TRADE UNION PROPOSAL
DEFENSE ECONOMIC ADJUSTMENT**

"TITLE I--DEFENSE ECONOMIC ADJUSTMENT

General Provisions

"declaration of purpose and policy

Sec. 801. (a) the Congress finds that in view of 3 decades of heavy economic, scientific and technical commitments for defense, which have come at great cost to commitment and investments in the domestic civilian industrial base and physical infrastructure; that there is a direct causal relationship between the nation's military industrial base inadequacies and disinvestment and underinvestment in the domestic civilian industrial sector that has been abandoned in many critical instances, neglected, exported or sold-out and shutdown; in view of the drag on productivity due to the enormous deterioration in infrastructure, particularly in the last decade; in view of our now critical environmental problems which oblige us to seek environmentally benign sources of energy and methods of waste disposal, due in no small part to producing for the military; in view of recent and pending arms reduction agreements, defense acquisition

and procurement budget cuts, weapons systems cutbacks, cancellations and stretchouts, demonstrated reliance on imports of materials and components, all of which has led or will lead to continued erosion and debilitation of the total U.S. industrial base; that as these commitments and investments are modified to take account of changing requirements for national security and civilian domestic needs, careful preparation is necessary if serious economic dislocations are to be avoided; that because any economic dislocation due to changes in defense commitments will result from an act of the federal government, rather than as a consequence of market forces and so should be ameliorated by an act of Congress; and that the economic ability of the nation and of management, labor, communities, and capital to adjust to changing national security needs and to modernize and revitalize the total industrial base, including the nation's physical infrastructure, energy production and waste disposal capabilities, so as to preserve, strengthen and expand the nation's total industrial base, is consistent with the general welfare of the United States;

Sec. 801 (b) It is the purpose of this title to provide the means through which the United States can promote orderly economic adjustment which will (1)

minimize the dislocation of workers, communities, and industries impacted by defense cutbacks, (2) assure that such dislocations do not compound recessionary trends, and (3) encourage conversion of technologies and managerial and worker skills developed in defense production to projects which serve to develop, expand and modernize the civilian industrial base, the physical infrastructure and benign energy production and waste disposal capabilities and which serve other civilian sector needs, such as industrial manufacturing competitiveness.

"Definitions

"Sec. 802. For purposes of this title:

"(1) The term 'Commission' means the Defense Economic Adjustment Commission established in section 811.

"(2) The term 'defense agency' means the Department of Defense, the (nuclear weapons division) of the Department of Energy, the National Aeronautics and Space Administration, the Coast Guard, and any other agency of the Government to the extent it conducts military or other defense-related operations.

"(3) The term 'defense contract' means any contract entered into between a person or nonprofit organization, including subcontractors, components

manufacturers, suppliers, service contractors and service suppliers, and a defense agency to furnish defense material or services to such agency, and any contract entered into between a person or nonprofit organization, including subcontractors, component manufacturers, suppliers, service contractors and service suppliers, and any foreign country or person acting on behalf of a foreign country to furnish defense material or services to or for such country pursuant to the Arms Export Control Act, or similar Act.

"(4) The term 'defense contractor' means any facility engaged in the furnishing of defense material pursuant to the terms of the defense contract or subcontract, including any contract under negotiation.

"(5) The term 'defense facility' means any private plant or other establishment (or part thereof) used under a defense contract or engaged in the production, repair, modification, storage, or handling of defense material, or any Government-owned or Government-leased facility, including bases, forts, shipyards, and depots.

"(6) The term 'defense material' means any item of weaponry, munitions, equipment, or specialized supplies or services intended for use by a defense agency or for sale to or for the use of a foreign

country which has primarily military application.

"(7) The term 'defense service' means the research, development, production, test, inspection, maintenance or repair of any defense material for use by a defense agency or pursuant to a defense contract.

"(8) The term 'displace' or 'displacement' means with respect to any worker, including all Federal civilian employees of the Defense Department, civilian employees of the National Aeronautics and Space Administration, and all civilian employees engaged in defense and space-related production, the separation, on a permanent or temporary basis, of such worker from employment with such facility or agency.

"(9) The term 'fund' means the Community and Employee Economic Adjustment Reserve Trust Fund established in section 841.

"(10) The term 'person' means any corporation, firm, partnership, association, individual, or other entity.

"(11) The term 'State' means each of the United States, and the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

"(12) The term 'State agency' means the

agency of a State which administers its unemployment compensation law, approved by the Secretary of Labor under section 3304 of the Internal Revenue Code of 1986.

"(13) The term 'substantially and seriously affected' means with respect to any community, a community which has within its administrative and political jurisdiction one or more military base, defense contractor facility and/or defense service facility, and which the curtailment, completion, elimination or realignment of a defense-related contract or program results in a workforce reduction of one hundred members or more, or one-third of the total workforce employed, if the military base or defense contractor or defense service facility employs less than one hundred employees, in furnishing specialized materials or services under a defense contract as determined by the Defense Economic Adjustment Commission.

"(14) 'Alternative Production and Use Committee' means that committee which shall be formed in a defense contract facility, defense service facility, or military base facility, which is composed of not less than twelve members, with equal representation of the facility's management, professional engineering staff and labor, including representatives of trade

union collective bargaining units (and democratically elected representatives of unorganized workers), for the purposes of undertaking economic planning and preparation for the employment of personnel and utilization of facilities in the event of a workforce reduction caused by elimination, curtailment, completion or realignment of any defense contract, defense service or military base.

TITLE II--DEFENSE ECONOMIC ADJUSTMENT

Commission

***Establishment**

*Sec. 811 (a) There is established in the Executive Office of the President the Defense Economic Adjustment Commission which shall be composed of--

- "(1) the Secretary of Commerce;
- "(2) the Secretary of Labor;
- "(3) the Secretary of Defense;
- "(4) the Secretary of Energy;
- "(5) 3 representatives of the business-management community who represent defense and nondefense and small business to be appointed by the President; and

"(6) 3 representatives of labor union organizations to be appointed by the President.

"(b) The Secretaries of Commerce and Labor shall

be Cochairs of the Commission, shall preside over meetings of the Commission, and shall designate a member of the Commission to preside in the absence of the Chair.

"c(1) The Commission shall execute its authority, duties and powers through the Economic Development Administration (EDA) of the Department of Commerce and the Assistant Secretary of Commerce for Economic Development shall be the chief administrative officer responsible for implementation of the programs authorized under Title II of this Act. The Assistant Secretary of Commerce for Economic Development shall appoint a Defense Economic Adjustment Assistance administrative officer and staff necessary to efficiently and expeditiously inaugurate and implement the programs of this title. The Defense Economic Adjustment Assistance officer shall be compensated at the rate provided for grade 18 of the General Schedule under Section 5332 of Title 5, United States Code.

All functions and duties of the Office of Economic Adjustment in the Department of Defense are hereby transferred to the office of the Assistant Secretary of Commerce for Economic Development.

"(2) At the request of the Commission, the staff and any task force established by the Commission shall carry out such duties as the Commission may prescribe.

"(3) The Commission may procure temporary and intermittent services to the same extent as authorized by section 3109 of title 5, United States Code.

"(4) The Commission is authorized to secure directly from any executive department, agency, or other instrumentality of the Government, information, suggestions, estimates, and statistics to carry out this title, and each such entity shall furnish such information, suggestions, estimates, and statistics directly to the Commission upon request made by the Chairman.

"(d)(1) Members of the Commission who are officers or employees of the Government shall receive no additional compensation by virtue of membership on the Commission.

"(2) Members appointed to the Commission who are not officers or employees of the Government shall receive compensation at the rate of not to exceed \$135 per diem when engaged in the performance of duties of the Council.

"(3) While away from their homes or regular places of business in the performance of services for the Commission, all members of the Council shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed

intermittently in the Government service are allowed expenses under section 5703(b) of title 5, United States Code.

"Duties

"Sec. 812. (a) The Commission shall--

"(1) disseminate information furnished by the Secretary of Defense under subsection (b) to the appropriate Federal, State, and local agencies or authorities as soon as the proposed or pending change described in such notice is known;

"(2) encourage the preparation of concrete plans for civilian-related private enterprise and public projects addressing vital areas of national concern (such as transportation, housing, education, health care, environmental preservation and clean up, industrial base modernization and innovation and development of more environmentally benign energy resources) by the various civilian agencies of the Government, as well as by State and local governments and private enterprise.

"(3) solicit, direct, and coordinate concrete plans for civilian-related private enterprise and public projects addressing vital areas of national interest, taking regional, State and local concerns into account;

"(4) develop and coordinate information on

priority, federally funded projects, agency programs and funding possibilities, loans, and loan guarantees pertaining to defense economic adjustment;

"(5) monitor existing job services information banks in the Department of Labor and in State agencies to serve as a resource on civilian job information for workers displaced from defense-related employment as a result of shifting or reduced defense-related expenditure;

"(6) make full use of the provisions of section 15(d) of the Small Business Act;

"(7) Receive, approve or disapprove all applications for Community Defense Economic Adjustment planning grants;

"(8) perform such other duties as are imposed upon the Commission by this title.

"(b)(1) The Secretary of Defense shall notify the Commission 1 year in advance of a pending or proposed change in defense spending (but not later than 90 days in advance of such change if a reduction in notice is required for reasons of national security or military emergency) that would affect employment in the defense industry, including reduction, technical changes, outsourcing and offshore procurement, stretchout or elimination of a program by Congress, the Secretary of

Defense, the Office of Management and Budget, or the President; the termination or slowdown of a research and development or procurement contract; the proposal to close a military base.

"(2) The Secretary of Defense shall furnish the Commission with projected future defense spending levels and contract progress reports.

The Commission shall meet at least every 60 days and at such other times as may be required to fulfill its functions and duties.

"rules

"Sec. 813. (a) The Commission shall promulgate such regulations as may be necessary to carry out the provisions of this title.

TITLE III--COMMUNITY ECONOMIC ADJUSTMENT

Planning

"eligibility

"Sec. 821 (a) Each community which is substantially and seriously affected as defined in Sec. 802(13) of this Act by a reduction or elimination of Government defense facilities or curtailment or conclusion of defense contracts shall be eligible for Federal assistance for planning for economic adjustment to avoid substantial dislocations and for economic adjustment assistance should such dislocation

occur.

"(b) The Commission shall develop criteria for eligibility for planning assistance consistent with Sec. 802 'Definitions'. To the fullest extent practicable, the Commission shall utilize data and reports available from other departments, agencies, or instrumentalities of the Government for statistical and other information required to develop the criteria. The criteria shall insure that assistance is directed to those enterprises, plants, facilities and communities which are most vulnerable economically to reductions in defense expenditures, and which have established local economic development and economic planning agencies dedicated to civilian industrial development and modernization of the industrial base, including environmental preservation and clean up, rebuilding and restoring the physical infrastructure, establishing new start up and infant industries (such as more environmentally benign energy production, waste disposal facilities, high speed rail transit and magnetic levitation systems, high density television; superconductivity and advanced manufacturing processes and technologies).

"(c) The Commission shall publish semiannually listings of communities currently eligible, or which the Commission determines (on the basis of information

provided under section 812(b)(1)) is likely to be eligible, for such assistance. Communities not included may petition the Commission for inclusion on the list.

"(d) Any community which receives such economic adjustment planning assistance, shall, in turn, require that development of any specific plan for alternative use of an adversely impacted defense contract facility, defense service facility or military base, will be done in full consultation and cooperation with an Alternative Production and Use Committee established within the defense contract facility or defense service facility or military base facility itself, as defined in Sec. 802(14).

"(e) Any defense contract facility or defense service facility or military base facility, which is located within a community 'substantially and seriously affected,' as defined in Sec. 802(13) of this Act, shall upon notification of a reduction, elimination, termination, realignment or stretch-out of any defense contract shall immediately form an Alternative Production and Use Committee as defined in Sec. 802(14) and apply to the proper local agency or office and administering dispensing the Community Economic Adjustment Planning Grant for an alternative

use feasibility study. Should any defense contractor choose not to apply for community defense economic adjustment planning assistance under the provisions of this title, then within 30 days after notification of an impending reduction, elimination, termination, realignment or stretch-out of a defense contract, that contractor automatically forfeits any right to indemnity or other adjustment payments he may be entitled to receive under the terms and conditions of his defense-related contract; and should a defense contractor choose not to apply for community defense economic adjustment assistance according to the provisions of this Act, within 90 days of notice, then the members of the workforce of that facility, or the local community government itself, may petition for such economic adjustment planning assistance.

"excess property provision

"Sec. 822 (a) Any capital property or facilities declared excess by a defense agency in conjunction with a Government-owned facility reduction or closure shall be appraised for purposes of resale to the affected community. The defense agency shall take into account the cost of modernization and of improving abandoned facilities up to minimum safety and environmental standards in determining a fair

price for the facility.

"(b) In fixing the sale or lease value of any property to be disposed of under subsection (a), the defense agency shall take into consideration any benefit which has accrued or may accrue to the United States from the use of such property by the community involved. Whenever there is a dispute as to the sale or lease value, the defense agency shall submit such a dispute to the Commission for resolution.

TITLE IV--ECONOMIC ADJUSTMENT ASSISTANCE

for Employees

"certification

"Sec. 831 (a) All displacements affecting workers employed by a defense contractor civilian workers employed by the Armed Services or federal agency attributable to a reduction of the volume of defense work in such facility shall be reported by the management of the firm or federal government facility, or by the employees in the affected facility, or by the bargaining unit representing employees in the facility, to the Commission and the State employment security agency acting as agent of the Secretary of Labor for the administration of the program under this subtitle.

Sec. 831 (b) the displacement of any worker who

loses employment within one year prior to either a reduction of the volume of defense work of such contractor, or the workforce reduction or closure of a military base or other federal government facility or one year prior to the petition for certification (whichever period is shorter), and up to two years after certification, shall, for purposes of subsection (a), be deemed to be a displacement attributable to that reduction.

"(c) Any worker employed by a defense facility shall be eligible for benefits in accordance with regulations prescribed by the Commission.

"entitlement to benefits

"Sec. 832. (a) Any worker certified pursuant to section 831 as eligible for adjustment benefits shall be entitled, for the 2-year period following displacement, to whichever of the following benefits are applicable:

"(1) Compensation, on a weekly basis, sufficient, when added to any benefits which such worker receives or is entitled to receive for such weekly period under any Federal or State unemployment compensation program (or any plan of such worker's employer providing for such benefits) by reason of such worker displacement, and any earnings during such weekly period from other employment, to maintain an income at a level equal to

90 percent of that worker's regular annual wages (based on a 40-hour workweek, or, in the event a defense contractor has a regular workweek payable at straight-time wage rates other than 40 hours, for such regular workweek) prior to that worker's displacement.

"(2) Vested pension credit under any applicable pension plan maintained by the defense contractor from which such worker was displaced, for the period of that worker's employment with such facility, and the 2-year period following that worker's displacement, during which 2-year period, for the purpose of the Employee Retirement Income Security Act of 1974 and the corresponding provisions of the Internal Revenue code of 1986 (relating to a qualified plan) such worker shall be treated as if such worker were employed by such contractor on the same basis as such worker was employed on the day preceding such worker's displacement; except that pension credit during such 2-year period shall be reduced to the extent of vested pension credit earned with another employer during such 2-year period.

"(3) Maintenance of any hospital, dental, vision, surgical, medical, disability, life (and other survivor) insurance coverage which such individual (including members of such individual's family) had by

reason of employment by a defense contractor prior to such displacement; except that if such worker so displaced is otherwise employed during such 2-year period, such worker shall be entitled to receive benefits under this paragraph to the extent necessary to provide such worker with the same protection described in this paragraph as such worker (including family members) would have had if such worker had not been displaced.

"(4)(A) Education, training and retraining for civilian work providing pay and status comparable to the employment from which such worker was displaced is an entitlement which is approved by the Secretary of Labor or, in the case of a worker in a State which has entered into a contract with the Commission pursuant to section 833, by the State agency.

"(B) Workers shall be eligible for a job search allowance under the same terms, conditions, and amounts as provided in section 237 of the Trade Act of 1974 (19 U.S.C. 2297).

"(5) Reimbursement for reasonable relocation expenses incurred by such worker in moving to another location, as determined by the Secretary of Labor under section 238 of the Trade Act of 1974 (19 U.S.C. 2298).

"state agreements

"Sec. 833. (a) The Commission shall, on behalf of the United States, enter into an agreement with a State, or with any agency administering the unemployment compensation law of any State approved by the Secretary of Labor under section 3304 of the Internal Revenue Code of 1986, which --

"(1) as agent of the Commission, shall upon certification and other determinations required in section 831, make such payments and provide such benefits as are authorized by section 832, on the basis provided for in this title, and shall otherwise cooperate with the Commission and other State agencies in carrying out the provisions of this title; and

"(2) shall be reimbursed for all benefits paid pursuant to such agreement and all administrative and operational costs incurred in carrying out such agreement.

"(b)(1) There shall be paid to each State agency which has an agreement under this section, either in advance or by way of reimbursement, as may be determined by the Commission, such sum as the Commission estimates the agency will be entitled to receive under such agreement for each calendar month, reduced or increased, as the case may be, by any sum by which the Commission finds that its estimates for

any prior calendar month were greater or less than amounts which should have been paid to the agency. Such estimates may be made upon the basis of statistical sampling, or other method as agreed upon by the Commission and the State agency.

"(2) The Commission shall from time to time certify to the Secretary of the Treasury for payment to each State Agency which has an agreement under this section sums payable to such agency under paragraph (1) of this subsection. The Secretary of the Treasury, prior to audit or settlement by the General Accounting Office, shall make payments to the agency, in accordance with such certification, from the fund.

"(3) All money paid a State agency under any such agreement shall be used solely for the purposes for which it is paid; and any money so paid which is not used for such purposes shall be returned, at the time specified in such agreement, to the Treasury.

"(c) In any case involving a worker entitled to benefits under section 832 who is in a State with respect to which there is no agreement pursuant to this section, the Secretary of Labor shall, under regulations prescribed by the Secretary, administer such benefits on behalf of such worker. The Secretary of Labor, in administering such benefits, shall, from time to time, certify to the Secretary of the Treasury

for payment to such worker the amounts of such benefits to which such worker and the Secretary of the Treasury shall make payments to such worker, in accordance with such certification, from the fund.

***limitation on benefits**

"Sec. 834. In no case shall any displaced worker be eligible for benefits under section 832(a) unless such worker agrees (1) to maintain, on a current basis, during the period of displacement, an active registration with the Secretary of Labor or an appropriate State employment agency, as the case may be, and (2) to accept any employment determined by the Secretary of Labor or agency, as the case may be, to be of the same skill or work of a similar nature, at the same pay as such worker was receiving before such worker was displaced. No such benefits shall be paid under this title to any worker who fails to maintain such registration or to accept such employment.

***treatment of unemployment compensation**

"Sec. 835. In no case shall any adjustment benefits paid pursuant to this title be taken into consideration in determining eligibility for, or the amount of, unemployment compensation under any Federal or State unemployment compensation law.

***termination of benefits**

"Sec. 836. Adjustment benefits shall terminate when a worker eligible for benefits accepts employment providing 90 percent of that worker's previous wages, or 2 years after displacement, whichever occurs sooner.

TITLE V--COMMUNITY AND EMPLOYEE ECONOMIC

Adjustment Fund

"fund established

"Sec. 841. There is established in the Treasury of the United States a trust fund to be known as the Community and Employee Economic Adjustment Reserve Trust Fund.

"deposits into the fund

"Sec. 842. (a) To carry out the provisions and programs of this title, two and one-half percent of the sum of the Department of Defense's Operations and Maintenance, Procurement, Research, Development, Test and Evaluation (RDTE), Military Construction Budget Authority and the Department of Energy Budget Authority shall be set aside, beginning with the fiscal year in which this title becomes effective and shall be set-aside each year thereafter; or 33 1/3% of the Department of Defense and Department of Energy budget cuts; whichever is greater; such sum to be deposited by the Secretary of the Treasury into the Community and Employee Economic Adjustment Fund.

"Sec. 842 (b) One-fourth of the Fund shall be committed to Community Defense Economic Adjustment planning grants and the remainder shall be committed to Employee Adjustment Assistance.

"management of the fund

"Sec. 843. (a) It shall be the duty of the Secretary of the Treasury to invest such portion of the moneys in the fund as is not, in the judgment of the Secretary, required to meet current withdrawal requirement. Such investments may be made only in interest-bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States. For such purpose, such obligations may be acquired (1) on original issue at the issue price, or (2) by purchase of outstanding obligations at the market price. The purposes for which obligations of the United States may be issued under chapter 31 of title 31, United States Code, are hereby extended to authorize the issuance at par of special obligations exclusively to the fund. Such special obligations shall bear interest at a rate equal to the average rate of interest, computed as to the end of the calendar month next preceding the date of such issue, borne by all marketable interest-bearing obligations of the United States then forming

part of the public debt; except that where such average rate is not a multiple of 1/8 of 1 percent, the rate of interest of such special obligations shall be the multiple of 1/8 of 1 percent next lower than such average rate. Such obligations shall be issued only if the Secretary of the Treasury determines that the purchase of other interest-bearing obligations of the United States, or of obligations guaranteed as to both principal and interest by the United States on original issue or at the market price, is not in the public interest.

"(b) Any obligations acquired by the fund (except special obligations issued exclusively to the fund) may be sold by the Secretary of the Treasury at the market price, and such special obligations may be reduced at par plus accrued interest.

TITLE VI--PRESERVATION OF COLLECTIVE

Bargaining

"Sec. ____ . No provision of this Act or assistance rendered to any party or entity under any of its provisions shall be used to circumvent, destroy or weaken collective bargaining agreements or collective bargaining units in existence at the time such assistance is applied for and is being utilized; nor shall labor-management consultants as defined in _____ be eligible to receive assistance grants or

participate in planning, education and training programs conducted by grantees under the authority of this title.

TITLE VII--AUTHORIZATION OF APPROPRIATIONS

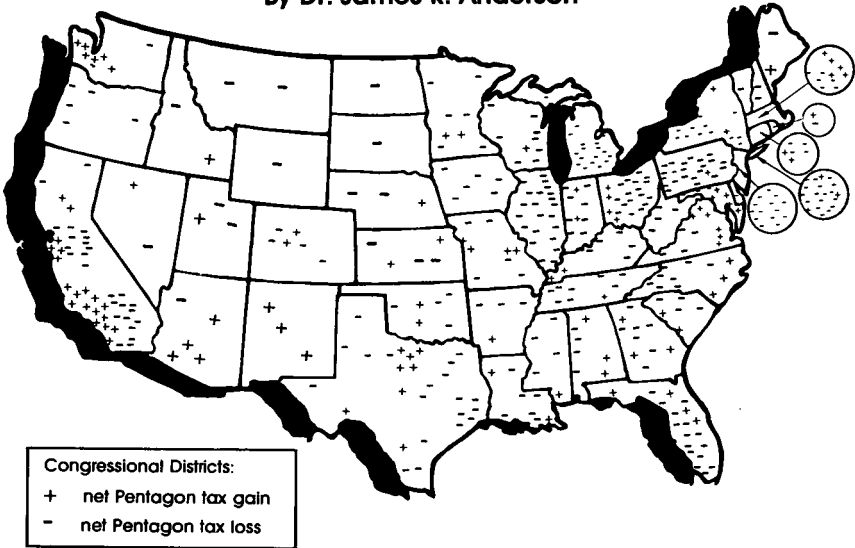
"appropriations authorized

"Sec. 851. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this title."

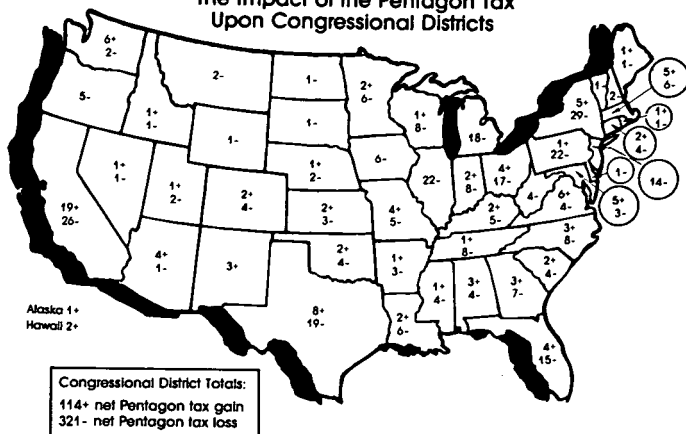
BANKRUPTING AMERICA

The Tax Burden and Expenditures of the
Pentagon by Congressional District

By Dr. James R. Anderson



The Impact of the Pentagon Tax Upon Congressional Districts



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INTRODUCTION

One hundred and seventy-five million Americans live in Congressional Districts which suffer a net loss in their balance of payments with the Pentagon. For 321 of the 435 Congressional Districts, the military budget takes more out of them in taxes than it returns to them in military contracts and salaries.

For these Congressional Districts, over 70 percent of the total, the tax burden for military expenditures, which we call the Pentagon Tax, exceeds by significant amounts, frequently hundreds of millions of dollars, the sums returned to these Districts for military contracts, salaries, and facilities. This creates deficits in their balance of payments with the Pentagon, whose budget and expenditures constitute the largest single segment of the Federal budget.

For these 321 Congressional Districts, the Federal government acts as a giant syphon, funneling tax money out of them through the Federal tax system, and concentrating it in those with large military bases or very high military contracts.

Even the 114 Congressional Districts which have a net gain in their balance of payments with the Pentagon suffer from the weakening of the U. S. economic fabric. This report documents the unequal sacrifice imposed upon American Congressional Districts, states, and regions in financing the U.S. military establishment. It further suggests that the magnitude of the drain of tax dollars for military purposes is of such proportions as to constitute a critical drag on savings, public and private investment, and productivity, even in areas which receive substantial Pentagon subsidies.

In the name of national security, the wealth of our nation has been diminished by deficits, debt, decay of public infrastructure facilities, and economic decline.

THE IMPACT OF MILITARY SPENDING ON CONGRESSIONAL DISTRICTS

The Pentagon budget and military-related expenditures constitute the largest category in the Federal budget. On a geographical basis, military spending is the most unevenly distributed of all major budget items. Its size and uneven distribution create drastic

imbalances in the net federal tax burden imposed on major regions and Congressional Districts. Unequal sacrifice for national security is a fundamental characteristic of the impact of the Pentagon Tax.

The Pentagon Tax measures the portion of the U.S. military tax burden imposed upon a given area of the U.S. In this study, we are concerned with Congressional Districts, although cities, metropolitan areas, counties, or states could also be utilized as focal points of analysis. The Pentagon Tax is paid by the taxpayers of an area through the array of Federal taxes, including personal income taxes, excise taxes and customs duties, estate and gift taxes, and corporate profits taxes. This study shows exactly how the Pentagon Tax burden was distributed among Congressional Districts for Fiscal Year (FY) 1987, and where military spending is distributed and concentrated.(1)

Taxpayers would be startled if their Congresspersons and Senators announced that they were routinely voting for measures that brought about the permanent loss of hundreds of millions or even billions of dollars per year from their Congressional Districts and states. Yet, an analysis of the impact of the military budget indicates that for a majority of Representatives and Senators this is precisely the case.

A total of 321 of the nation's 435 Congressional Districts suffered net losses in FY 1987 from the budgetary impact of military spending. Only 114 Congressional Districts (CDs) are receiving more funds from the Pentagon budget than they pay out in taxes allocated to the military. (See Table 2, page 5. Unless otherwise noted, subsequent discussion of gains or losses for specific CDs refers to this table.)

This means that the Pentagon budget is draining tax resources from 321 Congressional Districts and channeling them into only 114 Districts. Military spending is thus a principal source of drastic imbalance in the federal tax burden and budget allocation, an imbalance which as a rule is not offset by non-military Federal expenditures.

The pattern of imbalance and depletion has worsened markedly during this decade. In FY 1980, 302 Congressional Districts (see Text Reference 1) experienced net losses from the Pentagon Tax, while 133 were net gain Districts. This indicates that

the pattern of military expenditure is one of increasing concentration and narrowness, in spite of conspicuous efforts by many areas to recover some contract dimes from their Pentagon tax dollars through more military contracts. Military expenditure is the decisive factor in the concentration of Federal spending in the United States.

The increasing concentration of military expenditure may well be due to the fact that geographically concentrated expenditures for activities such as procurement, research and development, and military construction have increased much more rapidly than outlays for operation and maintenance, which are typically expended in a more broadly based and decentralized manner.(2)

REGIONAL PATTERNS

Every census region of the United States has more net loss Congressional Districts than net gain Districts. The Northeast has 80 net loss Districts, and only 15 net gainers. The North Central region, comprising much of the Midwest, is the most devastated by the military budget with 97 of its 113 Districts in the net loss category.

In FY 1987, the Pentagon took \$37 billion more out of the North Central region than it returned, extracting more taxes than a colonial overlord would dare to do. All but one of the 55 Congressional Districts in Illinois, Iowa, Michigan and Wisconsin are net loss Districts, and 24 of them lost \$500 million or more in FY 1987.

By analyzing military spending along Congressional District lines, it becomes evident that the military budget harms more areas of the Sun Belt region than it helps. The South has 99 net loss CDs, over twice the 43 net gain Districts. Even the West, with an overall net inflow of military spending, has more net loss Districts than net gainers, with 45 losers and 40 gainers. The western net gain CDs are heavily concentrated in Los Angeles County and Orange County in Southern California.

An affinity for spending at the seashore is a marked characteristic of the current military budget. A strong bi-coastal concentration of military spending becomes evident when we consider the location of net gain CDs. *Fifty-seven of the 114 net gain Congressional Districts, exactly one-half of them, are located in immediate coastal areas, ranging*

from southeastern Maine to southeastern Mississippi, and from San Diego to Seattle.

High military spending is thus a significant contributing factor to regional disparities in economic growth, which have given rise to the concept of the bi-coastal economy. Growth areas of the last eight years are for the most part areas of high and rising military spending, especially for aircraft, missiles, electronics, naval vessels, and to some extent, Pentagon personnel, both uniformed and civilian. The states and regions which have lagged in the recovery from the 1982 recession are inland areas which comprise the crumbling or beleaguered foundations of the peacetime industrial economy.

MAJOR STATES

Every major industrial state in the country, including California, has more Congressional Districts which lose than gain in their military balance of payments.

All of the 40 CDs in Illinois and Michigan suffer net losses from the Pentagon Tax, and the net drain caused by the Pentagon Tax for these two states alone has reached almost exactly \$20 billion per year. Of New York's 34 Districts, 29 lose. Pennsylvania has 22 net loss CDs out of 23, and Ohio has 17 net loss Districts out of 21.

This helps to explain these states' relative loss of population and uphill economic struggle during this decade. States which anticipate the loss of Congressional seats as a result of the 1990 Census are almost without exception states with large Pentagon Tax drains.

Florida has 15 net loss CDs out of 19, and even California has 26 net loss Districts out of 45. Although California receives almost \$38 billion in military contracts, its Pentagon Tax burden is almost \$36 billion. If current trends continue, California may well be a net loss state by 1992, and possibly sooner.

The most dramatic single change in military spending patterns in this decade has occurred in Texas, which as a state has moved from net gain to net loss in its balance of payments with the Pentagon. This has occurred not because of absolute reductions in contract awards and military employment, but because its Pentagon Tax burden has

risen so rapidly during this decade. Of the 27 CDs in Texas, 19 are now in the net loss category. As a consequence, it has five more net loss Districts and two fewer gainers than in FY 1980.

MAGNITUDE OF INEQUITY IN MILITARY SPENDING

Almost 70 percent of the Members of the House of Representatives, 302 in number, represent CDs which suffered a net Pentagon Tax loss of \$100 million or more in FY 1987. This is an increase of 70 Districts from FY 1980, indicating that the areas of unequal sacrifice and significant net drains of tax resources because of increased military spending are expanding. It further shows the increasing concentration of Pentagon expenditures in fewer Congressional Districts and regions of the country.

Table 1
States with Congressional Districts
Experiencing Net Losses of \$500 Million or More

State	Number of \$500 Million Net Loss Districts
New York	19
Illinois	13
Texas	11
Ohio	8
Michigan	8
Florida	7
New Jersey	7
California	5
Pennsylvania	4
Missouri	3
North Carolina	3
Wisconsin	3
Massachusetts	2
Colorado	1
Connecticut	1
Georgia	1
Indiana	1
Kansas	1
Minnesota	1
Nebraska	1
Oklahoma	1
Oregon	1
Tennessee	1
Virginia	1
TOTAL	104

Net losses of \$500 million or more were suffered by 104 Congressional Districts in Fiscal Year 1987, and the number of such casualties of the Pentagon Tax is virtually certain to rise if the military budget rises substantially. For the most part these are CDs with above average income levels and very low levels of military spending, with resulting high Pentagon Tax burdens and net losses. To put these figures in perspective, \$500 million is roughly half of the legislative appropriation for the entire state college and university system of Michigan, which serves approximately one-half million students.

Of the 104 CDs losing \$500 million or more, 73 are concentrated in just seven states. New York leads the list of \$500 million loser CDs with 19, followed by Illinois with 13, Texas with 11, Ohio and Michigan with 8 each, and Florida and New Jersey with 7 each. The complete list of states with CDs losing \$500 million or more is contained in Table 1.

Over \$40 billion of the net Pentagon Tax gain is concentrated in just 20 Congressional Districts, each of which has a net gain of \$1 billion or more. Twenty-five Districts gain between \$500 million and \$1 billion. Therefore, the Congressional Districts suffering net losses of \$500 million or more outnumber those gaining \$500 million or more by 105 to 45.

Thus the military budget is a creator of extremes from the standpoint of political economy. It guarantees depletion and deprivation for large areas of the country, and provides an unproductive stimulus for areas in which military contractors and installations are located.

A financial chasm of over \$4 billion separates the Congressional District with the largest military subsidies from the District suffering the largest net loss as a result of the Pentagon Tax.

The Tenth Congressional District of Virginia (Wolf-R), where the Pentagon is located, had a net gain of over \$3 billion for FY 1987. This means that every other CD in the U.S. surrendered an average \$7 million for the Pentagon Tax bonanza of this District. The heaviest net loss was borne by the Texas Seventh District (Archer-R) in Houston, which lost \$1.2 billion. Between these two Districts, there lies a Pentagon Tax differential of \$4.2 billion.

Other CDs with extremely large net losses include the New York Fifteenth (Green-R), the Silk

Stocking District, which had a net loss of \$1.28 billion, equivalent to a loss per family of \$8,131, and the nearby New York Seventeenth (Weiss-D), with a net loss of \$903 million. Two CDs in Northern New Jersey, among the wealthiest in the nation, the Ninth (Toricelli-D) and Twelfth (Courter-R), each experienced net losses of over \$900 million, or over \$5,600 per family, in FY 1987.

Along with the Virginia Tenth District, there are five other Congressional Districts with net Pentagon Tax gains of more than \$2 billion each. They include the Virginia First (Bateman-R), comprising Newport News and Hampton, where major Navy bases are located which had a net gain of \$2.8 billion, and its close neighbor, the Virginia Second (Pickett-D) of Norfolk, headquarters of the Navy's Atlantic Fleet, with a net gain of \$2.8 billion. The Missouri First (Clay-D) and Third (Gephardt-D) each had net gains of \$2.3 billion, largely derived from McDonnell Douglas aerospace contracts. The California Twelfth (Campbell-R) is Silicon Valley, and had a net Pentagon Tax gain of \$2.0 billion.

DISPARITIES WITHIN STATES AND CONGRESSIONAL DISTRICTS

Analyzing the tax impact of the Pentagon budget by Congressional District has an important advantage over calculating the breakdown by states. When the study focus is narrowed from the state to the Congressional District level, it becomes evident that disparities in the impact of Pentagon spending are extreme even within states with large overall military outlays.

For example, Mississippi had total Pentagon expenditures of \$2.46 billion, with a Pentagon Tax burden of \$1.91 billion, for a net Pentagon Tax gain of \$0.55 billion. It would appear from state data alone that the entire state of Mississippi shares in a sizable net inflow of Pentagon dollars.

Yet when the pattern of Pentagon spending in Mississippi is closely analyzed by Congressional District, a surprise emerges. Four of its five Congressional Districts, comprising the northern four-fifths of Mississippi's population and land area, suffer a net drain of tax resources when their Pentagon Tax burdens are compared with Pentagon expenditures in them.

About \$1.7 billion of Pentagon spending is con-

centrated entirely within the Fifth District, located in the southeastern corner of the state along the Gulf Coast. The other four CDs have combined net losses totalling \$763.9 million, an increase of \$161.4 million, more than 25 percent, since FY 1983.

When we look still more closely at the Mississippi Fifth, we are quickly reminded that the military budget not only consumes tax dollars, but it also concentrates them. The Pentagon Tax takes from the many and returns to the few. It is collected from all taxpayers, but is funneled to a relatively narrow group of military contractors and employees.

For instance, although the Mississippi Fifth Congressional District has a net gain of \$8,602 per family equivalent, the families in eleven of its twelve counties experience a net drain of tax dollars to finance military spending. Only in Jackson County, where Litton Industries operates naval shipbuilding facilities, is there any sizable number of families or households which gain substantially from military spending.

A similar pattern occurs in Georgia, where a modest net statewide gain of \$299 million masks notable disparities within the state's Congressional Districts. Only three of Georgia's ten CDs are net gain Districts, the First (Thomas-D), the Third (Ray-D), and the Seventh (Darden-D), but the combined net gain for the three Districts is almost \$2.9 billion. Georgia's other seven CDs, comprising seventy percent of the state's population, are all net loss Districts, and their combined losses total some \$2.6 billion. In this way the military budget exacerbates the economic polarization of Georgia, characterized by the so-called "two Georgias"—one relatively rich and dynamic, the other poor and stagnant.

In the figures in Table 2 (pages 5-9), the net gain per family appears higher for the majority of families in net gain CDs than it is in reality, for included are salaries and expenses for all armed forces personnel as well as the military contracts. So averaged on a per family basis, the amount can look quite large whereas only a relatively small number of people may be benefiting.

Table 2
The Pentagon Tax Gain or Loss by Congressional District, Fiscal Year 1987

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)	CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
ALABAMA					<i>California continued</i>				
Heflin-D, Shelby-D	\$3,620.0	\$3,613.8	\$ +6.2	\$ +5	34 Torres-D	\$ 155.5	\$ 622.8	\$ -467.3	\$ -2,921
1 Callahan-R	174.2	511.7	-337.6	-1,969	35 Lewis-R	1,719.3	719.4	+1,000.0	+6,250
2 Dickinson-R	1,060.5	494.4	+566.1	+3,389	36 Brown-D	649.2	622.8	+26.5	+165
3 Nichols-D	532.0	460.4	+71.6	+424	37 McCandless-R	280.8	744.4	-463.7	-2,906
4 Bevil-D	169.7	483.2	-313.5	-1,835	38 Dorman-R	90.4	701.5	-611.1	-3,826
5 Flippo-D	1,383.4	549.3	+834.1	+4,991	39 Dannemeyer-R	1,795.9	894.8	+901.1	+5,636
6 Erdreich-D	155.8	623.4	-467.6	-2,776	40 Cox-R	1,280.1	1,109.5	+170.6	+1,068
7 Harris-D	144.5	491.5	-347.0	-2,042	41 Lowery-R	2,199.2	898.3	+1,300.9	+8,136
ALASKA					42 Rohrbacher-R	901.1	1,098.8	-197.6	-1,240
Murkowski-R, Stevens-R	1,235.2	925.1	+310.1	+2,539	43 Packard-R	1,465.9	862.6	+603.4	+3,759
1 Young-R	1,235.2	925.1	+310.1	+2,539	44 Bates-D	1,374.4	561.9	+812.5	+5,083
ARIZONA					45 Hunter-R	1,656.4	762.3	+894.0	+5,593
DeConcini-D, McCain-R	4,536.4	3,498.1	+1,038.3	+1,257	COLORADO				
1 Rhodes-R	935.7	731.1	+204.6	+1,238	Armstrong-R, Wirth-D	4,842.6	4,105.2	+737.4	+839
2 Udall-D	809.6	540.8	+268.8	+1,628	1 Schroeder-D	2,032.9	727.9	+1,305.1	+8,914
3 Stump-R	254.3	684.6	-430.3	-2,598	2 Skaggs-D	414.1	711.4	-297.3	-2,031
4 Kyl-R	1,085.0	818.6	+266.4	+1,613	3 Campbell-D	85.4	589.9	-504.6	-3,445
5 Kolbe-R	1,451.8	723.1	+728.7	+4,416	4 Brown-R	110.0	573.5	-463.5	-3,167
ARKANSAS					5 Hefley-R	1,703.7	674.1	+1,029.6	+7,033
Bumpers-D, Pryor-D	1,353.1	1,965.9	-612.8	-882	6 Schaefer-R	499.0	828.4	-329.4	-2,250
1 Alexander-D	161.7	432.9	-271.2	-1,555	CONNECTICUT				
2 Robinson-D	350.6	563.4	-212.8	-1,230	Dodd-D, Lieberman-D	5,637.3	5,521.8	+115.5	+122
3 Hammerschmidt-R	172.7	495.4	-322.7	-1,853	1 Kennedy-D	869.2	901.2	-32.0	-204
4 Anthony-D	668.1	474.0	+194.1	+1,119	2 Gejensson-D	1,933.4	787.4	+1,146.0	+7,275
CALIFORNIA					3 Morrison-D	201.2	851.5	-650.3	-4,125
Cranston-D, Wilson-R	37,800.0	35,790.6	+2,009.4	+279	4 Shays-R	1,371.8	1,165.1	+206.7	+1,311
1 Bosco-D	155.2	723.0	-567.8	-3,549	5 Rowland-R	605.1	912.8	-307.7	-1,952
2 Hergert-R	193.9	665.7	-471.8	-2,951	6 Johnson-R	656.6	903.9	-247.3	-1,573
3 Matsui-D	968.6	801.7	+166.9	+1,044	DELAWARE				
4 Fazio-D	1,112.1	694.3	+417.7	+2,614	Biden-D, Roth-R	407.4	867.3	-459.9	-2,546
5 Pelosi-D	575.2	937.7	-362.5	-2,268	1 Carper-D	407.4	867.3	-459.9	-2,546
6 Boxer-D	557.3	919.8	-362.6	-2,269	DISTRICT OF COLUMBIA				
7 Miller-D	189.5	859.0	-669.5	-4,193	Fauntroy-D (Delegate)	1,892.1	1,011.9	+880.3	+4,537
8 Dellums-D	1,353.8	919.8	+434.0	+2,715	FLORIDA				
9 Stark-D	415.5	819.6	-404.1	-2,534	Graham-D, Mack-R	10,831.5	13,905.7	-3,074.2	-1,038
10 Edwards-D	462.5	744.4	-281.9	-1,759	1 Hutto-D	1,827.8	618.8	+1,209.0	+7,756
11 Lantos-D	622.1	987.8	-365.7	-2,291	2 Grant-D	190.4	547.9	-357.5	-2,292
12 Campbell-R	3,092.3	1,070.1	+2,022.2	+12,666	3 Bennett-D	1,076.7	642.4	+434.3	+2,787
13 Mineta-D	823.6	912.7	-89.1	-557	4 James-R	602.1	703.6	-101.5	-652
14 Shrumway-R	196.9	737.3	-540.4	-3,381	5 McCollum-R	2,059.0	721.7	+1,337.3	+8,576
15 Coelho-D	211.2	633.5	-422.3	-2,642	6 Stearns-R	160.6	602.1	-441.5	-2,832
16 Panetta-D	828.2	737.3	+90.9	+569	7 Gibbons-D	419.2	673.0	-253.9	-1,628
17 Pashayan-R	300.4	619.2	-318.7	-1,998	8 Young-R	452.4	746.7	-294.4	-1,888
18 Lehman-D	141.5	619.2	-477.7	-2,980	9 Bilirakis-R	367.5	728.7	-361.2	-2,316
19 Lagomarsino-R	1,050.0	744.4	+305.5	+1,911	10 Ireland-D	86.9	660.5	-573.6	-3,680
20 Thomas-R	606.9	715.8	-108.9	-681	11 Nelson-D	1,401.8	730.1	+671.7	+4,310
21 Gallegly-R	834.7	937.7	-103.0	-646	12 Lewis-R	507.8	735.6	-227.8	-1,461
22 Moorhead-R	422.1	1,009.3	-587.2	-3,669	13 Goss-R	151.9	831.6	-679.7	-4,358
23 Beilenson-D	777.5	1,263.4	-485.9	-3,039	14 Johnston-D	838.6	915.0	-76.4	-490
24 Waxman-D	610.9	844.7	-233.8	-1,463	15 Shaw-R	107.0	878.8	-771.9	-4,951
25 Roybal-D	255.5	486.8	-231.3	-1,448	16 Smith-D	111.3	839.9	-728.7	-4,670
26 Berman-D	866.3	948.5	-82.1	-514	17 Lehman-D	114.6	717.5	-602.9	-3,866
27 Levine-D	2,132.5	1,012.9	+1,119.6	+7,006	18 Pepper-D	112.7	703.6	-591.0	-3,788
28 Dixon-D	1,488.3	619.2	+869.1	+5,439	19 Fascell-D	243.2	909.4	-666.3	-4,274
29 Hawkins-D	233.2	486.8	-253.5	-1,586	GEORGIA				
30 Martinez-D	366.5	587.0	-220.4	-1,382	Fowler-D, Nunn-D	6,601.4	6,302.4	+299.0	+1,800
31 Dymally-D	655.3	604.9	+50.4	+315	1 Thomas-D	798.4	553.4	+245.1	+1,490
32 Anderson-D	733.0	705.1	+28.0	+174					
33 Dreier-R	999.6	819.6	+180.0	+1,125					

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>Georgia continued</i>				
2 Hatcher-D	\$ 242.4	\$ 511.1	\$ -268.7	\$ -1,607
3 Ray-D	1,439.4	562.2	+877.2	+5,336
4 Jones-D	239.6	906.9	-667.3	-4,048
5 Lewis-D	396.1	653.6	-257.5	-1,540
6 Gingrich-R	162.6	651.7	-489.1	-2,931
7 Darden-D	2,536.5	725.4	+1,811.1	+10,915
8 Rowland-D	80.3	521.2	-440.9	-2,678
9 Jenkins-D	100.6	600.0	-499.4	-2,977
10 Barnard-D	605.4	617.0	-11.6	-69

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>HAWAII</i>				
<i>Inouye-D, Matsunaga-D</i>	2,502.9	1,185.3	+1,317.6	+4,493
1 Saiiki-R	1,662.9	662.6	+1,000.3	+6,823
2 Akaka-D	840.0	522.7	+317.3	+2,164

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>IDAHO</i>				
<i>McClure-R, Symms-R</i>	675.5	896.2	-220.7	-769
1 Craig-R	99.7	458.4	-358.8	-2,498
2 Stallings-D	575.8	437.8	+138.0	+963

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>ILLINOIS</i>				
<i>Dixon-D, Simon-D</i>	3,723.6	15,351.2	-11,627.6	-3,348
1 Hayes-D	79.3	492.6	-413.5	-2,621
2 Savage-D	83.9	521.9	-438.0	-2,777
3 Russo-D	118.0	733.8	-615.8	-3,903
4 Sangmeister-D	91.2	721.5	-630.3	-3,995
5 Lipinski-D	96.1	597.2	-501.0	-3,176
6 Hyde-R	94.2	856.6	-762.4	-4,833
7 Collins-D	90.9	564.9	-474.0	-3,005
8 Rostenkowski-D	90.5	563.4	-472.9	-2,997
9 Yates-D	155.2	965.6	-810.4	-5,136
10 Porter-R	560.6	1,033.1	-472.6	-2,992
11 Annunzio-D	127.6	793.7	-666.1	-4,222
12 Crane-R	298.9	824.4	-525.4	-3,330
13 Fawell-R	107.0	928.8	-821.8	-5,205
14 Hastert-R	68.1	738.4	-670.3	-4,225
15 Madigan-R	96.1	646.3	-550.2	-3,488
16 Martin-R	155.2	661.6	-506.4	-3,210
17 Evans-D	391.6	655.5	-263.9	-1,672
18 Michel-R	114.4	678.5	-564.1	-3,576
19 Bruce-D	191.1	597.2	-406.0	-2,577
20 Durbin-D	77.5	630.9	-553.4	-3,508
21 Costello-D	511.6	597.2	-85.6	-540
22 Poshard-D	124.6	548.0	-423.5	-2,672

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>INDIANA</i>				
<i>Lugar-R, Coats-R</i>	3,104.4	5,926.6	-2,822.1	-1,691
1 Visclosky-D	25.0	633.0	-607.9	-3,656
2 Sharp-D	243.1	590.9	-347.8	-2,067
3 Hiler-R	681.9	596.2	+85.7	+505
4 Vacancy	536.0	596.2	-60.2	-358
5 Jontz-D	147.3	605.7	-458.4	-2,751
6 Burton-R	330.6	714.7	-384.2	-2,337
7 Myers-R	83.0	567.2	-484.1	-2,869
8 McCloskey-D	205.9	563.0	-357.2	-2,149
9 Hamilton-D	166.6	514.4	-347.9	-2,100
10 Jacobs-D	685.0	547.0	+138.0	+838

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>IOWA</i>				
<i>Grassley-R, Harkin-D</i>	785.6	2,977.7	-2,192.2	-2,475
1 Leach-R	69.7	501.8	-432.1	-2,925
2 Tauke-R	431.6	496.4	-64.8	-439
3 Nagle-D	64.7	499.7	-435.0	-2,947
4 N. Smith-D	86.3	547.0	-460.7	-3,122
5 Lightfoot-R	101.9	454.7	-352.8	-2,390
6 Grandy-R	31.4	478.8	-447.4	-3,032

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>KANSAS</i>				
<i>Dole-R, Kassebaum-R</i>	\$2,248.7	\$2,919.9	\$ -671.2	\$ -934
1 Roberts-R	60.1	532.6	-472.5	-3,292
2 Slattery-D	858.0	534.3	+323.7	+2,251
3 Meyers-R	112.9	706.0	-593.1	-4,130
4 Glickman-D	1,125.9	629.0	+496.9	+3,455
5 Whittaker-R	69.8	518.0	-428.3	-2,979

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>KENTUCKY</i>				
<i>Ford-D, McConnell-R</i>	2,014.5	3,266.8	-1,252.3	-1,125
1 Hubbard-D	779.9	468.8	+311.1	+1,946
2 Natcher-D	635.6	435.1	+200.5	+1,267
3 Mazzoli-D	152.5	519.1	-366.6	-2,310
4 Bunning-R	109.8	584.4	-474.6	-2,985
5 Rogers-R	64.6	349.2	-284.6	-1,788
6 Hopkins-R	164.7	509.6	-344.9	-2,186
7 Perkins-D	107.4	400.8	-293.4	-1,834

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>LOUISIANA</i>				
<i>Breaux-D, Johnston-D</i>	2,820.4	4,394.3	-1,573.9	-1,231
1 Livingston-R	650.8	614.8	+36.1	+226
2 Boggs-D	295.7	527.8	-232.1	-1,448
3 Tauzin-D	367.2	627.1	-259.9	-1,500
4 McCrery-D	946.3	545.8	+400.5	+2,509
5 Huckaby-D	67.9	453.5	-365.6	-2,262
6 Baker-R	159.7	592.8	-433.1	-2,715
7 Hayes-D	114.4	579.2	-464.8	-2,911
8 Holloway-R	178.5	453.5	-275.0	-1,724

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>MAINE</i>				
<i>Cohen-R, Mitchell-D</i>	1,170.5	1,098.6	+71.9	+210
1 Brennan-D	973.4	590.5	+383.0	+2,168
2 Snowe-R	197.0	508.1	-311.1	-1,883

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>MARYLAND</i>				
<i>Mikutski-D, Sarbanes-D</i>	7,449.8	6,475.8	+973.9	+760
1 Dymond-D	826.5	667.0	+159.5	+997
2 Bentley-R	666.0	847.0	-181.1	-1,132
3 Cardin-D	722.6	799.8	-77.2	-481
4 McMillen-D	1,558.0	836.0	+721.9	+4,520
5 Hoyer-D	1,031.6	832.8	+198.8	+1,240
6 Byron-D	442.3	760.9	-318.6	-1,984
7 Mfume-D	626.7	536.2	+90.5	+564
8 Morella-R	1,576.1	1,196.1	+380.0	+2,368

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>MASSACHUSETTS</i>				
<i>Kennedy-D, Kerry-D</i>	9,600.7	8,441.7	+1,159.0	+665
1 Conte-R	645.0	684.6	-39.6	-249
2 Neal-D	138.5	689.7	-551.2	-3,474
3 Early-D	537.3	747.9	-210.6	-1,329
4 Frank-D	953.9	884.7	+69.2	+436
5 Atkins-D	1,713.5	847.6	+865.9	+5,496
6 Mavroules-D	1,911.4	808.7	+1,102.7	+6,992
7 Markey-D	1,406.4	797.7	+608.7	+3,822
8 Kennedy-D	1,127.3	798.6	+328.7	+2,074
9 Moakley-D	423.9	727.7	-303.8	-1,925
10 Studds-D	185.5	739.5	-554.0	-3,491
11 Donnelly-D	558.0	714.2	-156.2	-978

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>MICHIGAN</i>				
<i>Levin-D, Riegle-D</i>	2,713.5	11,043.6	-8,330.1	-2,959
1 Conyers-D	45.3	516.8	-471.5	-3,015
2 Pursell-R	114.6	670.4	-555.7	-3,553
3 Wolpe-D	143.8	597.5	-453.7	-2,901
4 Upton-R	326.9	542.2	-215.3	-1,377
5 Henry-R	181.1	589.7	-408.7	-2,613

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)	CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
MICHIGAN continued					NEW JERSEY				
6 Carr-D	\$ 84.5	\$ 625.1	\$ -540.5	\$ -3,456	<i>Bradley-D, Lautenberg-D</i>	\$4,803.6	\$12,373.5	\$-7,569.9	\$-3,382
7 Kildee-D	24.1	630.6	-606.5	-3,878	1 Florio-D	309.9	722.6	-412.7	-2,581
8 Traxler-D	42.2	552.2	-510.0	-3,261	2 Hughes-D	115.1	737.5	-622.4	-3,891
9 Vander Jagt-R	128.1	506.9	-378.8	-2,422	3 Pallone-D	586.6	867.4	-280.8	-1,760
10 Schuette-R	58.5	502.5	-444.0	-2,839	4 Smith-R	807.6	814.2	-6.6	-41
11 Davis-R	324.0	455.0	-131.0	-837	5 Roukema-R	239.4	1,046.8	-807.4	-5,047
12 Bonior-D	410.3	660.4	-250.1	-1,599	6 Dwyer-D	88.3	892.1	-803.9	-5,049
13 Crockett-D	39.0	445.1	-406.0	-2,596	7 Rinaldo-R	174.7	952.8	-778.1	-4,871
14 Hertel-D	297.4	696.9	-399.4	-2,554	8 Roe-D	353.9	821.6	-467.7	-2,925
15 Ford-D	76.7	658.2	-581.5	-3,718	9 Torricelli-D	167.8	1,075.3	-907.5	-5,662
16 Dingell-D	47.3	670.4	-623.0	-3,984	10 Payne-D	317.9	608.8	-290.9	-1,820
17 Levin-D	120.6	748.8	-628.2	-4,016	11 Gallo-R	499.2	1,036.9	-537.7	-3,367
18 Broomfield-R	247.9	976.3	-728.4	-4,657	12 Courter-R	246.8	1,192.8	-946.0	-5,907
MINNESOTA					13 Saxton-R	659.7	904.5	-244.8	-1,531
<i>Boschwitz-R,</i>					14 Guarini-D	236.7	705.3	-468.6	-2,927
<i>Durenberger-R</i>	2,743.1	5,001.4	-2,258.4	-1,823	NEW MEXICO				
1 Penny-D	64.3	567.7	-503.4	-3,251	<i>Bingaman-D, Domenici-R</i>	2,835.7	1,358.8	+1,476.9	+3,729
2 Weber-R	27.7	510.7	-483.0	-3,119	1 Schiff-R	1,437.7	521.8	+915.9	+6,941
3 Frenzel-R	633.5	843.2	-209.8	-1,355	2 Skeen-R	662.1	425.7	+238.4	+1,783
4 Vento-D	919.6	703.7	+215.9	+1,394	3 Richardson-D	735.9	411.7	+324.1	+2,466
5 Sabo-D	733.7	689.2	+44.6	+288	NEW YORK				
6 Sikorski-D	251.9	682.7	-430.8	-2,782	<i>D'Amato-R, Moynihan-D</i>	11,387.1	24,978.2	-13,591.2	-2,547
7 Stangeland-R	46.9	467.6	-420.7	-2,717	1 Hochbruckner-D	332.1	709.4	-377.3	-2,404
8 Oberstar-D	65.6	536.2	-470.6	-3,039	2 Downey-D	320.3	686.9	-366.6	-2,339
MISSISSIPPI					3 Mrazek-D	1,343.9	1,071.6	+272.4	+1,730
<i>Cochran-R, Lott-R</i>	2,460.9	1,908.1	+552.9	+722	4 Lent-R	1,624.2	891.7	+732.4	+4,649
1 Whitten-D	101.3	367.1	-265.9	-1,733	5 McGrath-R	1,628.9	904.2	+724.7	+4,643
2 Espy-D	191.4	328.6	-137.2	-894	6 Flake-D	104.1	614.5	-510.4	-3,249
3 Montgomery-D	261.9	383.9	-122.0	-797	7 Ackerman-D	137.3	806.8	-669.5	-4,244
4 Parker-D	180.9	419.8	-238.8	-1,559	8 Schuefer-D	276.0	839.3	-563.3	-3,617
5 Smith-R	1,725.4	408.7	+1,316.7	+8,602	9 Mantop-D	119.2	706.9	-587.7	-3,746
MISSOURI					10 Schumer-D	123.3	734.4	-611.1	-3,918
<i>Bond-R, Danforth-R</i>	7,802.7	5,782.0	+2,020.7	+1,352	11 Towns-D	66.1	389.7	-323.6	-2,054
1 Clay-D	2,895.9	616.9	+2,278.9	+13,727	12 Owens-D	80.5	477.1	-396.6	-2,524
2 Buechner-R	112.9	901.4	-788.5	-4,751	13 Solari-D	102.9	604.5	-501.6	-3,180
3 Gephardt-D	3,001.6	712.3	+2,289.2	+13,791	14 Molinari-R	124.6	736.9	-612.3	-3,905
4 Skellorn-D	642.3	579.9	+62.4	+375	15 Green-R	259.8	1,536.2	-1,276.3	-8,131
5 Wheat-D	751.0	704.3	+46.7	+281	16 Rangel-D	81.5	484.6	-403.1	-2,568
6 Coleman-R	85.6	638.3	-552.7	-3,327	17 Weiss-D	183.6	1,086.6	-903.0	-5,755
7 Hancock-R	120.8	545.8	-425.0	-2,561	18 Garcia-D	59.3	349.7	-290.4	-1,844
8 Emerson-R	120.5	481.1	-360.5	-2,172	19 Engel-D	98.6	691.9	-593.3	-3,814
9 Volkmer-D	72.2	601.3	-529.2	-3,187	20 Lowey-D	93.5	1,079.1	-985.5	-6,221
MONTANA					21 Fish-R	160.0	796.8	-636.8	-4,054
<i>Baucus-D, Burns-R</i>	277.9	780.6	-502.7	-2,102	22 Gilman-R	188.9	839.3	-650.4	-4,142
1 Williams-D	61.0	385.6	-324.6	-2,605	23 McNulty-D	850.3	711.9	+138.4	+881
2 Marlenee-R	216.9	395.0	-178.1	-1,555	24 Solomon-R	90.0	641.9	-552.0	-3,522
NEBRASKA					25 Boehlert-R	393.0	582.0	-189.0	-1,207
<i>Exon-D, Kerry-D</i>	821.4	1,763.5	-942.1	-1,974	26 Martin-R	647.3	539.5	+107.8	+687
1 Berouster-R	99.3	576.7	-477.4	-3,002	27 Walsh-R	616.1	701.9	-85.8	-547
2 Hoagland-D	684.7	642.5	+42.3	+266	28 McHugh-D	537.7	644.4	-106.8	-680
3 Smith-R	37.4	544.4	-507.0	-3,184	29 Horton-R	185.3	701.9	-516.6	-3,292
NEVADA					30 Staughtler-D	104.5	791.8	-687.3	-4,375
<i>Bryan-D, Reid-D</i>	1,116.3	1,214.2	-97.9	-402	31 Paxon-R	120.0	734.4	-614.4	-3,925
1 Bilbray-D	405.9	609.5	-203.6	-1,672	32 LaFalce-D	131.7	694.4	-562.7	-3,585
2 Vucanovich-R	710.4	604.7	+105.7	+869	33 Nowak-D	122.4	614.5	-492.0	-3,135
NEW HAMPSHIRE					34 Houghton-R	80.3	587.0	-506.7	-3,222
<i>Humphrey-R, Rudman-R</i>	934.4	1,329.9	-395.4	-1,413	NORTH CAROLINA				
1 Smith-R	565.4	659.6	-94.2	-672	<i>Helms-R, Sanford-D</i>	4,250.4	6,157.8	-1,907.4	-1,067
2 Douglas-R	369.0	670.3	-301.2	-2,156	1 Jones-D	502.2	487.1	+15.1	+93
					2 Valentine-D	113.5	519.7	-406.2	-2,493
					3 Lancaster-D	1,190.1	468.6	+721.5	+4,429
					4 Price-D	155.3	647.2	-491.9	-3,033
					5 Neal-D	\$ 89.9	\$ 593.0	\$ -503.1	\$-3,093

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)	CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
6 Coble-R	433.3	639.2	-205.9	-1,279	<i>Pennsylvania continued</i>				
7 Rosa-D	1,405.8	495.7	+910.0	+5,554	14 Coyne-D	298.2	595.6	-297.4	-1,894
8 Hefner-D	99.9	549.9	-450.0	-2,765	15 Futler-R	91.6	657.5	-565.9	-3,613
9 McMillan-R	79.1	678.6	-599.5	-3,677	16 Walker-R	343.7	613.9	-270.2	-1,727
10 Ballenger-R	52.6	554.2	-501.6	-3,096	17 Gekas-R	149.0	580.1	-431.1	-2,749
11 Clarke-D	128.8	524.7	-395.8	-2,452	18 Walgren-D	412.8	826.5	-413.7	-2,637
NORTH DAKOTA					19 Goodling-R	561.5	643.4	+18.0	+115
<i>Burdick-D, Conrad-D</i>	456.0	693.8	-237.9	-1,199	20 Gaydos-D	255.5	630.8	-375.3	-2,393
1 Dorgan-D	456.0	693.8	-237.9	-1,199	21 Riedge-R	83.7	574.0	-490.7	-3,125
OHIO					22 Murphy-D	52.1	578.7	-526.6	-3,363
<i>Glenn-D, Metzgerbaum-D</i>	6,681.9	12,431.3	-5,749.4	-1,752	23 Clinger-R	125.5	537.8	-412.3	-2,629
1 Luken-D	1,136.8	601.7	+535.2	+3,413	RHODE ISLAND				
2 Gradison-R	917.0	650.2	+266.8	+1,707	<i>Chafee-R, Peil-D</i>	838.7	1,185.3	-346.6	-1,204
3 Hall-D	568.4	593.0	-24.6	-158	1 Machtley-R	714.0	599.8	+114.2	+792
4 Oxley-R	829.6	550.7	+278.9	+1,783	2 Schneider-R	124.8	585.5	-460.8	-3,207
5 Gillmor-R	59.6	566.9	-507.3	-3,246	SOUTH CAROLINA				
6 McEwen-R	130.5	525.8	-395.4	-2,526	<i>Hollings-D, Thurmond-R</i>	4,002.0	2,919.9	+1,082.1	+1,140
7 DeWine-R	1,357.4	553.2	+804.2	+5,160	1 Ravenel-R	1,655.0	506.6	+1,148.4	+7,261
8 Lukens-R	62.4	573.1	-510.7	-3,273	2 Spence-R	46.2	511.0	-464.8	-2,926
9 Kaptur-D	74.1	615.4	-541.2	-3,463	3 Derrick-D	1,222.4	488.5	+733.9	+4,650
10 Miller-R	100.8	617.8	-517.3	-3,312	4 Patterson-D	97.0	536.7	-439.7	-2,779
11 Eckart-D	54.3	612.9	-558.5	-3,583	5 Spratt-D	255.0	456.5	-201.5	-1,275
12 Kasich-R	238.5	606.7	-368.1	-2,361	6 Tallon-D	243.0	420.5	-177.4	-1,124
13 Passer-D	43.9	583.0	-539.1	-3,442	SOUTH DAKOTA				
14 Sawyer-D	343.6	621.6	-278.0	-1,777	<i>Daschle-D, Pressler-R</i>	278.8	636.0	-357.2	-1,701
15 Wylie-R	225.4	609.1	-383.8	-2,453	1 Johnson-D	278.8	636.0	-357.2	-1,701
16 Regula-R	88.2	573.1	-484.9	-3,108	TENNESSEE				
17 Traficant-D	41.5	588.0	-546.5	-3,490	<i>Gore-D, Sasser-D</i>	2,436.0	4,625.6	-2,189.6	-1,569
18 Applegate-D	64.7	528.3	-463.6	-2,968	1 Quillen-R	330.5	471.4	-140.9	-904
19 Feighan-D	31.7	804.3	-772.7	-4,937	2 Duncan-R	103.4	540.7	-437.3	-2,820
20 Oaker-D	168.0	606.7	-438.7	-2,811	3 Lloyd-D	767.6	543.1	+224.6	+1,430
21 Stokes-D	156.0	565.6	-409.6	-2,619	4 Cooper-D	315.7	425.1	-109.4	-705
OKLAHOMA					5 Clement-D	101.5	616.6	-515.1	-3,292
<i>Boren-D, Nickles-R</i>	2,345.5	3,527.0	-1,181.5	-1,285	6 Gordon-D	77.9	525.5	-447.6	-2,877
1 Inhofe-R	160.5	671.2	-510.7	-3,336	7 Sundquist-R	209.9	552.3	-342.4	-2,237
2 Synar-D	88.7	526.6	-437.9	-2,852	8 Tanner-D	258.6	457.5	-198.9	-1,296
3 Watkins-D	124.0	464.9	-340.9	-2,224	9 Ford-D	270.9	493.6	-222.6	-1,449
4 McCurdy-D	853.6	556.6	+297.0	+1,932	TEXAS				
5 Edwards-R	728.2	727.3	+0.9	+6	<i>Bentsen-D, Gramm-R</i>	15,000.8	20,265.9	-5,265.1	-1,217
6 English-D	390.7	580.2	-189.5	-1,239	1 Chapman-D	433.0	628.2	-195.2	-1,219
OREGON					2 Wilson-D	53.7	646.5	-592.8	-3,702
<i>Hatfield-R, Packwood-R</i>	652.8	2,833.2	-2,180.4	-2,724	3 Bartlett-R	1,139.3	1,295.0	-155.7	-972
1 AuCoin-D	159.8	661.3	-501.5	-3,132	4 Hall-D	200.6	713.4	-512.8	-3,201
2 R. Smith-R	145.6	501.5	-355.9	-2,222	5 Bryant-D	648.6	723.5	-74.9	-468
3 Wyden-D	149.6	583.6	-434.1	-2,711	6 Barton-R	144.2	715.4	-571.1	-3,563
4 DeFazio-D	75.2	524.7	-449.5	-2,809	7 Archer-R	177.9	1,355.8	-1,177.9	-7,352
5 D. Smith-R	122.7	561.5	-438.9	-2,744	8 Fields-R	108.0	824.8	-716.9	-4,471
PENNSYLVANIA					9 Brooks-D	265.8	830.9	-545.2	-3,407
<i>Heinz-R, Specter-R</i>	6,442.0	14,079.2	-7,637.2	-2,118	10 Pickle-D	348.0	743.8	-395.7	-2,470
1 Foglietta-D	354.8	443.5	-88.7	-567	11 Leath-D	1,205.6	610.0	+595.6	+3,715
2 Gray-D	398.7	497.0	-88.3	-626	12 Wright-D	2,129.8	741.7	+1,388.0	+8,664
3 Borski-D	478.3	597.0	-118.7	-757	13 Sarpalius-D	493.9	751.9	-258.0	-1,611
4 Kotler-D	57.7	582.9	-525.2	-3,351	14 Laughlin-D	158.8	674.9	-516.1	-3,222
5 Schutze-R	452.4	705.4	-253.0	-1,614	15 de la Garza-D	108.9	470.2	-361.2	-2,254
6 Yatron-D	110.2	589.9	-479.7	-3,059	16 Coleman-D	848.7	555.3	+293.4	+1,830
7 Weldon-R	473.0	705.4	-232.3	-1,482	17 Stenholm-D	303.6	687.0	-383.4	-2,394
8 Kostmayer-D	260.5	708.2	-447.7	-2,850	18 Leland-D	79.9	608.0	-528.1	-3,294
9 Shuster-R	377.5	516.7	-139.2	-888	19 Cornbest-R	113.9	695.1	-581.2	-3,623
10 McDade-R	301.5	516.7	-215.3	-1,374	20 Gonzalez-D	1,044.7	492.5	+552.3	+3,452
11 Kanjorski-D	125.6	515.3	-389.7	-2,486	21 Smith-R	869.0	853.2	+15.8	+99
12 Murtha-D	\$ 64.4	\$ 580.1	\$ -515.6	\$ -3,288	22 DeLay-R	\$ 121.3	\$ 999.1	\$ -877.8	\$ -5,484
13 Coughlin-R	514.0	881.4	-367.3	-2,350	23 Bustamante-D	978.9	563.4	+415.5	+2,596

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>Texas continued</i>				
24 Frost-D	737.4	678.9	+58.5	+366
25 Andrews-D	116.0	885.6	-769.6	-4,806
26 Armev-R	1,655.3	942.4	+712.9	+4,448
27 Ortiz-D	496.1	579.6	-83.6	-522
UTAH				
<i>Garn-R, Hatch-R</i>	2,080.9	1,416.6	+664.3	+1,496
1 Hansen-R	1,443.0	452.3	+990.9	+6,683
2 Owens-D	487.1	550.1	-63.0	-425
3 Nielson-R	150.5	414.1	-263.6	-1,785
VERMONT				
<i>Leahy-D, Jeffords-R</i>	179.7	549.3	-369.6	-2,378
1 Smith-R	179.7	549.3	-369.6	-2,378
VIRGINIA				
<i>Robb-R, Warner-R</i>	16,508.4	7,083.0	+9,425.4	+5,800
1 Bateman-R	3,399.9	624.7	+2,775.1	+17,063
2 Pickett-D	3,406.5	653.8	+2,752.7	+17,114
3 Billey-R	258.7	752.2	-493.5	-3,042
4 Sisisky-D	1,090.0	577.3	+512.7	+3,149
5 Payne-D	132.8	544.0	-411.2	-2,546
6 Olin-D	104.6	636.8	-532.1	-3,252
7 Slaughter-R	1,375.0	660.8	+714.2	+4,391
8 Parris-R	2,222.3	984.5	+1,237.8	+7,621
9 Boucher-D	345.4	522.7	-177.3	-1,083
10 Wolf-R	4,173.2	1,126.2	+3,047.0	+18,733
WASHINGTON				
<i>Adams-D, Gorton-R</i>	6,404.8	5,319.4	+1,085.3	+864
1 Miller-R	856.6	801.6	+55.0	+349
2 Unsoeld-D	640.1	613.9	+26.2	+166
3 Bonker-D	149.9	617.1	-467.2	-2,976

IMPACT ON ECONOMIC HEALTH: FIVE DAMAGING EFFECTS OF SUSTAINED HIGH LEVELS OF WAR EXPENDITURE

While U.S. military forces may march at the head of the parade of major industrial nations, the American economy lags at or near the rear. This circumstance should be disturbing, but it should not be surprising, because war expenditure is an intrinsically unproductive or destructive consumption of capital resources. In this respect, the purpose of this report is twofold: 1) we document the amounts and magnitude of taxes poured into the economic black hole of military expenditure, and 2) we summarize evidence of financial, industrial, public and human stress, depletion, and deprivation created as a direct consequence of sustained high military tax burdens.

The root of the problem was explained two centuries ago by Adam Smith, the economic idol of conservatives. He pointedly observed, "The sovereign, for example, with all the officers both of justice and war who serve under him, the whole Army and

CONGRESSIONAL DISTRICT	PENTAGON EXPENDITURES (\$ MILLIONS)	PENTAGON TAX BURDEN (\$ MILLIONS)	NET GAIN OR LOSS (\$ MILLIONS)	NET GAIN OR LOSS PER FAMILY (\$)
<i>Washington continued</i>				
4 Morrison-R	758.6	586.7	+171.9	+1,105
5 Foley-D	293.1	571.3	-278.3	-1,784
6 Dicks-D	1,523.0	605.4	+917.7	+5,851
7 McDermott-D	1,015.5	726.1	+289.4	+1,852
8 Chandler-R	1,168.0	797.9	+370.1	+2,354
WEST VIRGINIA				
<i>Byrd-D, Rockefeller-D</i>	322.2	1,590.1	-1,267.8	-2,139
1 Mollohan-D	37.7	424.1	-386.4	-2,802
2 Slaggers-D	134.9	363.3	-228.5	-1,542
3 Wise-D	77.2	418.2	-341.0	-2,308
4 Rahall-D	72.6	384.3	-311.8	-2,104
WISCONSIN				
<i>Kasten-R, Kohl-D</i>	1,343.0	5,232.7	-3,889.8	-2,719
1 Aspin-D	73.8	608.6	-534.8	-3,365
2 Kastenmeier-D	126.8	601.8	-475.0	-2,988
3 Gunderson-R	50.6	494.0	-443.4	-2,790
4 Kleczka-D	141.8	648.3	-506.6	-3,187
5 Moody-D	132.1	601.2	-469.2	-2,952
6 Petri-R	132.1	558.6	-426.5	-2,752
7 Obey-D	82.8	490.3	-407.5	-2,565
8 Roth-R	75.6	532.7	-457.1	-2,874
9 Sensenbrenner-R	100.9	712.7	-611.8	-3,849
WYOMING				
<i>Simpson-R, Wallop-R</i>	198.1	607.1	-409.0	-2,866
1 Cheney-R	198.1	607.1	-409.0	-2,866

Column totals may reflect rounding of numbers.

Navy, are unproductive laborers."⁽³⁾ What Smith understood better than most of the economic proponents of the national security state, is that beyond some minimal baseline, military spending undermines the productive base of the economy. If fortresses claim excessive capital, factories, farms, and the nation as a whole will become less productive and prosperous.

The average Pentagon Tax burden imposed on each Congressional District for FY 1987 alone was \$665 million, and the amount will rise if the military budget increases. This sum represents the average amount of taxes extracted from the people and production economy of every Congressional District and dedicated to the instruments of war.

Pentagon Tax burdens of this magnitude make impossible the achievement of sustained and competitive rates of growth in productivity, marketable civilian industrial production, productive employment, and real incomes. The Pentagon Tax now

constitutes one of the most important sources of the inefficiency, declining economic and financial health and general dislocation of the capital base of the United States.(4)

The military budget has become an important source of five debilitating problems now afflicting the economic and political structure of the United States. They are the budget deficits, public debt, decay of the infrastructure of public facilities, human deprivation, and overall decline of industrial competitiveness and vitality.

They are discussed in order below.

Budget Deficits

The surge in military spending of the 1980s has triggered Federal budget deficits without precedent in the period since World War II. The cumulative deficits incurred since the runup in military spending between FY 1981 and 1988 totalled approximately \$1,672.6 billion, or \$1.7 trillion, excluding trust funds, such as Social Security funds.(5) The Federal Funds deficit has thus averaged \$209.1 billion each year since 1981 (\$232 billion in 1988 dollars). The figure most often presented for public discussion is a somewhat lower number, created by counting reserve funds from the Social Security trust fund as well as other trust funds.

Deficits have averaged almost 5 percent of gross national product throughout this period. This is more than twice the average for the 1970s of 2.1 percent and almost four times the postwar average of 1.1 percent.(6) A cautionary historical note can be added here. We should remember that the comparatively modest deficits of the 1960s and early 1970s, especially during the VietNam War era, were sufficient to trigger a dollar devaluation and abandonment of the U.S. gold standard of currency backing as gold reserves were depleted. It would not be wise to rule out a repetition of this or similar patterns as a longer-term consequence of the far higher deficits of the 1980s.

The quadrupling of the Federal budget deficit is due in large part to the rapid increase in military spending, in combination with the 1981 tax cut and historically high real interest rates. These factors multiplied the public debt by historic proportions over the last eight years.

More than two trillion dollars have been spent

on the U.S. military in the last eight years, and the annual military budget is now about \$300 billion per year.(7) These figures do not include debt service. Every working day for the last eight years the Pentagon has consumed an average of \$1 billion.

The contention that the deficits are created primarily by social or non-defense spending fails to bear close scrutiny when the growth rates of important budget categories are examined closely, as the House Budget Committee, for example, has done. Between 1980 and 1987 military spending increased 52 percent, and interest payments soared 90 percent, while all other civilian spending increased by a mere 5.2 percent, less than 1 percent per year. Of all the social programs, Social Security and Medicare payments for individuals, financed through trust funds, together with entitlement programs, increased 22 percent, after inflation. All other discretionary categories of Federal civilian spending, including environmental protection and grants to state and local governments for education, mass transit, public health, and public infrastructure improvement, were cut by 35 percent (see Figure 1).(8)

Debt

Without abundant reserves, deficits quickly generate debt, and swiftly compounding debt and interest payments have mushroomed since the great Pentagon spendup began. Debt is a many tentacled octopus threatening strangulation of the American economy. In this study we look at only two of its key components. We consider the growth in debt of the United States government, and the transformation of the United States into a debtor nation.

At the end of 1980, the U.S. Federal debt was \$914.3 billion. Over the next eight years, while military spending and debt interest were the major source of growth in Federal spending, Federal debt grew to \$2,586.9 billion, i.e. to \$2.6 trillion.(9) This increase of \$1,672.6 billion amounted to \$209.1 billion per year from 1981 through 1988, and the Administration, unwilling to reduce Pentagon outlays or levy taxes to pay for them, projects continuation of this or a higher average rate of increase in Federal debt for the next six years, through 1994.(10)

The Administration projects a total Federal debt

of \$3.084 trillion at the end of 1990 (11), *more than tripling the national debt in just one decade.* An Administration which has proclaimed its devotion to getting the government off the backs of the people has piled debt upon them, and continues to pile it on, at a rate of *more than \$4 billion per week, or \$217 billion per year.* To reduce the rate of growth in Federal debt will require corresponding reductions in military spending.

A Debtor Nation Standing Tall

In 1981 the United States maintained a seemingly comfortable surplus of more than \$140 billion in its net international investment position.(12) This means the U.S. was a creditor nation, a position it had maintained for seventy years, through Federal administrations of both major American political parties. That form of standing tall apparently did not appeal to the Reagan Administration, whose addiction to debt by 1985 led it to liquidate its international investment inheritance.

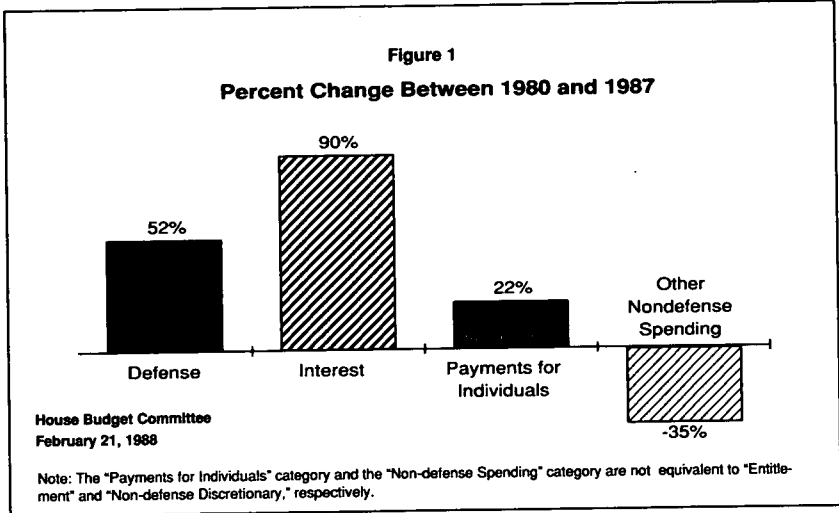
Paul Volcker, head of the Federal Reserve Board in 1984, anticipated this historic turning point in the following words: "The net investment position of the United States overseas, built up gradually over the

entire postwar period, will in the space of only three years—1983,1984, and 1985—be reversed. The richest economy in the world is on the verge of becoming a net debtor."(13)

Not only did the Reagan Administration pre-empt the spending of its international inheritance, but it also made the United States the world's largest debtor nation. By the end of 1988, the United States foreign debt approached \$500 billion, and was increasing by more than \$2 billion per week (see figure 2).(14)

The trade deficit is a contributing factor to the increasing U.S. foreign indebtedness. Wassily Leontief, a Nobel Prize-winning economist, predicted as early as 1981, that a worsening balance of payments would be one of the harmful results of the Reagan military spending surge. He said, "If handled improperly, these huge jumps in military spending will mean higher inflation, a worsening balance of payments gap, a drain on productive investment, soaring interest rates, increasing taxes, a debased currency and, in the long run, more unemployment." (15)

For 5 consecutive years the trade deficit has



exceeded \$120 billion per year, and totalled \$137.3 billion in 1988. Since the beginning of 1984, the trade deficit has averaged \$12 billion per month, in current dollars.(16) High Federal deficits have contributed to the trade deficits, as a portion of the wages and salaries coming from accelerated military spending are spent on imported merchandise.

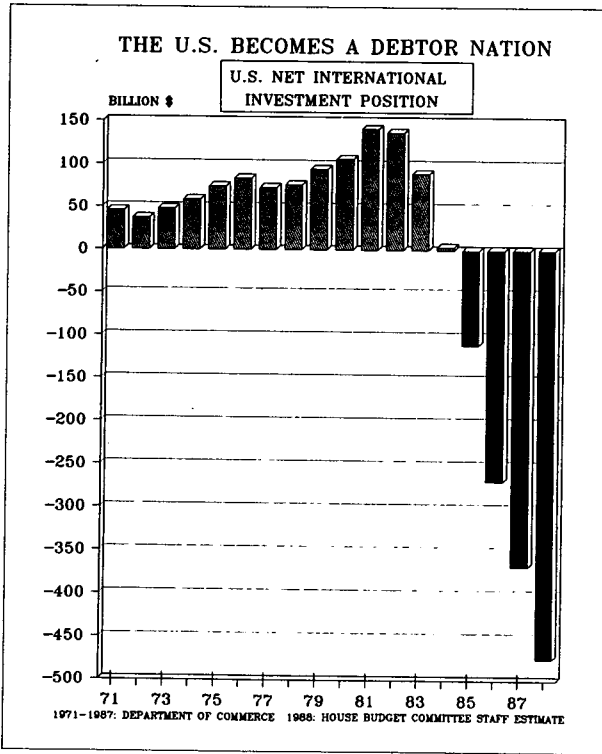
Former U.S. Budget Director David Stockman, testifying before the Senate Budget Committee, described the scenario in terms that can scarcely be called rosy: "We are in the same position that many companies are in when they are on the eve of Chapter 11 (bankruptcy proceeding)."(17) This trend is compounded by sustained high military spending, revealing underlying weakness to allies

and antagonists alike. This in turn undercuts the image of steadfast power which the U.S. government seeks to project with a muscle-bound militarism whose financial feet of clay are increasingly evident.

Deprivation

When capital resources and incomes are depleted or diverted from productive enterprises which meet human needs, and are instead devoted to unproductive or outright destructive purposes, human deprivation is the inevitable result. Prosperity and the growth of real income are the fruits of saving and investment in productive enterprise.

Figure 2



Investment in waste will produce impoverishment. There is substantial evidence of declining real incomes for millions of Americans, and of increasingly severe deprivation in the United States, in spite of the massive, deficit-driven military consumption spree of the 1980s.

These problems have been exacerbated by profound underlying changes in the private economy, including the loss of manufacturing jobs, the growth of income inequality, and the skewing of job creation towards low wage jobs. Between 1979 and 1985, while the trade deficit soared, more than 8 million American factory jobs were eliminated, according to Labor Department studies, which cited foreign imports as a primary factor in the reduction of well-paying manufacturing jobs. (18)

A staff study for the Senate Budget Committee found that "The dominant trend in American job creation during the 1980s has been for low-paying jobs to replace those which provided a middle-class standard of living." (19) The study showed that while 64 percent of American jobs paid middle-level wages in 1979, the share of middle-wage jobs created during the 1980s was only 38 percent. Over 50 percent of the increase in employment was in low-wage jobs, that is, jobs at below poverty level wages. High wage jobs accounted for the remaining 12 percent of the growth in employment.

Overall, the last decade's increase in employment is marked by a shrinking share of middle-wage jobs, modest growth in the share of high-wage jobs, and even larger growth in the share of low-wage jobs. This is called *downward wage polarization*. (20)

The combination of shrinkage in middle-wage jobs with ongoing inflation rates, which frequently have exceeded both productivity and income growth rates, has brought about a decline in real wages. Average weekly earnings for the total private nonagricultural sector of the U. S. economy have declined to \$248.83, from their 1972 level of \$294.84, a 15.6 percent *decline*, removing almost \$2,400 per year from the yearly income of the average American wage earner. (21) At the same time, per capita disposable income for the entire population rose from \$8,562 to \$11,362 during the same period, a growth of 32.7 percent. (22)

The growth of inequality explains the apparent contradiction. Each set of figures points to a differ-

ent part of the income picture. Real incomes are declining for wage earners and some segments of the middle class, but are increasing for other segments of the middle class and for the upper classes. Between 1979 and 1987 real pre-tax family income declined 8.9 percent for the lowest fifth of the U.S. income distribution spectrum while rising 11.5 percent for the highest fifth. (23)

The policies which cause deprivation have harmed the most defenseless, but in the long run, the most vital segment of the U.S., our children. Twenty percent of American children now live in poverty. This is an increase of 25 percent since the beginning of the decade. (24)

Federal spending for programs benefiting needy children have been cut by an estimated 40 percent since 1980. If present trends continue, 25 percent of American children will live their childhoods in poverty. Priority for the military spendup has become dangerous to the well-being of our children. (25)

Decay of Infrastructure

The public works infrastructure is the extensive national network of basic public facilities, such as water treatment plants, streets and sewers, bridges, highways, railroads, and various modes of public transportation. These and other similar facilities are primary determinants of the productivity of American industry and agriculture, as well as of the health and standard of living of the American people. The infrastructure is literally the material foundation upon which the local and national economies are built.

Our public infrastructure is decaying. When a bridge falls down, carrying people to a watery death below, it announces and symbolizes the decay of critical public works. In its 1988 report, *Fragile Foundations*, The National Council on Public Works Improvement found "convincing evidence that the quality of America's infrastructure is barely adequate to fulfill current requirements and insufficient to meet the demands of future economic growth and development." (26)

Public works spending is declining as a government priority, even as peacetime military spending has risen rapidly. In 1950, federal, state, and local governments devoted 19 percent of their budgets to public works. By 1985, after 35 years of Cold War budget priorities and the Reagan military spending

spree, the percentage had dropped more than 60 percent, to 6.8 percent. It should be little wonder that half the bridges of New York City are rated in poor or fair condition.(27)

Low or falling infrastructure investment correlates closely with declining economic productivity. From 1971 to 1985, the growth rate of nonmilitary public capital stock dropped from 4.1 percent to only 1.6 percent per year. At the same time, productivity growth fell in the U.S. from 2 percent to 0.8 percent.

Industrial nations with high levels of public investment have surpassed the U.S. in productivity growth. The U.S. from 1973 to 1985 had the lowest productivity growth of the G-7 industrial nations, and the lowest rate of investment in public infrastructure facilities. On the other hand, the U.S. had the highest rate of investment of these seven major industrial nations in unproductive military projects.

The U.S. has been investing less than 1 percent of output in infrastructure projects, and more than 5 percent of GNP in military projects, with resulting low productivity growth. Japan, by contrast, reverses the priorities. It invests 1 percent of GNP in its military, and more than 5 percent of output in public facilities. Increased competitiveness clearly will require major increases in spending for public facilities. Estimates of the increased expenditure required range from \$17 billion to \$70 billion per year.(28)

Declining Industrial Competitiveness and Financial Stability

Federal budget deficits averaging more than \$200 billion per year for almost a decade, and foreign trade deficits averaging almost \$144 billion per year over a five-year period, tell the world something is deeply wrong with the U.S. economy. In effect, the United States has become the world's foremost producer of IOUs, as Federal and international debt of the U.S. accumulates at an alarming and destabilizing pace.

Deficits devour savings. Domestic investment, which is the fountainhead of productive capacity, real wealth and incomes, and overall prosperity, is limited by the available pool and price of savings. When unproductive expenditure, whether military or otherwise, is financed by enormous deficits, the quantity of savings available for productive invest-

ment is reduced, and its price, measured in terms of real interest rates, is increased, in the absence of intervening special factors.

The Wall Street Journal warned of the problems created by unproductive government expenditure, especially military spending, in early 1980, when the Carter Administration signaled its intention to increase the military budget. In an editorial insightfully titled "Burning Up \$1 Trillion," the Journal observed: Government spending of any kind tends to be more inflationary than private spending: it increases incomes *without increasing the supply of goods* that consumers can buy. *Defense spending, in this sense, is the worst kind of government outlay, since it eats up materials and other resources that otherwise would be used to produce consumer goods* (emphasis added).(29)

The military spending surge of the 1980s has imposed a quadruple burden upon the American production and financial structure, in some cases exacerbating tendencies already visible to the discerning eye earlier in the Cold War era. The elements of the quadruple burden include:

- reduced national savings and diminished financial reserves.
- increased real interest rates.
- reduced investment in productive facilities and public infrastructure facilities.
- reduced productivity.

These are principal components of reduced American productivity and competitiveness. Let us consider each of them in turn.

National saving is comprised of personal savings, earnings retained by corporations, the surplus or deficit of state and local governments, and the Federal surplus or deficit.(30) From 1949 to 1980, net national saving averaged 7.3 percent of gross national product, but trended slowly downward from its highest rate of 8.3 percent between 1965 and 1968. Even these rates compare unfavorably with the comparable savings rate for other major industrial nations such as Japan and West Germany.

But between 1981 and 1988, the U.S. net national savings rate plummeted 62 percent, from the post-war average of 7.3 percent to an abysmal 2.8 percent, far short of the increased rate need to revitalize the U.S. industrial base.(31) The deple-

tion of savings and the destabilizing impact of debt accumulation on the financial structure of the U.S. is further indicated by the ominous rise in the ratio of total debt to gross national product (GNP). The debt-to-GNP ratio has risen in the last eight years to its highest level since 1929, and continues its sharp rise.(32)

The most dramatic, if not necessarily the most dangerous, evidence of declining U.S. financial strength is found in the *American Banker's* annual ranking of the world's 500 largest banks. In 1988, for the first time, there were no American banks among the top 25 banks of the world. The world's top 10 banks are now Japanese, as are 17 of the top 25 banks.(33)

"It is a measure of Japan's postwar decision to concentrate capital and energy on civilian development, rather than military development. The success of the Japanese banking industry reflects the success of that decision. It's a lesson that we should take to heart," according to John Kenneth Galbraith.(34)

Given the sustained large deficits and dismal savings rate of the last eight years, it should not be surprising that real interest rates, reflecting the nominal level of rates minus the rate of inflation, have reached their highest levels of the postwar era. Real interest rates on three month treasury bills have averaged 4.1 percent for the last eight years, far above the postwar average real rate of 0.2 percent.(35) These are the highest real rates since the 1929-1932 era.(36)

Real long-term interest rates have also been forced to exceptional heights by the deficits of this decade. The real cost of funds for Federal government debt service has remained above 6 percent for the last six years, the highest level in at least 30 years.(37) Financing increased military spending through IOUs instead of direct taxation has proven to be an exceptionally expensive proposition. High real interest rates mean that weapons may be paid for again and again via debt service, unless this debt is quickly reduced or liquidated.

Reduced investment in production facilities, followed by stagnant or reduced living standards, as discussed above, is the third economic burden, and this one is two-sided. First, there is a direct diversion of available capital and income to an unproductive sector, in this case the sovereign's army, navy, and

air force. Second, the increasing shortage of capital contributes materially to the rise in real interest rates.

The central point here, indeed one of the central points of this entire analysis, is that as a result of reduced saving and higher interest rates generated by the military spending spurge, net domestic investment has been seriously retarded.

At a current rate of 2 percent, the United States has the lowest rate of net capital formation, meaning the lowest percentage of GNP flowing into fixed investment in new plant and equipment, since the Depression decade of the 1930s.(38) Net private domestic investment in 1987 was only \$214 billion, 16 percent below its 1973 level of \$257.1 billion.(39)

The real stockholders equity in all U.S. manufacturing corporations rose in almost uninterrupted fashion to \$755.76 billion in 1973. For the last 16 years, it has sputtered and more or less stagnated, standing at \$767.95 billion at the end of 1987, a feeble growth rate of 0.87 percent per year for a 14 year period. The Dow Jones Industrial Average, adjusted for inflation, stood at 1699.40 at the end of the third quarter of 1988, almost exactly 1000 points, in real terms, below its 1965 level of 2694.91, remarkably close to the nominal level reached prior to the crash of 1987.(40)

The weakening of the American financial structure and economy relative to competitor nations less obsessed with military prowess is reflected in basic comparisons of international capital markets. U.S. corporations in 1988 accounted for 29 percent of the world's stock market capital, while Japanese corporations accounted for 44 percent.(41) The Japanese capital market as a whole is now bigger than the United States capital market as a whole.(42) By February of 1989, the American public had decided that Japan had become the world's leading economic power.(43)

The Federal decision to expend more than \$650 million each year of each Congressional District's income and capital resources on unproductive military purposes predictably has contributed to declines in important indices of U.S. international competitiveness. These indices are developed by the Federal Council on Competitiveness, which defines competitiveness as a nation's capacity to "produce goods and services that meet the test of

international markets while simultaneously maintaining or expanding the real incomes of its citizens."⁽⁴⁴⁾

The United States fails the test of competitiveness on at least four different indices of productive competitiveness. In standard of living, trade, productivity, and investment, the United States is below 1972 levels relative to other industrial nations. The standard of living index stands at 78.9, 21.1 points below 1972 levels.

The productivity index has dropped 31.3 points, to 68.7. The trade index has dropped 17.4 points to 82.6, and the investment index stands at 96.2, 3.8 per cent below 1972 levels. As a consequence of deeply warped budget priorities, the U.S. standard of living has grown only one-fourth as fast as the average standard of living in the seven major industrial nations.⁽⁴⁵⁾ In addition to the U. S., these nations include Canada, France, Italy, Japan, the United Kingdom, and West Germany.

CONCLUSIONS

Five major findings emerge from this analysis:

First, the American people make markedly unequal sacrifices to support the U.S. military establishment. Analysis of tax and spending patterns for the Pentagon budget reveal it as a major source of geographical inequity and imbalance.

Second, the Pentagon Tax drain from the Midwest and Northeast is severe, causing a hemorrhage of capital outflows. Rust Belt economic stagnation is in significant measure the consequence of diversion of potentially productive tax resources to an economically unproductive Pentagon.

Third, the Pentagon Tax concentrates disproportionate amounts of Pentagon spending in coastal areas, and drains resources disproportionately from inland areas which constitute the industrial and agricultural heartland of the United States. To some degree, the bi-coastal pattern of economic growth is a result of parasitic military stimulus, which drains resources

from the productive sectors of the economy.

Fourth, for 321 Congressional Districts representing over 73 percent of the nation's population, high military spending is a continuing drain on their financial resources. This undermines regional economic development by reducing real incomes, and creates a major drag on efforts to revitalize key industries and regions.

Fifth, as Pentagon spending adds relatively little to the productive capital base of a community, and consumes rather than creates real wealth, even the Congressional Districts with sizable net gains should find little comfort in this analysis. Although St. Louis and Los Angeles, for example, and several other areas have major inflows of military expenditure, they display ongoing problems of housing, education, homelessness, transportation, and overall financial stress.

The conclusion is inescapable: accelerated military spending is eroding the foundations of the American economy, and moving the U.S. to the back of the international competitive pack. The swollen military budget is impoverishing major sectors of American society, and exacerbating budget and economic development problems for 321 Congressional Districts. Federal budget deficits, high interest rates, compounding debt, lack of international competitiveness, and economic decline will remain major threats to financial stability and prosperity.

The combination of \$300 billion military budgets and \$150 billion Federal debt interest burdens is not sustainable without a further decline in U.S. living standards, continued weakening of the middle class, increased polarization of rich and poor, and further destabilization of the economic and financial structure. In short, sustained high military budgets will make the United States a poorer, weaker, and more divided nation than it is today. National defense should strengthen the nation, not undermine its foundations.

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METHODOLOGY

The concept of the Pentagon Tax is designed to determine the amount of direct U.S. military spending whose cost, or tax burden, should be allocated to a particular geographical area. In this study we are primarily concerned with Congressional Districts. The base year was Fiscal Year (FY) 1987.

For FY 1987, United States military budget outlays, or expenditures, totalled \$282.0 billion, and \$7.1 billion was spent on military categories of international security assistance.⁽¹⁾ Therefore, the total Pentagon Tax burden for FY 1987 was \$289.1 billion. Military-related interest payments on the burgeoning Federal debt are not included in determining the Pentagon Tax burden, and this makes the calculation an extremely conservative one. To establish the Pentagon Tax burden for each state, the total Federal tax burden for military purposes, the Pentagon Tax, is allocated to each state in accordance with a percentage distribution computed by the Tax Foundation.⁽²⁾

The total state military tax burden is divided by the number of Congressional Districts, then multiplied by the ratio of the Congressional District per capita income to the state per capita income. In this way the Pentagon Tax burden for each Congressional District reflects both population and income levels.⁽³⁾

Pentagon outlays data for each county and principal city of the United States are published in the *Consolidated Federal Funds Report, Fiscal Year 1987*, in accordance with the *Consolidated Federal Funds Report Act of 1982* (P.L. 97-326).⁽⁴⁾ Department of Energy weapons outlays are drawn from the same report and combined with Department of Defense outlays wherever appropriate. This report is the less detailed and specific successor to the *Geographic Distribution of Federal Funds* annual series, last published for FY 1984 by the Community Services Administration, and upon which studies by this author for years prior to FY 1981 were based. Its publication was halted by the Office of Management and Budget under Director David Stockman's direction in late 1981.

Where a county includes all or part of more than one Congressional District, aggregate income levels for each Congressional District portion are calculated as a percentage of county aggregate income to determine the portion of the county's military outlays which should be assigned to a Congressional District or part thereof.⁽⁵⁾

The net Pentagon tax gain or loss for each Congressional District is then computed by subtracting the Pentagon Tax burden from the Pentagon outlays for each district. The net gain or loss per family is calculated in two steps. First, the number of families or households in each CD is calculated by dividing the total CD population by the average family size for the 1980 census, currently 3.29. Second, the net gain or loss per family is computed by dividing the net gain or loss per CD by the total number of families or households in the District.

TEXT REFERENCES

1. The methodology is discussed in detail in the Methodology section above. This publication updates two previous editions of this report, *Bankrupting America*, 1982 Edition and 1984 Edition, published by Employment Research Associates, 115 W. Allegan St., Lansing, Michigan, 48933, (517) 485-7655.
2. See statement of Congressman Lee H. Hamilton, *Congressional Record*, June 13, 1984, page E2782.
3. Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Book II, Chapter III, edited by Edwin Cannan, Chicago: The University of Chicago Press, 1976, Volume I, page 352.

4. For an extended discussion of the economic impact of military spending, especially its effect upon productivity, see Dumas, Lloyd J., *The Overburdened Economy: Uncovering the Causes of Chronic Unemployment, Inflation, and National Decline*, Berkeley: University of California Press, 1986.
5. Tax Foundation, *Facts and Figures on Government Finance, 1988-1989 Edition, Table C-2, "Federal Receipts and Outlays by Fund Group."* Stated in constant 1988 dollars using GNP deflators. Hereafter cited as *FFGF 88-89*.
6. U.S. House of Representatives, Office of the Speaker, *Crossroads: A Report on the State of the U.S. Economy*, Washington, D.C.: U.S. House of Representatives, August, 1988, page 8. (Hereafter cited as *Crossroads*.)
7. U.S. House of Representatives, Committee on the Budget, *President Reagan's Fiscal Year 1990 Budget*, Washington, D.C.: U.S. Government Printing Office, January, 1989, table E. 1, "Spending by Major Category, FY 1962 - FY 1994." Restated in constant 1988 dollars, using GNP deflators. Unless otherwise stated, whenever current dollar values are restated in constant dollars in this report, GNP deflators are used. Hereafter cited as *PR FY 1990 Budget*.
8. U.S. House of Representatives, Committee on the Budget, *President Reagan's Fiscal Year 1989 Budget*, Washington, D.C.: U.S. Government Printing Office, February, 1988, page 243.
9. *FFGF 88-89*, Table C1, "Summary of Federal Fiscal Operations, Fiscal Years 1940-1988."
10. *PR FY 1990 Budget*, Table IX.A, "The President's Budget 1989-1994 By Function, Budget of 1,009/89," page 257.
11. *Ibid.*
12. *Economic Report of the President, 1989*, Washington, D.C.: U.S. Government Printing Office, 1989, Table B-106, "International investment position of the United States at year-end, 1980-87."
13. Quoted by Senator Lawton Chiles, *Congressional Record*, June 21, 1984, page S8034.
14. *PR FY 1990 Budget*, Figure 3, "U.S. Becomes a Debtor Nation," page 23.
15. Kaiser, R.G., "Reagan's Defense Spending Could Turn Into Economic Nightmare," *Washington Post*, April 25, 1981, page 1.
16. *Economic Report of the President, 1989*, Washington, D.C.: 1989, Table B-105, "U.S. merchandise exports, imports, and trade balance, 1970-1988." This report is hereafter cited as *ERP*, with identification of the pertinent table.
17. Quoted in "Heavier Load: Climbing Federal Debt is Inexorably Raising U.S. Interest Burden," *Wall Street Journal*, June 22, 1984, page 1.
18. Seaberry, Jane, "8 Million U.S. Jobs Said Lost Since '79," *Washington Post*, June 7, 1985, page B1.
19. United States Senate, Committee on the Budget, *Wages of American Workers in The 1980s*, Washington: U.S. Government Printing Office, September, 1988, page vii.
20. *Ibid.*, page viii.
21. *ERP*, Table B-45, "Average weekly earnings in selected private nonagricultural industries, 1947-1988." Adjusted to 1982 dollars, using ratios from Table B-27, "Total and per capita disposable personal income and personal consumption expenditures in current and 1982 dollars, 1929-88."
22. *ERP*, Table B-27, op. cit.
23. *PR FY 1990 Budget*, page 24.
24. *PR FY 1990 Budget*, page 12.
25. King, Corretta Scott, "Children need help more than the military does," *Detroit Free Press*, February 21, 1989, page 7A.
26. *Congressional Record*, January 25, 1989, page S637.
27. *Ibid.*
28. *Ibid.* See also Aschauer, David Alan, "Rx for productivity: Build infrastructure," *Chicago Fed Letter*, Chicago: The Federal Reserve Bank of Chicago, September, 1988, Number 13.
29. "Burning Up \$1 Trillion," *Wall Street Journal*, Editorial, January 22, 1980.
30. *Crossroads*, page 4.
31. *Ibid.*
32. The Bank Credit Analyst, *The Escalation in Debt and Disinflation: Prelude to Financial Mania and Crash?*, Montreal: BCA Publications, Ltd., 1987. Pages 111-114. Hereafter cited as *BCA*.
33. Sudo, Philip T., "U.S. Banks Drop Out of World's Top 25," *American Banker*, July 19, 1988, page 1.
34. *Ibid.*
35. *Crossroads*, page 3.
36. *BCA*, page 123.
37. *BCA*, page 129.
38. Friedman, Benjamin, "U. S. Indebtedness And The Implications For Global Stability," *Phase II In The Escalation of Debt, Disinflation, and Market Mania: Prelude To Financial Crisis?*, Montreal: BCA Publications, Ltd., 1988, page 45.
39. *ERP*, Table B-17, op. cit.
40. *ERP*, derived from Table B-94, "Common stock prices and yields, 1949-1988," and Table B-3, "Implicit price deflators for gross national product, 1929-1988."
41. Morgan Stanley Capital International Perspective (N.Y.C.), quoted in "Harper's Index," *Harper's Magazine*, March, 1989, page 17.
42. Cullison, A. E., "Japan Borrows Short, And Lands Funds Long," *Journal of Commerce*, March 1, 1989, page 7.
43. Morin, Richard, "Americans Rate Japan No. 1 Economic Power," *Washington Post*, February 21, 1989, page A19.
44. Council on Competitiveness, *Competitiveness Index*, Washington, D.C. 20004: Council on Competitiveness, 1331 Pennsylvania Avenue, NW, Suite 900; 1988, page 1.
45. *Ibid.*, page 4.

METHODOLOGY REFERENCES

1. *PR FY 1989 Budget*, op. cit., pages 135 and 140.
2. *FFGF*, op. cit., Table C55, "Allocation of the Federal Tax Burden by State."
3. U. S. Department of Commerce, Bureau of the Census, *1980 Census of Population and Housing, Congressional Districts of the 96th Congress*, PHC 80-4, Issued February, 1983.
4. U. S. Department of Commerce, Bureau of the Census, *Consolidated Federal Funds Report, Fiscal Year 1987, Volume I: County Areas, and Volume II: Subcounty Areas*, Issued April, 1988.
5. U.S. Department of Commerce, Bureau of the Census, *Summary Tape File 3D, Congressional Districts of the 98th Congress*, op. cit.

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Representative SCHEUER. Indeed we will and we enjoyed your testimony. It was very constructive and very interesting.

We will now go on to Mr. Frisby. Please proceed, Mr. Frisby, and your testimony will appear in full in the record.

**STATEMENT OF GREG FRISBY, CHIEF EXECUTIVE OFFICER,
FRISBY AIRBORNE HYDRAULICS**

Mr. FRISBY. Good morning. My name is Greg Frisby, chief executive officer at Frisby Airborne Hydraulics. Frisby is a 50-year-old manufacturer and designer of hydraulic systems and assemblies predominantly for aerospace. We have moved from being about 95 percent military oriented in 1980 to about 25 percent today.

The public response to our efforts at converting to nonmilitary manufacturing has been overwhelming. We at Frisby Airborne have been featured in newspapers across the country—the Boston Globe, Chicago Tribune, Daily News, Newsday, Philadelphia Inquirer, USA Today, and floods of reporters from smaller town press. Our magazine credits include Inc., Macleans magazine of Canada, and numerous trade publications. We have been the feature of stories on both Canadian broadcasting and national public radio. We have even had an intensive interview by the Tass News Agency for a feature in several publications in the Soviet Union. NBC Television News will be visiting our plant on Long Island, NY, for a segment of the “Today” show, and most importantly, I have been honored today with the opportunity to offer my testimony to the Joint Economic Committee.

While such tremendous exposure and acclaim is obviously flattering, it is also extremely disconcerting.

We didn't hit the Fortune 500 this year. In fact, with under 100 employees and \$10 million in annual sales, I daresay the fortune 50,000 might be well out of reach. Defense News published in 1989 top 100 contractors at the DOD last week—once again, the conspicuous absence of Frisby Airborne.

The fact that Frisby Airborne, a company that is most likely outnumbered by most congressional committee staffs, is looked to as one of the only successful examples of U.S. military contractors making the transition to commercial and civilian markets is as worrisome to me as it surely must be to the Congress.

I would like to address my testimony today, however, toward what can and should be done for defense contractors of the 1980's to smooth their transition to stable diversified markets in the 1990's. Since the Frisby story has been so thoroughly documented in the press, and in the interest of time, I will just briefly summarize our efforts to date. What we at Frisby Airborne have done is to apply what we feel is common sense, or what Tom Peters termed “A blinding flash of the obvious.”

Founded in 1940 by R.A. Frisby, Frisby Airborne was a captive Long Island subcontractor to Grumman and Fairchild-Republic. As the production rates for these principal customers declined in the defense budgets of the late 1970's and early 1980's, so too did our sales outlook. Although we had started to diversify within the defense industry, the much publicized Reagan arms buildup with its

emphasis on strategic and "black hole" weaponry did little for conventional arms suppliers like ourselves.

In fact, the hundreds of thousands of dollars Frisby lost when the T-46A trainer program was canceled in 1986 more than smothered the mildly successful initial commercial sales we had realized at the Boeing Co. to date. And Boeing's decree that year mandating 25 percent price reductions and the freezing of those prices for 5 years made it painfully apparent to us that if we were to remain in business, be it defense or commercial, we had to significantly change the way we do business.

In the face of these and other industry changes, our strategic marketing efforts were focused successfully on five goals: One, establish sales presences at all commercial aircraft manufacturers; two, attain global marketing presence in advance of 1992; three, develop additional products in additional growth markets; four, diversify to other value-added product and market applications; and five, we established joint ventures with R&D firms.

To accomplish the goals of our strategic plan required fundamental internal changes. A company, large or small, whose credo is "but we've always done it that way" will find itself hopelessly uncompetitive at best and, most likely, out of business in the 1990's.

We at Frisby took the requisite "leap of faith" and instituted the following significant cultural changes:

One, a 100-percent move to participative management in production and methodizing in order to rethink every aspect of every job at Frisby Airborne.

Two, elevated hourly workers to the decisionmaking level and eliminated a layer of management. And in our company we only have two layers.

Three, a total obsession to doing it right the first time, thereby reducing scrap and rework costs while saving time.

Four, we instituted a profit-sharing plan.

Five, we monitor financial statement every month with our employees to discuss our progress or lack thereof.

Six, we cross-train indirect employees to encourage their participation in direct labor in order to help reduce our overhead burden.

Seven, we teach English to our non-English-speaking employees at our own expense.

Eight, we offer flexible work shifts/hours to accommodate individual requirements such as returning mothers.

The efforts, combined with numerous other ongoing efforts, have had dramatic results at our place. We've reduced scrap by over 50 percent for each of the last 3 years; we've reduced rework by over 20 percent per year; we've got zero employee turnover; our profit margins on the Boeing jobs we have received since the beginning of 1980 are actually higher now; the significant cost reduction brought on through these in-house gains have resulted in improved success all across our bidding process; our growth and sales volume this year will exceed 30 percent, with 20 percent growth projected over the next several years, and we'll actually be hiring in the aerospace industry, probably 10 percent this year and 10 percent next.

I've offered these internal Frisby changes for consideration in order to provide representative examples of what types of dramatic

shifts are required to remain competitive in the manufacturing market. I have no doubt that these moves, plus others, will aid our transition to an aerospace leader.

Our principal reason for assured success will be attributable to the high quality of excellent employees. They are part of an aerospace manufacturing tradition which was instrumental in the growth of our U.S. economy, and can be instrumental in its growth in the 1990's as well. There really is no excuse for defense manufacturers not to take advantage of the tremendous human resources currently available in our industry and to apply the innovative leadership demonstrated in the growth of our aerospace industry toward making those moves required to transition their firms into the manufacturing marketplace of the 1990's.

These well-publicized changes at Frisby, a small privately held family business, has made—have transitioned us as I said from 90 percent military to less than 20 percent in less than 5 years without layoffs. We certainly believe that our transition was greatly facilitated by our size. We also believe that our products are probably more readily adaptable to use than some others. We do not believe, however, that it is impossible for large defense contractors to make similar transitions.

From our viewpoint, a significant constricting factor is Wall Street, which looms in the minds of the management teams of public corporations that can ill afford to show bad quarterly or yearly reports while expensive, but very necessary retooling occurs. The easy way out, unfortunately, is often to close down an existing defense plant and acquire a commercial operation.

Unfortunately, these decisions are being made in most cases by corporate directors, who will not personally be impacted by these layoffs. What remains is a displaced work force and a community rightfully feeling betrayed by the company whose profits they helped to create. Such situations obviously must be addressed.

What is urgently needed is unprecedented communication and cooperation between and labor and management. Employees must be willing to cross-train, cost-share through concessions and do whatever else is necessary to aid in the valuable transition. Management though, must work hand in hand with labor and include employees in all retraining, productivity, and cost-savings decisions which must occur. In addition, obviously, profit sharing would be also valuable.

The Government's role in this effort should be that of facilitator. True conversion will not occur as a result of laws mandating conversion. Congress must provide incentives to corporations to convert. The most vital contribution you can make to a U.S. conversion effort is to increase incentives and funding for research and development of new commercial technologies.

Whether this would be best accomplished through a permanent system of tax credits for R&D, increased SBIR or similar set-aside programs or some other means is a matter for the Congress to decide. This R&D funding should be directed toward upgrading existing weapons systems and stimulating technology transfer of defense technologies toward commercial applications. Defense contractors have tremendous numbers of R&D projects under develop-

ment in their labs today. They must be encouraged to bring those to market.

Further, in order to stimulate the retooling that is necessary, a reinstatement of the investment tax credit, low-interest loans, and/or possibly challenge grants would offer some positive incentives for conversion. If successful conversion is to occur, management of the major contractors must want it to occur. It is impossible to imbue enthusiasm or involvement through legislative mandates.

For affected communities and displaced workers, Congress should provide funds to those communities earmarked to establish dislocation centers, retrain workers, hold job opportunity fairs, and stimulate alternative industries, such as through high-technology incubator programs. With the high concentration of technical expertise and the skilled work force inherent in defense dominated communities such as on Long Island, the Federal Government will be nurturing logical growth industries through the commitment of economic development assistance funds to incubator development.

Further, in order to assist the retraining of displaced workers, the Federal and State Governments should consider combining on economic assistance to prevent the exodus of teachers from high job loss areas and to stimulate the establishment of retraining and research partnerships between private industry and local universities. Education and retraining will form the foundation upon which successful transition and growth will occur.

I wish to reiterate my belief that the Government role in economic conversion should be that of facilitator. The private sector must be motivated to perform the research and development vital to both our national security and economic strength. The reason large and small defense contractors invested in military programs in the past, even with their lengthy payback periods and bureaucratic overkill associated with them, was that the business was profitable in the long haul. There currently is no incentive to develop new technologies in a marketplace as volatile and uncertain as defense contracting.

However, in no way should my desire to see more contractors convert be misconstrued as an abandonment of the defense industry. In fact, we at Frisby have targeted defense for 25 percent of our future sales. Both Frisby employees and management view defense work as one of the most important contributions we can collectively make for our country. It is of great concern to us that with no rewards for high-quality innovative work in the defense industry, the production of the goods necessary to defend the United States will be left to those companies too slow and inefficient to succeed in the more lucrative commercial marketplace, or companies unwilling to privately fund technological R&D and innovation.

While I'm certain that the DOD horror stories in the press have tarnished the image of defense contractors in many of your minds, the truth is that there is an efficient, dedicated core of defense businesses that do not abuse the system, but rather are abused by it. The burdens of defense work are disincentives that erode the impressive U.S. defense industrial base and reduce our manufacturing capacity, thereby limiting our country's ability to mobilize in times of conflict. We must not enlarge the regulatory structure that is such a disincentive to defense contracting.

I urge the Congress not to mandate economic conversion in any form. Instead, Congress should attempt to remove the roadblocks causing innovative companies to avoid defense contracting and encourage transfer of advanced technologies to the commercial marketplace by offering incentives to do so. It is the only way to retain and motivate the very companies that are vital to the future defense in our country and to the successful technology transfer that will be the basis for future economic growth.

I urge the Congress to make the stimulation of research and development and the elimination of regulations inhibiting innovation a national priority. It is through the free market system and not through increased regulation that the desired reinvestment and innovation toward commercial markets will transpire.

As this Committee knows far better than I, there are numerous conversion and assistance bills currently before the House and Senate. We've heard some informed opinions as to which are valuable and which are not. I don't know as much as the gentleman sitting on either side of me regarding most of the bills, since I spend most of my time making sure survival is a daily occurrence.

There is a great need, though, to continue to provide assistance toward the needs of those communities with severe job losses through, for example, Secretary of Labor's discretionary funds, which successfully brought over \$2 million to Long Island for displaced Grumman, Harris, and Fairchild employees from 1987-90, and such cost-sharing partnerships between the Federal, State, and local governments as the ADC and EAF. These methods provide assistance to displaced workers and impacted communities without greatly overloading an already overburdened Federal budget.

The proposed fund created from a small percentage of the Pentagon's procurement budget and the DOE's nuclear weapons budget, as called for in H.R. 101, deserves serious consideration as a possible source for increased funds. However, I don't wish to misconstrue that as a tax on individual contracts. The percentage on the overall budget should be the source of funds. However, the central provision of this bill mandating conversion or alternate use committees would mean additional paperwork and a waste of valuable time for both contractor management and employees, and will in no way ensure success.

Similarly, H.R. 2852 includes a provision for the improved transfer of information and enhanced notification to communities of available grants, job banks, and development resources. That is a valuable asset to any conversion bill.

In sum, defense contractors have numerous options available to them as the reductions in the defense budgets of the 1990's unfold. As they address the tough decisions associated with this conversion, it is my hope that they rightfully face this volatile period as we have, as a challenge and a source of unlimited opportunities.

We at Frisby are proud to be a small example of what can be accomplished when management and employees of an organization forge together on a new course of action. There was no government assistance involved in our conversion, we absorbed all costs of conversion internally, and there were zero layoffs involved. There was a significant cost to retool, retrain, and reinvigorate our organization which did negatively impact our revenues and bottom line.

We, however, applied the requisite long-term vision and have succeeded. It behooves management of other defense dependent organizations to focus on the long-term planning necessary to effect these changes as well. Contractors need not only convert outside of the defense industry to be successful and profitable, however. There is ample room for a transition within the defense budget to growth areas such as electronics, intelligence gathering, surveillance, and verification. But there is unlimited potential available in the commercial marketplace for all companies with advanced technology products.

To be truly successful in this effort as a country, the Federal Government must also join with us in this long-term vision and planning. The creation of incentive to stimulate American industry toward diversified economic strength must be the core of any legislation dealing with conversion.

There is no room for adversarial relationships in a successful program of national conversion. Labor and business both have much to gain from teaming together for the common goal of prosperity in the 1990's. Government and industry must also combine efforts to assure a smooth economic transition. Greater visibility through long-term procurement plans, gradual—and I emphasize gradual—intelligently considered defense cuts, increased progress payments and increased incentives to develop alternate uses for defense technologies will help in creating the impetus contractors need to desire the transition. It is a transition that must be made for the sake of our jobs, families, communities, and our country.

Thank you.

DEVELOP A PLAN TO ADDRESS DOD REDUCTIONS

Representative SCHEUER. Well, I want to congratulate all three members of this panel for a remarkably interesting and thoughtful and stimulating presentation. Each one of you were really superb. Our job is to put it together and come up with some kind of a national policy and recommend that I think, as you suggested Mr. Marlin, to the various legislative committees and to try and get a prototype measure that would include many of the functions that you're talking about, assistance to local communities, assistance to corporations, phasing into the R&D that will enable them to make the transition to the commercial market, analysis of what the facts are, all of the above.

How do we get a national consensus on that? Do you think that this committee ought to engage—well, I guess that you recommend that Mr. Marlin—in additional hearings? Is that a consensus? Or do we know enough now for a few of the experts to sit down and say, this is what ought to be in a consensus bill in the Congress that would combine Gejdenson-Mavroules-Weiss and the rest of the players? Do we know enough now to put that together in a long weekend session at the Aspen Institute or some such place or should we have further hearings?

Mr. MARLIN. I think that my suggestion for a blue ribbon committee is based on the idea that the information is out there but nobody really has been pulling it together. A lot of different skills are required. You have the urban, the regional, State planning, leg-

islative, local government type skill. There's the defense skills. There's the issue of the technology involved, the whole issue of public and private total. There are so many different aspects to the problem of readjustment that the only way anyone is ever going to be able to tackle this is to bring all of these experts together.

It might take two weekends, and you don't want to give a commission like this a very long timeframe or they will go on forever. But if you can give them a deadline and get some very good people together, I think it would make an enormous difference to the quality of the type of legislation that the Congress is likely to come up with in the coming months.

Representative SCHEUER. Whose leadership should such a blue ribbon committee come into being?

Mr. MARLIN. Well, my understanding is that commonly these committees are appointed half by Congress and half by the President and you'd have to get the President to agree that something like this was needed. You'd have to informally test out the idea. But I think the problem is so pressing and there is so much confusion reigning in terms of the ideologies of the different assistant secretaries and the different agencies, and so many contradictory messages being given when I have called around, that I think that the administration would welcome some effort to straighten out the situation. What programs in the Federal Government and the State government have been successful? What do we really need? What would the real numbers be for the budgets that would be required for the staff and for funding of State and local assistance? Until we get all of this sorted out and some consensus, I think confusion will continue to reign and we are not going to get a bill, we're not going to get help, and we're going to have a much more serious problem with the transition than we would have if Congress and the administration could come up with some agreement.

Representative SCHEUER. Well, that is very interesting. All three of you have spontaneously and without rehearsal mentioned Long Island and Grumman and other aerospace manufacturers there as a sort of a prototypical symbol of the problem. Long Island is almost a little State in itself, and to quite a considerable extent quite a variegated community, a heterogeneous pluralistic economy and so forth, but with the aerospace industry perched over it like a 600-pound canary. And what happens to the aerospace industry there is terribly critical to the economic health and vitality of industry in Long Island and also its social health too. You are talking about a lot of people in a comparably small geographical area, a large percent of the population. I think it was fifth or sixth—New York State was fifth or sixth, and a lot of that is concentrated on Long Island. If you included Long Island as a State in terms of the relative impact on the economy, it probably would be closer to one than to six. I presume.

Would this be an area in which a Governor could take the initiative? Is this an appropriate area for Governor Cuomo to appoint such a blue ribbon commission or blue ribbon committee?

Mr. MARLIN. He has such a committee under consideration and Brad Johnson here in Washington has been working on some names. There is another committee already in place which I mentioned.

Representative SCHEUER. In New York?

Mr. MARLIN. In New York. The codirector of my project, Betty Lall is on that council advisory committee. It is called the Industrial Cooperation Council. They are working with the State's electronic association. But Governor Cuomo is also planning to put together a defense advisory panel so he is very much focused on this. Since both New York State and New York City have their budget problems, I think one of the things that this panel will recommend when they are through will be to look to the Federal Government, because they don't have a lot of excess funds lying around.

Representative SCHEUER. Look to the Federal Government for assistance.

Mr. MARLIN. For assistance, right.

GRUMMAN AS EXAMPLE

Representative SCHEUER. Let's talk about Grumman to all three of you. Grumman as you suggested, Mr. Marlin, may be downsizing its labor force on Long Island, perhaps what you mentioned 5,000 employees out of 19,000. It's possible that it will shift some of its labor and some of its production functions to its other facilities in Texas and Florida. But in terms of its impact on Long Island, that's closing down and most of those workers probably would not relocate. So, Grumman does symbolize the problem that we are faced with as a nation, Maine to California.

What should the relationship of Grumman be to the community? I think you mentioned, Mr. Greenwood, that they don't give employees a great deal of notice. My information is that they don't give the Government institutions out on Long Island any notice at all, any more than they give the employees, the economic development organizations and Nassau and Suffolk Counties are given no advance notice, the State labor board gets no advance notice of pink slips, as I understand it.

The employees who are destined for the discard, who are scheduled for discard, for pink slips are herded into a large room on a Friday afternoon close to 5 o'clock, given their pink slips and escorted out of the plant under guard and then given an appointment for a later time at which they can come back and clean out their desk or clean out their lockers. Is this more or less what you heard or is this a variance with what any of the three of you know?

Mr. GREENWOOD. Well, that's as it was reported to our offices what was happening, particularly at Grumman. I would point out that in many instances around the country that is SOP, standard operating procedure.

Representative SCHEUER. Now, Grumman does give the explanation that they are afraid of sabotage, they are afraid of the typical wrench being thrown into the machinery from disgruntled and angry labor. I don't know how much validity there is to that, I don't know of any instances of sabotage, but there may well have been that have not been publicized. I would think companies would be hesitant to publicize that as such an incident. It wouldn't reflect well on their labor relations.

Do any of you have any reaction as to whether this explanation protecting the company against sabotage, violence, destruction of plant and equipment—

Mr. FRISBY. In defense of Grumman, I don't think obviously—I think highly of the aerospace workers on Long Island and I doubt that they would do any of that. I think more in the question is that Grumman doesn't quite know what's going on, because most of the Long Island subcontractors don't know what's going on. F-14, we hear that it is going to be terminated. We see it's going to be terminated, yet there's a congressional fight, obviously, principally from the Long Island delegation saying that no, the F-14(D) is going to be the derivative, there won't be a follow-on aircraft, the ATF is too expensive and we don't need it, and that type of mentality.

So, in some defense of them, I don't think Grumman really knows what's going on yet in the defense picture until ultimately late in the day. I know it says it has cut down for the next couple of years, the F-14 production is supposed to stop, but I'm not so sure that that's a fait accompli and I believe that's what Grumman management also, I would guess, rallies around. But anything such as sabotage, I doubt with the people that I know over there that there would be any such thing.

Representative SCHEUER. Yes, I sympathize with Grumman. For half a century they've been an exemplary corporate citizen on Long Island and they've participated—their executives and staff have participated in a wide variety of community and civic activities. But in the here and now on the question of downsizing and the pink slips and working closely with the appropriate State, county, and community organizations that are desperate to have advance information of plants with pink slips—5,000 workers that you mentioned, Mr. Marlin, their record is not all that exemplary.

Now, it may be that what they need is an example. Maybe what they need is to consult with other industry executives, with government officials, Federal, State, county, and local to see if they can achieve some consensus on what a responsible corporate role would be. And, of course, they are faced with terrible doubts and we in the Congress don't know what the future is going to be for our Defense Establishment.

CUTTING THE DEFENSE BUDGET

Here we have Mr. McNamara, the former Secretary of Defense, recommending a 50-percent cut in 10 years. And we see Mr. Webster providing some intellectual underpinnings for that by saying, yes the changes that are taking place in the Soviet Union seem quite irreversible. The major thrust toward democracy, toward multiparty democracy, toward destroying the Communist Party monopoly on power toward abdicating the use of force in rigidly controlling the Baltic states, Lithuania, Latvia, Estonia, all of whom seem to be rushing, not walking to the nearest exit. And these are phenomena that have taken place in recent weeks and in recent days. Mr. Gorbachev only last week got a very much enhanced presidency and a 5-year term in the cat bird seat.

So, what Mr. McNamara and Mr. Webster were telling us weeks and months ago—the validity of those views have been confirmed by events in recent days, much less in recent weeks.

And then we have four-star General Andrew Goodpasture a man who has spent all of his life in strategic planning, who was commanding general of our troops in World War II and who teaches at the Army War College and similar institutions, he came down and told a group of us in the Arms Control and Foreign Policy Caucus only the week before last that where former Defense Secretary McNamara recommended a 50-percent cut in 10 years. General Goodpasture told us that we should be on a structured downward glide path—and I use his exact words—at the end of 5 years would give us a 50-percent cut in our military budget.

Now, that is a prodigious cut in the military budget coming from a man who has been preeminent in strategic planning all his life, a brilliant man, a military careerist of extraordinary intelligence, we have to take it seriously as an option.

Well, of course, the peace dividend flowing from such an option would be absolutely awesome. Not in the first year perhaps, little in the second year, but come the third and the fourth and the fifth year that peace dividend turns into a torrent and the prospect of how to spend it, some of it in budget deficit reductions but many of it to the things that the gentlemen have talked about is a very exciting prospect. The fact is that Grumman, like the rest of us, does not know who is going to bite the bullet at which one of these options.

I think it's quite obvious that there are going to be very substantial cuts in the defense budget, probably somewhere between McNamara and Goodpasture. And that means that the impact on local economies is going to be awesome and that far more thinking has to be done about how we phase out without causing major hardship to families, major destabilization of communities, of societies.

I take a society like Long Island as a discreet society, it is almost like a little State. And the impact of the kind of cuts that are being contemplated, who knows whether they will continue on with the Tomcat or the other more expensive military aircraft. None of us know. But I think we have to prepare some contingency plans and relationships and philosophies in the corporate sector as well as in the private and government sector that contemplate this extraordinary downsizing by the military in general, which has very desperately important implications for Long Island.

So, the past history gives us little guidance. As I said, for over half a century Grumman has been an exemplary corporate citizen on Long Island. But now they are faced with wholly new challenges that they never faced before of a different national mood than they may have faced decades ago in terms of their moral and ethical obligations to the community in which they reside that has nurtured them as they have nurtured the community; their obligations to workers. The 6-month plant closing bill that Congress passed gives a clue of the direction in which the national thinking is moving and the direction in which corporate thinking ought to be evolving.

COMPANIES MUST PREPARE FOR THE DEFENSE REDUCTIONS

Let me ask the three of you as corporate philosophers, labor philosophers, Mr. Greenwood, what kind of counsel would you give the executives of Grumman, and what direction would you counsel them to take in relating to their labor force and relating to the neighborhoods that surround the Grumman installation and relating to the Long Island association, which is the major Long Island Chamber of Commerce representing all of the heavy hitters in the corporate community? How should they relate to the State labor board, the Nassau and Suffolk County Boards, who according to conversations I've had with them are desperate for information about pink slips, and nevertheless read about the issuance of pink slips in the morning paper the day after they're issued to the employees?

If I were the president of Grumman and if the board of directors was sitting here, what kind of advice would you give them in trying to grow into a responsible corporate leadership role in this awesome challenge of trying to meld and merge into the civilian sector along the lines that you've done so successfully, Mr. Frisby, and to the extent that there may be some inevitable downsizing, some inevitable flow of pink slips, how would you recommend that they face up to that today? And keeping in the back of your mind that they may have some legitimate concerns about security and the violent destruction of their property.

Mr. FRISBY. Well, the LIA that you mentioned before has put a task together and I understand that John O'Brien is participating in it regarding economic conversion on Long Island.

Representative SCHEUER. General Bryant?

Mr. FRISBY. John O'Brien. He is actively looking at that now himself. I would obviously recommend diversification. They have a number of black hole—I'll call them laboratory efforts going on, everything under the Sun you can imagine is going on in the Grumman R&D labs right now. I would say, obviously, any attempt to diversify and bring those applications to commercial markets would be an emphasis that they should go after, try to avoid buying flexible buses that they haven't reviewed the designs of and go with what they know, don't try to acquire a whole different operation that they have no background with, convert from within and convert from your strength.

They are obviously a high precision work force, do some Boeing subcontract work. I see no reason their plants—not Long Island necessarily—but their offsite plants and Lockheed plant that was mentioned before, can't do Boeing subcontract work. There is such a backlog of it out there right now that is obviously my first strength. Go after some of the commercial work which is currently out there.

Representative SCHEUER. Why can't Grumman get involved doing some backlogged work?

Mr. FRISBY. That's a very good question. I can't understand—

Representative SCHEUER. I understand that Boeing has an 8- or 9-year backup in its civilian aircraft production. Isn't there some way that—wouldn't it be logical that there would be a way in which Grumman could participate in that?

Mr. FRISBY. We obviously are receiving more and more. We have an abundance of Boeing work right now, and there is more and more available. In fact, I'm in discussions with Grumman right now. They are going to team with us on a new application for the Boeing 777 aircraft. So, they are looking at it. We are making them look at it. We're bringing it to them since we're on the inside at Boeing and hoping that that has some kind of long-term dividends for Long Island.

Representative SCHEUER. And you're on the inside of Grumman apparently?

Mr. FRISBY. Yes, by virtue of a 45- to 50-year relationship.

Representative SCHEUER. And you're saying that Grumman is reacting openly?

Mr. FRISBY. They're making efforts and they're responsive to it. I think they're just a bit larger than we are obviously, so therefore there is a lot more bureaucracy to get through. I think Mr. O'Brien is doing a commendable job of cutting through a lot of the upper level problems. Obviously, that is the way they are notifying their lower level employees or hourly employees. But I don't believe that they have a lot of visibility into it.

Representative SCHEUER. They don't have a lot of visibility—

Mr. FRISBY. Not from the Congress in what's going on. I really—it's sort of a—if there was a little more long-term planning shared with the contractors and shared with the local community from the Congress. Actually, apparently, Grumman had some access to these long-term plans I understand relatively recently, illegally but—

Representative SCHEUER. They weren't alone in that, there were several others—

Mr. FRISBY. I wish they had sent me a copy. We obviously don't have that good of a relationship, but that's the kind of information that is needed though on the lower levels to make decisions.

Representative SCHEUER. What you're saying is they probably should have had that availability information above board so that they didn't have to take illegal means to achieve it, all of those corporations should have been privy to the long-term plans so that they could make the necessary adjustments and necessary initiatives.

What leadership role do you think the LIA, the Long Island Association ought to take? Should they be spearheading a common effort among the defense contractors on Long Island to work with the local community in the State and county, and the Federal Government and the State agencies, county agencies, nonprofit, as well as the Federal Government? Is that a proper initiative of the Long Island Association or should there be an association of military contractors to do that collectively?

Mr. FRISBY. The LIA represents a broad variety of groups. Defense contractors are involved as Frisby Airborne is, for example. They have most of the major defense contractors, but they also have realtors, they have bankers, they have every kind of corporation that there is on Long Island represented there. Therefore, I think it is a perfect vehicle for such discussions. They are working with the State. I understand they are going to be talking with congressional personnel about getting one big coordinated effort going.

I think that's the kind of thing that is necessary, an overall planning effort. The LIA is the type of group to do it. Obviously, other parts of the country have their chambers of commerce and the like that could be utilized. But I think the LIA would be an excellent source.

Representative SCHEUER. The executive director of the LIA has had a great deal of experience on the Washington scene and he is an extraordinary competent leader in his own right and would be very well positioned to get them moving in this direction.

Mr. Marlin.

Mr. MARLIN. I can comment on some of the things that you've asked. You asked: What would I recommend to Grumman board of directors and chief executives? One very sensitive issue among the people I've talked to on Long Island relates to Grumman. I went to a very interesting conference on economic adjustment in November. Somebody there from Grumman more or less said: "If we can't get some tax breaks from the community, from Nassau or Suffolk Counties or the townships in the area, we will have to move our contracts to lower cost areas where they have other plants."

I think that approach is confrontational. Blackmail is too strong a word, but I think that is a very alienating kind of attitude. The conference left a lot of people who were there with bad feelings about Grumman's attitudes toward the community. So, I would urge the company to take a more cooperative, less threatening stance.

Everyone is feeling threatened, so I can understand why an executive would feel under some pressure to try to assert the company's need for lower cost labor and lower costs all over, but I think they have overdone it. Your example of their attitude toward employees and the example I have given of their attitude toward the community suggests a company with its back to the wall, like a dog that has been cornered. I think that as far as possible the company should try to get out of that box by maybe making some initiatives to the labor representatives, some workers to work out better ways of handling layoffs given the problems. Maybe there is an easier way to do it to minimize their concerns while preserving the dignity of the employees and maintaining a much better relationship with the communities. I understand there is a lot of fighting going on over real estate in that area. You mentioned realtors as one group and bankers as another. A lot of the concerns of both of these two groups in that area have to do with real estate values and what will happen to their values if Grumman closes down plants. This is very worrisome for a lot of people.

I think that the way to deal with it is to get as broad a base of involvement, not just the bankers and the real estate people, but some representation from the employees and a broader representation of the communities. I would love to see the Long Island Association broaden its base. That's what I would suggest.

Representative SCHEUER. In what sense?

Mr. MARLIN. Well, reach out to some groups that they don't normally talk to; employees, churches, ordinary people who don't normally get involved in decisions relating to commercial real estate, teachers—all kinds of people who are not usually brought in. The broader the base in the planning process, generally the better the

plan that results. That is one of the criteria you can use for assessing the likelihood of success of any plan.

Mr. FRISBY. I did omit to mention that labor—they have two heads of labor organizations of Long Island on their board of directors, the LIA. So, they have already included them. As far as teachers and the like, I am not sure, but they definitely have labor representation.

Representative SCHEUER. Great. Elected by the employees at Grumman?

Mr. FRISBY. No, labor representatives on the LIA board.

Representative SCHEUER. They don't have unions. Apparently it's a nonunion shop. If that's true, and that is what Mr. Greenwood was advising us, they don't have a labor union to designate or represent them on the board, how would that represent—

Mr. FRISBY. The LIA board actually has labor representatives on it and the commission that would be studying the Grumman and the overall defense conversion would include those labor personnel. Nothing to do with the Grumman Corp. I doubt if they would have anyone from labor on the board.

EXAMPLES FROM OTHER COMPANIES

Representative SCHEUER. What is the practice elsewhere in the country? If Boeing or one of the other major space contractors decides to downsize somewhat and issue some yellow slips, do they consult with the union on ways to ameliorate damage, economic damage to the workers and their families, to consult with the community well in advance to help them get Federal funds that are available, State funds to engage in education and training and retraining projects? What do some of the other major corporations do when faced with the same conditions and the same threat to their survival that Grumman is apparently faced with?

Mr. GREENWOOD. Well, where we have collective bargaining agreements in some instances we do have prior consultation agreements written into those collective bargaining contracts, and the company does advise us of pending shutdowns and layoffs. And then, of course, within the rules of those agreements in most cases we are able to use seniority rights and this sort of thing to mitigate the damages.

And under the law now with the Advance Notification Act we're all supposed to get 60 days notice if 100 or more employees are going to be affected or in case of a shutdown or in the case of a layoff it is a somewhat higher number. So, what puzzles me a bit about your Grumman case is, is the employer complying with the plant notification law that was passed 2 years ago? And if it isn't, I wonder how it is getting around it?

Now, we have had a couple of instances where employers are getting around that prenotification to local government and to employees by cutting its work force in numbers that are just under the trigger in the law. So, I am wondering how Grumman is getting around that act? But if you have a good bargaining relationship, we'll get some help and some cooperation in the adjustment process. If we have a hearty employer attitude and disdainful of

community values, contemptuous of democratic values, then we are going to have some very grave problems.

It's interesting to me though that with the opening up of the Europe 1992 and the European Common Market, that those countries are fearful that their economic and social contract which is written into virtually all of their legislation will be seriously undermined and may be injured if they open themselves up to what we call American-style enterprise. So, I think that really if we want employers in this country to have some social responsibility, we may have to take some lessons from some of our trading partners who do have and require social responsibility on the part of employers and are beating our socks off at the trade game at the same time.

Mr. MARLIN. Congressman Scheuer, you asked about examples of what other companies have done. In the worker adjustment area I've cited two. One is Hughes Aircraft, the General Motors-Hughes facility which is paying employees to take courses for a career that they may wish to pursue after they leave the company, having been given ample warning that the layoffs will be coming at the end of the contract.

Another is the Rockwell facility that made the B-1. When they closed that plant down in Palmdale, CA, first of all they planned way ahead. Any time you know you are going to have layoffs coming down the road you have to move immediately to start looking ahead and they did that. Then the community launched a major marketing effort to try to say what can we do with the facilities we have and bring in other companies that will then be able to hire the people that we will have to release. And they did that.

After a major marketing effort and with the help of the DOD's Office of Economic Adjustment and with some Federal, State, and local funds, they managed to bring in four companies that took up a lot of the slack from the B-1.

Representative SCHEUER. So, you are saying that these 5,000 workers that are likely to be downsized, that are likely to get their pink slips from Grumman, if they could be identified several months in advance, they could be informed of the prospects that lie ahead and if other companies on Long Island could be apprised of the talent pool that is likely to be liberated for other employment in the near future, some of those connections could be made in the transition out of Grumman and into other work and be facilitated and made a great deal less painful both for the employees and the community and indeed for Grumman itself.

Mr. MARLIN. There are two very positive things about the Grumman situation. One is that compared to a decade ago there has been much more diversification of the Long Island economy. If Grumman had been laying off 5,000 people a decade ago, I think it would have been a lot more devastating. You have lots of Frisby Airbornes all over Long Island that are growing and are picking up people. That's a positive thing about the Grumman situation.

Representative SCHEUER. And Grumman is presumably aiding and abetting that phenomena.

Mr. MARLIN. Right.

Representative SCHEUER. Mr. Frisby, did Grumman consult with you in advance to let you know of the personnel that they were

going to be downsizing, letting go, so that you could try to figure out which of them were appropriate for your needs?

Mr. FRISBY. We didn't get notification from Grumman, we got it from the employees. Obviously, there is a limited number—there are quite a few, but there's a certain number of aerospace companies. Generally, when there is a Grumman layoff, we'll get a set of résumés not sent from Grumman but sent from the individual employees who are doing their own—

Representative SCHEUER. After the act?

Mr. FRISBY. Right. Grumman doesn't tell us in advance. Of course, when there are rumors of layoffs and the like occurring at Grumman, that's normally when some of the best people at Grumman will be sending their résumés around in advance of it. We've actually done well by that. A lot of our younger and more aggressive engineers come from the Grumman Corp. and Fairchild when it was closed in 1986 and 1987. So, we've done our little part in picking them up. Obviously, if you stimulate other companies like ourselves in the commercial marketplace, they will be able to hopefully take a few more in.

The question of 5,000 though I am not sure that the economy can just absorb that without some form of retraining.

Mr. MARLIN. The other positive point that I was going to make about Grumman's situation is related to the first one. Because of all the growth of the other nondefense industries on Long Island, the unemployment rate is very low. It's a better situation than in other communities—like let's say St. Louis, which I would say would be in a more serious situation—that have more unemployment. Long Island does not have a high level of unemployment compared to many other communities in the United States. Labor released in a market with high employment, provided the released labor is the right kind, will get absorbed. The Grumman labor force is skilled, which is what other companies need.

REBUILDING THE INDUSTRIAL MANUFACTURING BASE

Representative SCHEUER. Mr. Greenwood you say in your prepared statement that the country's industrial manufacturing base, what's left of it, needs rebuilding. I think some industry spokesman would dispute that assertion on the grounds that manufacturing productivity growth has exceeded that with the rest of the economy. And they would say that manufacturing exports have done quite well since the exchange rate value of the dollar came down to a more reasonable level. How do you respond to that argument?

Mr. GREENWOOD. Well, I would quite agree. Manufacturing productivity has led the industrialized world even throughout most of the 1980's contrary to popular perception. When we get the productivity figures that are released, it's productivity across all sectors, not just manufacturing. That includes a great deal of white-collar and service-industry productivity which lags and drags down manufacturing productivity. We're talking about industrial sectors there.

We have lost large segments, as we all know, of the consumer electronics industry. Very little of that is left. We have lost a large segment of the machine tool and machine manufacturing industries which are really critical and really underpin any manufactur-

ing operation in the country. And we could go on and on down the list and—

ROBOTICS

Representative SCHEUER. Is that loss of the machine tool industry, I take it much of that is to Japan and West Germany, is that because of their extensive use of robotics?

Mr. GREENWOOD. Well, that might be part of it, that might be part of it. The other part of it was that there was a conscious decision made by the machine tool builders in this country in the early 1980's that if they were going to be—you see, the UNIVAC Corp. invented the robot in this country in the 1960's and then it licensed its production to Japan in about 1969 and then nobody else paid any attention much to robotics here in this country until we had the movie "Star Wars."

That was part of "Star Wars" purpose, by the way, was to condition people to robotics in a positive way. All of a sudden why the Japanese had these new systems in and robotics were at the center of their system in the machine tool industry. So, the U.S. machine tool industry was caught off guard, was not prepared to meet the onslaught from the Japanese, but there were other countries too that were on the move and exporting into our own domestic markets; Switzerland, Sweden, and even Italy were getting into the act. So, they made a conscious decision. And I heard the president of McEArney Checker Machine Tool Co. make this statement at a Governor's conference in Ohio in 1982 and he said, "McEArney Checker will always be in the machine tool business. That doesn't mean we have to build machine tools." What he meant was they would license the production overseas and sell them with their label on it but it would be manufactured elsewhere. And with exception of one or two of the larger builders, that's what has been happening. That is one of the reasons we've been losing so much of the machine tool industry.

Other small precision machine shops, 80,000 small businesses, defense contracting small businesses, according to a Wall Street Journal report went out of business during the 1980's. Places like Ohio were devastated, western Massachusetts and Connecticut. These were small job-shop contractors. They simply were put out of business by bidding procedures, regulations, Pentagon trying to micro-manage their production and that sort of thing, overseas contracting, lot of procurements gone overseas in the decade of the 1980's.

In fiscal 1988, we estimated it to be between \$20 and \$30 billion a year going overseas. The trouble is that the Pentagon can't track its subcontract work. It is trying to develop a system. But we don't really know what is over there. There's a lot of work to be done in this area and there has to be a real commitment that we want a manufacturing base in this country, not just a service sector.

Representative SCHEUER. I think that there is a very strong feeling in Congress that this Congress does not look forward to a trend whereby many young Americans are going to be flipping hamburgers in Wendy's, Burger Kings, and you name it and doing laundry and flipping hamburgers for each other.

FROM DEFENSE TO COMMERCIAL APPLICATION

Mr. Frisby, in your testimony you urge the Government to encourage transfer of advanced technologies to the commercial marketplace, presumably for the military sector to the commercial marketplace by offering various incentives to do that. And the suggestion is that we can only improve our industrial performance substantially by unlocking the door to military technology and for the Federal Government to facilitate the crossover of that technology from the defense sector to the private commercial market.

Yet we see abroad, as Mr. Greenwood was saying, the Japanese are outcompeting us, have competed us out of business in the whole wide array, the length and breadth of consumer electronics and other leading-edge technologies, and they're doing it without the benefit of military technology. They may be doing it with the help of government. MITI, the Japanese Ministry of International Trade and Investment, may be helping them to arrange their financing and so forth. But they really have no Military Establishment from which to grasp high technology and transfer it.

If the Japanese can do it without a military sector to borrow from in terms of transfer of high technology from the military to the commercial sector, what are we doing wrong in the commercial marketplace as far as manufacturing is concerned?

Mr. FRISBY. Well, if you bring it back to the machine tools for just a minute. We're a small business and we have limited investment dollars. Every purchase we have made I'd say in the last couple of years, and we spend a lot of money on machine tools, C&C, computerized laser equipment, all of it is from Japan and Germany.

It is not because we are by any means not pro-American. We certainly couldn't be more so. They just have a better product. They spend, whether it's government financed or not, they spend a lot more money on research and development of these new technologies in there. For example, machine tools, they are years ahead of our machine tool industry. In fact, I would say there is not really going to be much of a machine tool industry in the United States, if there is any now. It will be a supporting role as you mentioned. It's because they reinvest in this and bring it to the market a whole lot cheaper. Obviously, the mentality that we need to bring to something in the aerospace industry, is the same type of mentality that is required. You need to spend the money on R&D. I am not sure the military contractors want to spend the money on R&D to do it.

It might take, as opposed to facilitating driving them almost to the brink of being out of business before they will finally wake up and make that transition. I am not sure what is going to be required to make a major contractor make a big decision toward commercial, except if it's an economic necessity.

GOVERNMENT SHOULD PRODUCE INCENTIVES FOR R&D

Mr. MARLIN. One of the arguments that is raised by people who favor defense spending as a form of Military Keynesianism is that the Department of Defense knows how to spend the money to get research done. DARPA is a very good example of effective manage-

ment of research. Now, the problem is it's defense-related work and the spinoffs from it are not at all clear. It is probably much more likely now that the military will get spinoffs from civilian research than the other way around.

So, Kosta Tshipis, a professor at MIT, has been arguing for some time that we really need to create a civilian-run equivalent to organize and centralize research in the same way that the Japanese are doing. Japanese R&D gets government support; it is no accident that they have done a lot of advanced research on the subject of machine tools. MITI is a very well-run operation with very good people, and it thinks about which way the country should go.

We don't have the equivalent in this country of a substantial civilian group under national auspices that thinks about where research should go. The question I'm raising is: Shouldn't we? We have all of these military researchers who are very, very good people in the Federal labs and agencies like DARPA, and they may be released. What are we going to do with them? Are we going to just throw them out into the market place or could we get some of this concentration of high-level talent to work on civilian projects, including work for State and local governments? It would still be the Government at work, but it would be for State and local government-type problems, such as transportation and the local infrastructure, as opposed to military ones.

Representative SCHEUER. I can see it would be transportation infrastructure which contains an astonishing variety of needs. I can see high tech involved in newer and more cost-effective answers to air pollution, some stationary uses like manufacturing plants and utilities, to automobile exhausts, to toxic wastes, to problems of polluted groundwater. There are a myriad of opportunities in the field of environment to apply high tech, preventable high tech. The opportunities are endless I would think.

I would think it also would take some overall master planning and some establishing of priorities as to where the need is and where the opportunities are most simply and most cost effectively to apply existing high tech in the military to the problems of our domestic economy.

Mr. Frisby, you've told us a remarkable story. Your achievement in successfully converting without any government assistance really is a remarkable one and a very impressive one. Now, it's true that you're a relatively small and highly specialized firm. How many other corporate citizens on Long Island, let us say, could emulate your example of self-help? And is your model one that is only really appropriate for a small firm that has a comparatively short turning radius and is not incumbent with the large bureaucracy? Or is this the kind of story you've related—is this appropriate to the Grumman's of the world also?

Mr. FRISBY. I think it might take the larger companies a little more time to do what we've done, but there really is—since it's such a simple method just reinvigorating your work force, they have a work force that desperately wants to keep their jobs. It is not a question of needing to enthuse them any further. I just think it's a question of management taking the time and looking past the next several quarters or however much money it is going to take to retool. That is obviously most major contractors biggest complaint.

There is no progress payments in commercial work, there's no advance money. There's no way this is not going to impact their initial bottom line. But there absolutely is no reason why they couldn't accomplish it themselves.

CONCLUSION

Representative SCHEUER. Well, we have a rollcall vote going on now and I'm going to have to depart the premises in another minute or two. Does anybody else have a final comment to make to wind up this truly remarkably interesting hearing?

Mr. FRISBY. I can throw another one in while I'm at it. The SBIR program that is currently in place takes a small percentage of most departmental budgets and puts it aside for small business investment research has been a boom for us personally. It allowed us to get an R&D joint venture going with a technology for cooking avionics and computer chips and the like, which is absolutely advanced anything else on the market right now.

We look to that to be a big growth market in the 1990's. That happens to be out of the defense budget that that particular application came, but if you expand that and allow larger companies to take part, the SBIR by nature is small business innovation research. If you had a national policy that all companies could get into a piece of the pie in that manner, I think that would have significant gains.

Representative SCHEUER. All right. I want to thank you all for your terribly interesting testimony. We are very grateful to you. If we have any further questions we will be in touch with you by mail. Thank you very much. The hearing is adjourned at the call of the Chair.

[Whereupon, at 12:10 p.m., the committee adjourned, subject to the call of the Chair.]

