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# CHANGING NATIONAL PRIORITIES

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## HEARINGS

BEFORE THE

SUBCOMMITTEE ON ECONOMY IN GOVERNMENT

OF THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

NINETY-FIRST CONGRESS

SECOND SESSION

\_\_\_\_\_

PART 1

JUNE 1, 2, 4, AND 5, 1970

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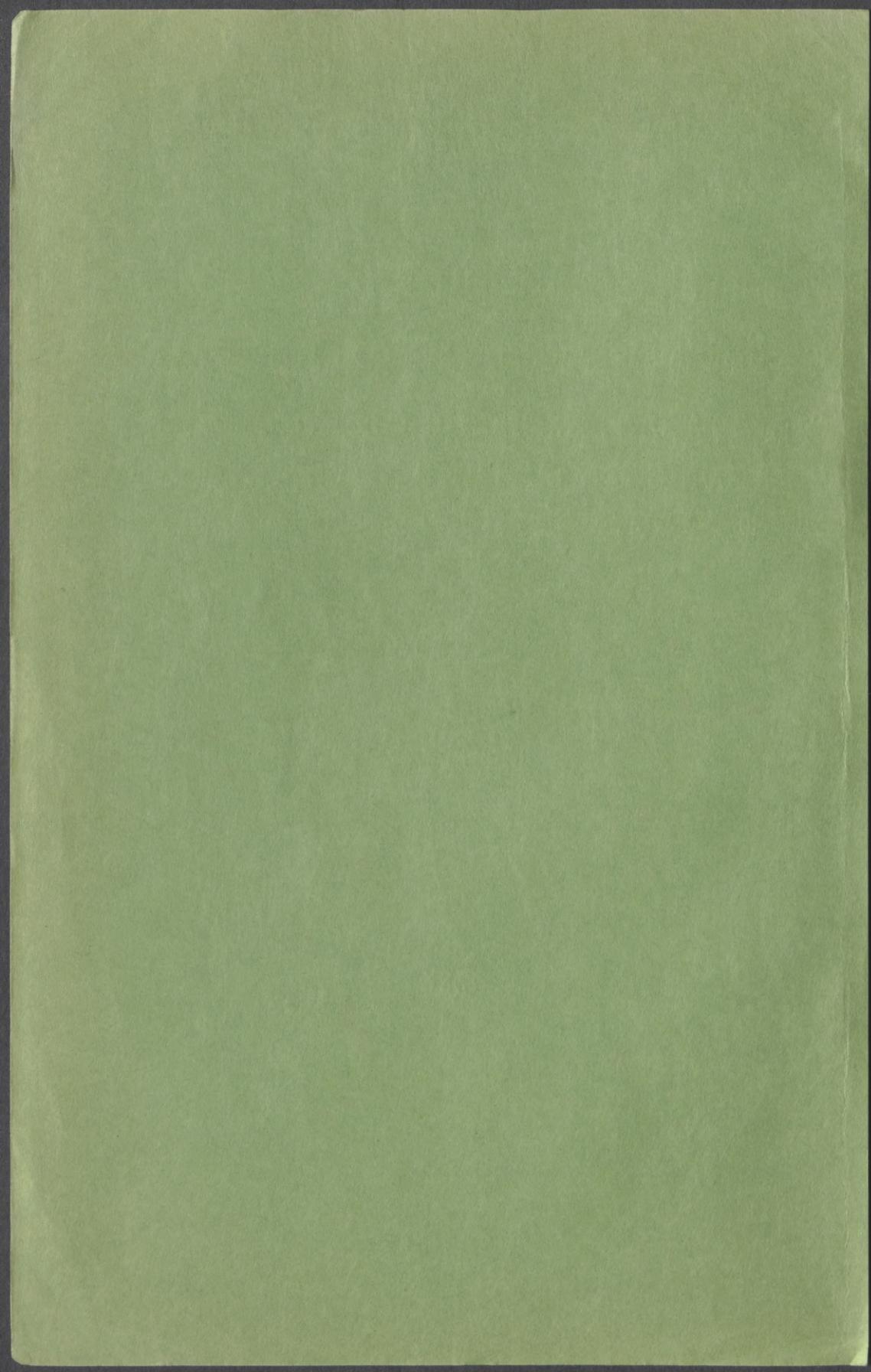
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OF THE  
JOINT ECONOMIC COMMITTEE  
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NINETY-FIRST CONGRESS  
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## CHANGING NATIONAL PRIORITIES

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MONDAY, JUNE 1, 1970

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMY IN GOVERNMENT  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The Subcommittee on Economy in Government met, pursuant to notice, at 10 a.m., in room G-308, New Senate Office Building, Hon. William Proxmire (chairman of the subcommittee) presiding.

Present: Senators Proxmire and Percy; and Representatives Moorhead and Brown.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, economist; and Douglas C. Frechtling, economist for the minority.

Chairman PROXMIRE. The subcommittee will come to order.

Today we begin the second in a series of annual hearings into the subject of national priorities. We have entitled the present inquiry, "Changing National Priorities" to emphasize our belief that there needs to be a change in the way the Federal Government allocates national resources.

The plain fact is that, despite the gains that have been made in recent years to bring a degree of enlightenment into the political process, the Nation is undergoing a period of acute crisis. The crisis is apparent wherever one looks, on the domestic scene and in foreign affairs.

At home, we are about to commence another long, hot summer, exacerbated by rising unemployment, continuing inflation, and record high interest rates. Abroad, we enter the second decade of a war in Indo-China which is taking on the timeless proportions of the struggle between ancient Greece and the Persian Empire.

Problems which were identified and acted upon by the Government in the sixties, and earlier, remain unsolved. The "Other America" is still there, almost as impoverished as ever. Racial segregation and discrimination is still a fact, 16 long years after the Supreme Court's historic decision. The housing shortage remains. And now we have begun to understand additional equally serious problems: air and water pollution and other threats to man's environment. It is, as the saying goes, later than we think.

We are indisputably a rich and powerful country on the whole, and we must ask ourselves, what have we done with our wealth and our might? Is it possible to stop wasting the revenues we collect from the overburdened taxpayer and solve problems?

One of the purposes of these hearings is to discover how resource allocations can be shifted into areas of greatest need and to understand the proper roles of the executive and legislative branches of the Federal Government in the decisionmaking process.

In this morning's session we will hear from Dr. Charles L. Schultze, former Director of the Bureau of the Budget and now a senior fellow at the Brookings Institution and professor of economics at the University of Maryland. Dr. Schultze is the author of numerous scholarly articles and several books, among them "The Politics and Economics of Public Spending," published in 1968, and "Setting National Priorities, the 1971 Budget," published this year.

We had originally planned to hear from John Gardner, former Secretary of Health, Education, and Welfare. Unfortunately an illness prevents Mr. Gardner's appearance today. However, we hope to be able to reschedule him for a later time.

Mr. Schultze, go right ahead.

You have a prepared statement, I believe.

Mr. SCHULTZE. Thank you, Mr. Chairman.

**STATEMENT OF CHARLES L. SCHULTZE, SENIOR FELLOW, THE  
BROOKINGS INSTITUTION,<sup>1</sup> AND PROFESSOR OF ECONOMICS,  
UNIVERSITY OF MARYLAND**

Mr. SCHULTZE. Mr. Chairman and members of the committee, the term "priorities" has become, in the last year or so, an "in" word. Calling for a reallocation of national priorities is now a standard theme in the rhetoric of both the establishment and the student activists. What is often forgotten is that the term "priority" implies a choice. To have more of one thing, we must give up something else. If we could achieve all our objectives simultaneously, there would be no need to set priorities, no need to make difficult choices. Reallocating national priorities, therefore, is a double-edged concept—it not only involves a decision about what we want most, it also involves a decision about what we want least.

Insofar as the public sector of the economy is concerned, setting priorities has two aspects: First, we must decide between public goods and private goods. To increase the share of national income going to public purposes—education, pollution control, income maintenance and the like—we must decrease the share going to private purposes. In turn this involves a decision about taxes; it is through tax policy that we make a choice between public and private goods.

Second, within the public sector we must choose among alternative patterns of public spending, among agricultural subsidies, military budgets, aid to education, SST's, manpower training, and so on. The more we devote to meeting one objective, the less we have to meet others.

Establishing national priorities, therefore, is a painful exercise, for it requires us not only to determine those things we need and want as a nation, but what we must do without to get them.

There are several different ways in which we can set national priorities, one clearly superior to the other. The patterns of public spending can grow like Topsy, as the unintended result of individual decisions taken piecemeal. Most decisions in the area of public spending have their major budgetary consequences long after the decisions themselves are taken. As a consequence, we can vote \$100 million for the nuclear reactors of an attack carrier without realizing that this decision carries

<sup>1</sup> The views expressed in this testimony do not necessarily represent the views of the trustees, officers, or other staff members of the Brookings Institution.

with it more than \$1½ billion of additional future outlays for the carrier itself, the planes on its deck and the escorts to protect it.

We can begin new public works projects, paying attention only to the minuscule first year costs and ignoring the much larger costs in future years. More generally, the way we set priorities in 1975 will be partly determined by what we do in 1970 and 1971. And without a major effort to develop proper information and analysis, we can unconsciously preempt our future freedom of action and set priorities we do not really wish to live with.

The alternative means of setting priorities involves a deliberate attempt to inform ourselves of the future consequences of current decisions, to act in full knowledge or of the fact that choosing one course of action today forecloses other possibilities tomorrow.

More specifically, this form of priority setting requires that we estimate the future resources available to the public sector under current tax laws and the expenditures we are already committed to under current policies and programs. Each new proposal would also be accompanied by an estimate of its future costs. We could then explicitly compare alternative courses of action and make explicit rather than implicit priority decisions.

We could review alternative changes in current policies—for example, in military posture or in agricultural price supports—in the context of how such changes would affect the resources available for other programs. We could similarly evaluate long-term changes in the tax laws. Had it been quite clear in 1969, for example, that the so-called tax reform bill would preempt some 40 percent of the free budgetary resources otherwise available in 1975 for expanding public education, pollution control, health services, and similar programs, I suspect the final action of the Congress may have been quite different.

Making decisions with full information about their long-term budgetary consequences, and with full knowledge of how one choice forecloses others, will not necessarily guarantee that decisions will be wise or just or rational. But at least it would mean that national priorities could be established consciously and explicitly rather than growing randomly and inconsistently out of piecemeal actions.

Some beginnings have been made recently in providing the framework of information within which explicit priority decisions can be made by the Executive and the Congress. The 1970 Report of the Council of Economic Advisers and the 1971 Budget document contained, for the first time, a 5-year projection of budgetary resources and claims upon those resources.

About a month ago, several of us at the Brookings Institution made a similar projection, in somewhat more detail, and accompanied by some examples of how the projection would be affected by the adoption of alternative military postures and agricultural price-support policies.

In this testimony I should like to summarize briefly the results of that projection and then suggest, a bit presumptuously perhaps, several ways in which the Congress might improve upon and utilize such projections as an aid toward a more conscious establishment of national priorities.

Let me turn briefly to a summary of projection of future budgetary conditions.

The first step in creating a framework within which to make priority judgments consists in estimating the free budgetary resources

becoming available for discretionary use in future years under current tax laws and expenditure policies. More specifically, this requires a projection of:

- (1) Federal revenues under current tax laws and
- (2) The expenditures which would be forthcoming under current and administration-proposed programs, allowing for increases in prices, wages, workloads, rising numbers of people statutorily eligible for benefits under social security and other programs, and similar relatively "built-in" elements making for changes in expenditures.

The difference between the revenues and expenditures so projected is the fiscal dividend, the amount available for discretionary use in expanding existing Federal programs, creating new ones, retiring the debt, or reducing taxes.

In these projections the following assumptions were made:

1. Economic growth would resume at a 4 to 4½ percent annual rate after the present pause, with the unemployment rate returning to slightly below 4 percent sometime in 1972. Inflation would continue but at a moderated pace, tapering off gradually from the current 5 to 6 percent to 3 to 2½ percent in 1972 or 1973.

I might note, Mr. Chairman, that the specific assumption that one makes about inflation does not have a major impact on the size of the fiscal dividends, since, at least in our calculations, it turns out that changing prices, very roughly, after the first year affects revenues about the same amount as expenditures, so the net gap is substantially unaffected by the assumption one makes about the degree of inflation.

2. Current tax laws would not be changed.

3. All major administration-proposed programs—family assistance, revenue sharing, urban mass transit, et cetera—would be adopted.

4. The Vietnam war would be terminated, so that by fiscal 1975 the only expenditures would be some \$1 billion for economic aid or a combination of economic and military assistance.

5. The Armed Forces would return to their basic pre-Vietnam level of 2.7 million men.

The budgetary consequences of these assumptions are shown in the table below.

#### THE FISCAL DIVIDEND

[In billions of dollars]

	Fiscal year—	
	1971	1975
<b>Revenues:</b>		
Before allowing for 1969 tax reform.....	202	284
Less: Cost of tax reform.....		-8
Total revenues.....	202	276
<b>Expenditures (built-in):</b>		
Military.....	72	75
(Vietnam).....	(12)	(1)
Civilian.....	129	178
Total expenditures.....	201	253
Difference between revenues and expenditures.....	1	23
Less: Budget surplus needed to reach national housing goals.....		10
Fiscal dividend.....		13

Note: Adapted from Charles L. Schultze with Edward K. Hamilton and Allen Schick, "Setting National Priorities: The 1971 Budget" (Brookings Institution: 1970), table 6-5, p. 186.

Revenues under existing tax laws would have risen to about \$284 billion by 1975. However, the tax reform bill of 1969 provided for a host of tax cuts, scheduled to phase in over the next several years. By fiscal 1975 the net revenue loss from that bill will be \$8 billion, leaving \$276 billion in revenues.

A return to the pre-Vietnam military structure and pace of modernization would mean a defense budget of about \$62 billion in today's prices at \$74 billion in the prices likely to prevail in 1975. (Rapidly rising numbers of retired military-personnel will also add substantially to the budget over this period, a fact which has been taken into account in the estimates.) The projection also assumes a residual expenditure of \$1 billion in Southeast Asia.

On the civilian side the "built-in" growth of current and Administration-proposed Federal programs would add some \$50 billion to Federal outlays in the 4-year period between 1971 and 1975—a rise of about \$12½ billion per year.

There will be, then, on the basis of these projections, a residual of about \$23 billion—the gap between revenues and already committed expenditures. But not all of this will be freely available to pursue high priority domestic programs of the Federal Government or for tax reduction purposes.

In 1968 the Congress, after examining the data on the rate of new family formation and on the condition of the housing stock, set out as a goal for the Nation the construction of some 26 million housing units in the decade of the 1970's. The Nixon administration has adopted that goal, with some modifications. But it is most unlikely that this goal of building 2.6 million housing units a year can be met unless the Federal Government, under conditions of high employment prosperity, runs a substantial budget surplus, which I have put conservatively at \$10 billion per year.

Under economic circumstances likely to exist during prosperity in the next 5 years, failure to run a budget surplus would generate such tight money and high interest rates that housing construction would not reach the 2.6 million per year goal. On the basis of the projections in its latest economic report, President Nixon's Council of Economic Advisers appears to agree with this conclusion.

Granted the need for a budgetary surplus of this rough magnitude, then, the fiscal dividend available to meet high priority domestic needs by 1975 will total only \$13 billion since I have to subtract that \$10 billion surplus out of it. This is less than 1 percent of the gross national product projected for that year. Or to put it another way, although the Federal Government disposes of 20 percent of the national income, built-in commitments and the cost of the defense program—assuming a return to the pre-Vietnam pattern—will absorb 19 percent of that, leaving only 1 percent freely disposable by the President and the Congress. This is hardly a large sum to look forward to 4 years from now, even after assuming that Vietnam hostilities are ended.

Let us look at some alternatives:

The conclusion that even by 1975 only 1 percent of the Nation's income will be freely available for discretionary use by the Federal Government depends, of course, on the assumptions used in the projection, in particular the maintenance of existing tax laws and the inviolability of current programs and policies in both the defense and civilian

sectors of the budget. Taking into account both the assumptions and the conclusions, the projection suggests three possible courses of action with respect to the establishment of national priorities.

First, we can accept the conclusion as it stands and carefully ration any expansion of existing social programs or initiation of new ones to the point where they fit into the slim resources available. This course of action would imply the view that all current spending programs have higher priority than potential new ones and that the priorities in the public sector are not high enough to warrant a shift of resources from private to public purposes.

Second, we can make the judgment that pressing social problems take priority, at the margin, over private spending. This judgment would call for an increase in tax rates. If taxes were increased sufficiently to raise the Federal Government's share of GNP from 20 to 21 percent, an additional \$14 billion would be added to the fiscal dividend in 1975, more than doubling it. This would not imply an absolute decline in private spending; it would simply grow a bit more slowly than would otherwise be the case. (In the original projection I outlined earlier, for example, Federal revenues would absorb about \$70 billion of the \$350 billion rise in GNP from 1971 to 1975; the remaining \$280 billion would be available for private and State and local spending. With tax rates increased to raise the 1975 Federal share to 21 percent of GNP, Federal revenues would absorb \$84 billion of the \$350 billion increase, still leaving \$266 billion for other uses.)

Third, we can decide that some current programs serve lower priority needs or fulfill those needs inefficiently and reallocate budget resources from those programs to higher priority purposes.

As an illustration of this last possibility, the study we published last month included a number of alternative military budgets, based on several different sets of possible defense postures. I will not attempt to spell those out in detail but will summarize one particular alternative as an example of the way in which questions or priorities can be posed.

Given the price and wage assumptions included in the projection and assuming a complete phase-out of the U.S. military presence in Vietnam, the defense budget in 1975 should be in the neighborhood of \$74 billion, barring major changes in strategy and force levels. This compares with a projected budget of \$72 billion for fiscal 1971. In other words, rising prices, wages and military retirement costs will roughly offset the decline in outlays due to a phaseout in Vietnam.

One set of alternative military policies could produce a reduction in the military budget of some \$14 billion in today's prices and \$17 billion in prices expected to prevail in 1975. There are two major elements of that alternative set of policies:

1. The conventional forces of the United States were, pre-Vietnam, built to provide the capability of carrying on simultaneously the initial, pre-mobilization, stages of 2½ wars: a major NATO war, a Chinese attack on our allies in Asia, and a minor contingency in the Western Hemisphere. The budgetary cost of maintaining and modernizing those forces, excluding any costs attributable to Vietnam, is about \$44 billion per year. In recent months both President Nixon and Defense Secretary Laird have stated that future force planning would be based on the contingency of having to handle simultaneously only 1½

wars—we would not prepare in peacetime to fight simultaneously both a NATO war and an Asian war.

If this change in planning assumptions is taken literally, it would imply the possibility of a \$10 billion reduction in the annual cost of our conventional forces, as we scaled them down from a 2½ war to 1½ war planning basis. The military will undoubtedly argue that our forces were never capable of handling the 2½ war contingency and that the new planning guidelines do not imply a reduction in forces or budgets. It seems to me, however, that at a minimum the burden of proof is on those who would maintain the budget in the face of a radical change in planning guidelines rather than vice versa. A \$10 billion reduction is certainly a major possibility to be examined in any overall establishment of national priorities.

2. In the case of our strategic nuclear forces, the adoption of a more restrained, yet still awesomely powerful, posture could produce budgetary savings of perhaps \$4 billion per year, reducing the annual cost of those forces from \$18 to \$14 billion. Such a posture would accept assured destruction capability as the essential requirement that our forces must meet—the capability of absorbing a Soviet first strike and retaliating devastatingly against the Soviets. This is the essence of nuclear deterrence, so that no one strikes first. But the more restrained posture would, unlike current policy, not seek to go beyond assured destruction capability and would estimate the forces needed for such capability in somewhat more reasonable terms. In particular the alternative posture would reduce the ABM to a research effort, stretch out but not cancel the deployment of MIRV's, postpone indefinitely the procurement of a new manned strategic bomber, and substantially reduce the continental air defense system as a weapon directed against a nonexistent threat. The United States would still be left with an awesome nuclear deterrent: more than 4,000 deliverable nuclear warheads, carried on three distinct delivery systems—1,054 perhaps vulnerable land-based missiles; 656 partially MIRV'd and invulnerable submarine systems; and 300 B-52 bombers.

These changes in defense posture represent only a few of the possibilities. But they illustrate the kind of tradeoffs between the defense and civilian budgets which are involved in the priority-setting problems. The particular changes, for example, would add \$17 billion, or 150 percent, to the fiscal dividend in 1975.

More generally, a projection of budget revenues, expenditures, and the fiscal dividend simply provides a framework within which the three basic types of priority decisions can be debated:

Deciding the division of national resources between the public and private sector, which basically comes down to making tax policy;

Comparing the merits of maintaining current spending programs against the potential expansion of selected social programs; and

Making priority judgments about the use of the fiscal dividend which finally emerges from the first two sets of decisions are made.

#### CONGRESSIONAL PROCEDURES FOR ESTABLISHED PRIORITIES

In a democratic form of government, the setting of national priorities must always remain an essentially political process and emerge

from the advocacy, bargaining, and compromise which characterize political decisionmaking. Choosing among alternative objectives and deciding how much of the Nation's resources to allocate to each is not something which can, or should, be done by formula or by consensus among experts. At the same time, however, the political bargaining process can either be an informed one, in which choices are hammered out with knowledge of their consequences, or it can operate in the dark, implicitly setting priorities which none of the participants consciously intended.

The kind of budgetary projections and presentation of major alternatives which I have described can, I believe, contribute to a better informed, more conscious, and more explicit exercise of the political process in establishing national priorities. I should like to examine, therefore, some ways in which Congress can itself provide and take advantage of this kind of information. Not having served in either body, my suggestions may seem presumptuous. Nevertheless, let me run that risk and plunge ahead. You have not stopped me so far.

In the first place, insofar as the consideration of particular issues is concerned—the development of a specific public program or the appropriation of funds to an individual activity—the committee system of the Congress has much to recommend it. Members become quite familiar with particular subject areas. Both formal hearings and informal contacts provide opportunity for experts and interested parties to be heard.

In my own view, given the complexities of modern legislation, the staffing of individual committees is inadequate and increases in staff resources would improve the process. Nevertheless, this is an improvement which requires no fundamental restructuring or major innovation, but simply a decision on the part of the Congress to take action.

There is another large area, however, where congressional procedures are quite weak and indeed outmoded. There are no existing means of relating a wide range of individual decisions to each other in a consistent way. As I have repeatedly stressed, setting priorities is primarily a matter of making choices. And given limited resources, choosing one course of action precludes others.

Each choice—including the choice of leaving existing programs and tax laws intact—has a cost in terms of opportunities forgone. Only in the light of overall resource availabilities and alternative patterns of resource use can individual decisions be interpreted from a priorities standpoint.

I believe there are a number of ways the Congress can provide an overall priorities-oriented information system, as an aid both to its individual committees and to itself when acting as a whole.

First, the Joint Economic Committee should undertake to develop its own longrun budgetary projections. These projections could be developed, in part at least, out of hearings devoted to the projections which have begun to be published in the Economic Report and the budget. The committee could also refer to outside projections, such as those I presented earlier in this testimony.

While the committee's projections would probably not, in the aggregate, differ sharply from those presented by the administration, the committee could provide for the Congress a critical review of the key

assumptions being made. Even more importantly, the committee could, in its projections, emphasize several points:

(1) The 5-year cost of the legislative package being presented by the President and its relationship to the overall totals;

(2) An analysis of the priority evaluations implicit in the President's program, both in terms of areas he is stressing and those he is ignoring; and

(3) A presentation of alternative possibilities, including the impact of higher or lower tax rates and major changes in certain areas of spending policy, such as the military budget. In addition, the committee could incorporate into the projections and analyses, as the opportunity arose, the implications of some of its studies and hearings conducted during the prior year, insofar as they are related to matters of priorities in public spending.

I do not suggest that the development and presentation of alternative projections by the committee would prove to be any panacea. But it would provide a much needed source of information and an overall framework for congressional committees in their work during the year.

Second, because the foreign policy commitments and military posture of the United States have such a major effect on the establishment of priorities, I would like to repeat a suggestion I made before this committee in testimony a year ago. I believe there should be established within the Congress a nonlegislative committee which, each year, would review the Nation's basic military posture, force levels, and planning assumptions in the context of our evolving foreign policy interests and overseas commitments.

This committee would not, by any means, be designed to absorb the work of the Armed Forces and Foreign Relations Committees of the two Houses of Congress. Rather, it would review the fundamental interrelationships of our foreign and defense policies, provide a critical analysis of those policies, and seek to present for the Congress the major alternative courses of action open to the Nation.

This new committee should also seek to translate the alternatives into budgetary terms, at least in rough orders of magnitude, and its work could form an input into the long-range budgetary projections which I have suggested that the Joint Economic Committee undertake.

Third, the Congress should require that Public Law 801 be more strictly observed and, if necessary, modified. Public Law 801 requires that each piece of new legislation be accompanied by a statement of its budgetary costs over a 5-year period.

In most cases, however, this information does not now accompany the submission of new legislation. To be sure, it is difficult to know on exactly what grounds the projection of 5-year costs should be made. Basically, the cost estimate should indicate what level of outlays the Government is committing itself to.

It need not be a forecast of how the program might grow by future action of Congress. Only the future implications of current decisions are relevant. And, if the program is to be authorized for less than 5 years, the 5-year projection can, barring specific reasons to the contrary, assume that the program will continue at the level reached in the last year of the authorization period.

If each new program were accompanied by a 5-year estimate of budgetary costs, it would then be possible to relate those costs to the

overall 5-year projections prepared by the Joint Economic Committee. In this way the Congress would be in a better position to evaluate the impact of each of its actions on others and on the emerging patterns of public spending.

I would like to add a fourth recommendation which is not in my prepared testimony; that is, a move toward full funding of public works projects. As you know, at the present time major public works projects are funded year by year, so that one can begin a new project with only a minuscule appropriation.

Over the past 10 years this has led to a situation in which the administration has recommended approximately 350-some new starts, and the Congress has itself added each year 350 to 360 new starts, at an average annual cost in the budget for that fiscal year of only something like \$10 to \$14 million a year, whereas full funding would require that an appropriation be made for the entire project before it could be started, which would then make it possible for the Congress carefully to see when it was voting that instead of \$1 million it might be voting \$500 or \$400 million for the project. So I think there is a fourth recommendation I would add as a move toward the full funding of public works projects as a means toward helping set national priorities.

The suggestions I have made are in one sense quite limited. They do not provide a means for guaranteeing that priorities are wisely chosen. But they would, I believe, help to insure that decisions are taken with fuller knowledge of their consequences. And this is at least a small step toward more rational decisionmaking.

Thank you, Mr. Chairman.

Chairman PROXMIRE. Thank you, Mr. Schultze.

As usual you have given us a marvelous statement. You have done good work in the past, so I am not at all surprised. But this is a very fine statement in every sense.

I am somewhat puzzled by your assumptions, however, that are reflected in your table. I take it that this is simply an example. This is not a prediction. You are not making the assumption that we are going to grow at the rate of 4 or 4½ percent, or that unemployment is going to go below 4 percent, but if it does these things are going to happen; is that correct?

The reason I say this is because our historical experience in these matters has not been very encouraging. How often have we had 4-percent unemployment, and growth has not been quite that high?

Mr. SCHULTZE. That 4- to 4½-percent growth is not all that far from the ball park. If you look at the growth in the labor force and simply project historical trends in productivity during the decade of the seventies, or certainly the first half of it, we should be able to hit 4- to 4½-percent growth.

Chairman PROXMIRE. On the assumption that you hold down unemployment?

Mr. SCHULTZE. That, or even if unemployment is 4½ percent, and you grow parallel with a full employment path, you can still grow at 4 to 4½ percent per year. So that part, it seems to me, is a little bit more than an assumption; I would say it is a little closer to a forecast.

Now, as to whether you will hit that growth line in 1972 as I have assumed, or later, is something I admit is simply an illustrative possi-

bility. But I do think the economy is capable of growing at 4 or 4½ percent. And, I think, it is likely to grow at 4 or 4½ percent. But I am not sure when we will get on that growth path. I am not sure when the present pause will be over.

Chairman PROXMIRE. You say it is likely. Historically we have not had that experience except, unfortunately, in periods of military activity or periods of preparation for military activity for extended periods.

And then the other proposal you throw in your statement, the full funding of public works, that is a fascinating idea. I wish we could bring that about. I do not know how realistic it is to assume that Congress, which looks at that "pork barrel" with great pleasure and enjoyment and anticipation in the notion that this is going to help reelect them, is going to do anything as public spirited and sensible as you suggest here. Full funding of public works you mean, for example, if we went ahead with a substantial new plan, that we might have to fund a billion dollars at once to provide those funds.

Now, if we did that, would it all be reflected in the budget? Wouldn't this mean automatically a very heavily unbalanced budget?

Mr. SCHULTZE. May I break this into two parts? What I was addressing particularly was the direct Federal public works projects, not the subsidized housing program in which the Federal Government is not doing the building—I mean the dams, the navigation projects, the irrigation, and the levees.

Interestingly enough, every year the Congress substantially adds to the administration's request of public works. And every year it cuts the public works budget. It is a marvelous technique, and I realized it is very difficult to ask anybody to give it up. But it seems to me that it would be helpful.

Chairman PROXMIRE. In your statement you summarize the challenge of determining national priorities by saying that "First, we must decide between public goods and private goods," and "second, within the public sector we must choose among alternative patterns of public spending." I have two difficulties with this statement of the process: first, who decides?

As a practical matter, the submission by the President of his budget, which is technically only a set of requests or proposals, is at least nine-tenths of the ball game. Once the budget is submitted it is almost set in concrete. Even moderate variations from program requests are interpreted as a slap in the face to the administration; a congressional initiative as a major defeat for the President. In short, how can decisions about the budget or the tax system be made the responsibility of the Congress and the general public?

Mr. SCHULTZE. That is a large question. I think there are two parts to it. If you look only at the annual budget, what the Congress can do to the budget in any one year is limited from a practical standpoint, and when the Congress tries to do anything severe, it is interpreted as a major slap at the President, because all of it has to be squeezed into 1 year, and it means a major reshuffling. This is one of the reasons, therefore, why it seems to me important to look 4 or 5 years ahead, so that when the Congress votes a new piece of legislation, or a major military weapons systems, it has a better idea of what it is doing over that 5-year period.

Admittedly, there is not much you can do in 1 year. But you can substantially affect the budget several years out.

As to the extent to which that is considered a slap at the administration, it is hard for me to generalize on that, except to say that in some cases yes, and in some cases no. But I would presume the Congress wishes to retain its power to do so.

Chairman PROXMIRE. This is another dimension on the notion of having a projection that would give the Congress more authority, more power, more influence. We would have more to say about the budget if we could do that. It is very hard to get such a projection. I have requested the administration to break down its projections. We could not even get a projection on the 5-year military spending program, which is a big part of the budget.

Mr. SCHULTZE. This is why I have suggested that perhaps the committee may want to do its own projection. I do not think it is all that impossible to do, even outside the administration.

Chairman PROXMIRE. With reference to your second point, do you include in the process of choosing among alternative program objectives the selection of alternative ways of attaining those objectives? It seems to me that it is not enough to embark on manpower training, for example, because the program we design or the way we administer it may defeat our own goals. How much weight do you give to this problem?

Mr. SCHULTZE. I guess there are in practical terms two parts to the business of setting priorities along the lines you have talked about. One is more or less deciding what you want to do and what kind of resources to put into it. And that is a major problem.

And secondly, there is the problem you have just raised, having decided what you want to do and what kind of resources you want to put into it, what can you do to insure that those objectives are carried out, that the program works well, that it is administered well, that it is so designed that it is not simply passing checks out, but is accomplishing its purpose. That is a second part of the problem, and a very important part.

Again, I have no magic answers on this. It is something that is not particularly addressed in this testimony which deals with the allocation of resources, but it is a major parallel problem of designing programs and the administration of programs so that they accomplish their objectives. I have a few pet biases in this direction, one of which is, we know very darned little about how to get things done, because we are trying to do such complicated things—which in turn leads me to believe—

Chairman PROXMIRE. I would think that here again Congress can be very helpful with inquiries and hearings and attempts to challenge the effectiveness of programs, and the insistence that the administration set up some way of measuring and evaluating programs.

Mr. SCHULTZE. I would agree that the Congress can do this itself to some extent. The Congress can, for example, through the GAO provide tougher evaluations of programs. In my own view, for example, the GAO job on the water pollution control program was an excellent example of what could be done to show how a program—which everybody agrees has very high priority—is not accomplishing its objectives because of very particular deficiencies in the way it is handled. And

so the Congress can in this area, particularly by good practical evaluation that its own staff does, and that it sponsors through other agencies, contribute substantially.

Chairman PROXMIRE. You say we will need in 1975 a full employment surplus of \$10 billion to permit enough monetary ease and lower interest rates so that we can meet the housing needs of 26 million new houses in the 1970's. I have several questions about that.

Did I understand you to say the Nixon administration has accepted this goal of 26 million housing starts?

Mr. SCHULTZE. To the best of my understanding, yes, it has accepted the goal, and it has redefined the goal.

Chairman PROXMIRE. I wish you would show me the Economic Report where this is spelled out. The chart on page 89, chart 10, shows no such picture, and it goes through 1978. Is this because the chart is based only on conventional starts, and it does not count mobile units?

Incidentally, when Secretary Romney came before our Banking Committee he wanted to count mobile homes.

Mr. SCHULTZE. That is right. The 26 million goal that the administration has accepted or sponsored includes 4 million mobile homes, the original 26 million did not.

Chairman PROXMIRE. Do you think mobile homes should be included?

Mr. SCHULTZE. I am not sure I am competent to answer that. It seems to me, yes, they probably should have. So whether having included them one ought to stick with the 26 million I am not quite sure, but it seems reasonable that mobile homes, or some substantial chunk, should be included. But I hesitate to act as an expert on this.

Chairman PROXMIRE. I can say that as an author of the amendment which provided for 26 million housing starts that I certainly did not contemplate mobile homes at all. And there are very fine mobile homes. But I am worried that if we push this kind of construction we will be adding to the pollution of our environment—like the junkyard full of old cars. They do deteriorate rapidly.

Mr. SCHULTZE. No response.

Chairman PROXMIRE. Let me just ask one more question.

I understand from the staff that we now have a full employment budget surplus around \$10 billion.

Mr. SCHULTZE. That sounds in the ballpark.

Chairman PROXMIRE. I do not see interest rates coming down. Don't we need an even larger surplus?

Mr. SCHULTZE. That is the reason I indicated that \$10 billion was a conservative estimate. It seems to me if the policy and the conclusion can be accepted that we will likely need a very substantial budget surplus, if that can be sold, I would rather be conservative in estimating what it is likely to be, rather than the other way. I think you are probably right that \$10 billion may be too small a number. But it is indicative, and it is a large number. But whether it is going to be politically feasible ever to run a \$10 billion surplus under the conditions of high unemployment and other matters I do not know.

I am not at all convinced that it will. And one may have to find other ways around the problem. But it seems to me that such a surplus—

Chairman PROXMIRE. I am sure that \$10 billion surplus notion surprises a lot of people, because they think we have a deficit, and we do have a deficit at present, in the face of present unemployment. But you are talking about high unemployment?

Mr. SCHULTZE. Yes, sir.

Chairman PROXMIRE. Senator Percy?

Senator PERCY. In your testimony you maintained that it is unlikely that we can meet our national housing goals unless the Federal Government runs substantial budget surpluses with high employment, the conclusion that the minority also reached in its report in 1970. The question here is, following the same analysis, is it fair to say that to the extent we run Federal budget deficits at high employment we will inevitably fall short of our housing goals, as increased sales of Federal debt and securities push up interest rates and reduce the availability of funds for housing?

I would like to add only a comment, that Maurice Mann, Assistant Director of the Bureau of the Budget, has come to the same conclusion. In a speech he gave last month he said that, in part, variations in the size of the budget surplus or deficit are primarily offset by variations in residential construction. He concluded that, almost dollar for dollar, to the extent that we do have a deficit, it comes right out of housing?

Mr. SCHULTZE. Under the conditions likely to prevail in the early part of the seventies, and under conditions of full employment, it seems to me it is clearly true that failure to run a significant budget surplus will primarily be reflected in failure to meet the housing goals.

Now, whether that would be true under other conditions in other decades I do not know. But in the period ahead it seems to me that is the case.

Senator PERCY. I hear two views expressed on the desirability of surplus or deficit in the budget. Some say that \$2, \$3, \$4, or \$5 billion out of a trillion-dollar economy is not very significant.

The other view is one of psychology, that if this administration cannot balance its budget, when are we ever going to be able to balance it? And now to the extent that a \$5 billion deficit comes right out of the hide of housing—and it is one of the great unmet needs of the future—isn't it very important that we take such steps as are necessary now, regardless of present conditions, to find a way to bring this budget into balance?

Mr. SCHULTZE. Yes, sir. if I could add one sentence; namely, to take such steps accompanied by the appropriate monetary action in easing the money supply even more rapidly. I think that simply tighter fiscal action without corresponding action on the monetary side might not do it, but those two combined I believe would.

Senator PERCY. That gets us down to setting national priorities. And to bring us into balance you can do two things in Government; one, you can reduce expenses. You can take out such optional expenditures as the SST. You can work rapidly toward this one-and-a-half-war concept and cut down as much as possible. You can take out other discretionary programs, or; two, you can raise taxes.

Would you have any specific suggestions from your broad background now as to what specific actions Congress should take in those two areas? If we have to raise taxes, what kind of taxes are the least painful to raise? I would like to commend the administration on its recent leaded gasoline tax proposal, I think this is a very good way to go about it. It serves several goals. But are there other taxes that should be raised, and are there other expenses that come to mind that should be chopped off?

Mr. SCHULTZE. I think you have to distinguish, Senator, between the shortrun problem and the longrun problem. In the short run it is terribly difficult to get a major reduction of expenditures. Now, one can do all sorts of things to keep some expenditures from rising as much as they otherwise would, et cetera. But in the very short run it is difficult to do.

Secondly, this is very late in the day to make this suggestion, and it is probably highly impractical. But ideally it seems to me that the most immediate thing that can be done is maintain the 5-percent surcharge. In the longer run it seems to me there are several things that could be done to raise taxes without raising taxes. And by that I mean, there are several major tax reductions scheduled to come into effect over the next several years which could be canceled or postponed.

First, the automobile and telephone excise taxes are, under current law, scheduled gradually to decline almost to zero, if not to zero. Simply maintaining those taxes would add \$4 billion a year in revenues by 1975, compared to what would happen with letting it run off. This is not raising taxes, this is simply forestalling certain reductions.

Secondly, between now and 1975 the impact of the 1969 tax reform law is scheduled to phase into a cost of \$8 billion by 1975. Some of those might be postponed or eliminated. The two together would give you \$12 billion in potential amounts.

Thirdly, it seems to me there are still some areas of tax reform, in particular, having to do with various capital gains at death, and things of this nature, which might have a potential of \$2 to \$4 billion, I do not really know the numbers, but probably in that order of magnitude.

There are something like \$15 billion of potential areas one could work with, most of which does not consist of raising taxes, but either postponing or eliminating certain scheduled reductions. So in the short run it seems to me extension of the surcharge would be effective. In the long run Congress might want to go back and look at some laws already in effect.

On the expenditure side in the short run I simply have to plead ignorance in terms of what is immediately—by that I mean the fiscal year 1971—what one could immediately get one's hands on. I am not sure I am quite close enough to know that. Even, for example, if one knocked the SST out, I suspect, given the nature of the contract, that a good bit of expenditures would run through part of 1971 anyway.

In the long run it seems to me that there are any number of areas where one might reallocate. The military we have talked about.

On agricultural price supports it seems to me—a 5-year law is expiring, and it will be rewritten—that there is room there for saving in a reasonable sort of way of up to a billion dollars a year. I think a review of some of the programs that this committee has already looked at in the area of public works projects and in the area of some of our subsidy programs, not substantial sums, but significant sums that could be reallocated to other areas.

So while it is indeed a difficult thing to do, it seems to me—particularly if you take a longer look ahead—that it is not an impossible thing to do.

Senator PERCY. Certainly stopping the second phase of the ABM would pick up a half a billion dollars and avoid a commitment for \$4 or \$5 billion.

Post Office reform, the Congress is delaying it now and sidestepping the issue and saying let the Commission raise the rates. We raise the pay, but let the Commission raise the rates. Instead, we could just simply say, let us raise the rates, and do it now, and put this Post Office on a better paying basis, and let third-class mail, the businessman, pay its full share. There is \$527 million in third-class postage that could be picked up right away.

I think there are a lot of things that can be done. And I am delighted that you feel that they should be done.

I am disturbed that when we considered the so-called tax reform bill which you say preempted some 40 percent of the free budgetary resources otherwise available in 1975 that we did not have that kind of information at the time. Why didn't we have it, in your opinion? Why didn't we know that? Is it that Congress did not get, in the long debate we had, accurate information, or do we have the information and just choose to ignore it?

Mr. SCHULTZE. Well, Senator, this happens to be one area. I guess, where there are two things to be said. One, tax laws, it seems to me, are something that the Congress finds very difficult to write without really strong leadership from the other end of Pennsylvania Avenue. It is very difficult for Congress to start from scratch writing a tax bill. And giving it a charitable interpretation, it may very well be that during the first year in office the administration was occupied with all kinds of things to grab hold of. But in this particular case I think there could have been much stronger leadership with a very specific set of proposals which might have kept the tax loss within reasonable bounds.

Now, at a very late stage of the game the administration did realize the losses that were involved and made a strong fight. But I think one lesson learned from that is that in tax policy it is absolutely critical that there be very strong leadership from the other end of the avenue. And I must say frankly in this particular case I do not think there was.

There are other reasons, too. I do not think the mechanism was available either here or at the administration—and it is bipartisan, as it goes back through the prior administrations—the framework in making available to the Congress this kind of information is not available anyway.

Those two things, it seems to me, led to this.

Senator PERCY. Thank you very much.

Chairman PROXMIRE. Congressman Moorhead?

Representative MOORHEAD. Thank you, Mr. Chairman.

I share the chairman's expression of admiration for your statement. They are always very good and very helpful, Mr. Schultze.

I am intrigued on this suggestion about the full funding of public works. I wonder in this connection if you could explain to me how it would work in the budget. Would we have it all in there, and then second, if we did it for public works, couldn't the same principle be applied to new weapons systems, say the AMSA? You know we are buying a little piece of it this year, or we are really committing ourselves to a great big project. And, similarly, for something like the SST. And the House side just voted \$289 million, and while we do

not know the exact amount, we know we are committing ourselves to a lot more.

Mr. SCHULTZE. Let me first take the public works and then come to the other. Let me give an example.

This year the budget recommended a start on the Tennessee Tombigbee project. And my numbers are only roughly accurate, but it is something like, I think, in the half-billion-dollar neighborhood of costs for that total project, \$500 million, in that neighborhood. I think it started this year with a \$1 million appropriation. And, of course, it is very easy under those circumstances to add 15 or 20 new ones, with a half million dollars or million dollars a year, even though you are committing yourself to well over a billion or two billion dollars down the line. Full funding would simply mean that you would have to appropriate the entire \$500 million. Realizing that costs cannot be estimated that accurately and you may have to come back for a supplemental appropriation, at least Congress would have before it the total cost.

It would show it as an appropriation in the budget of \$500 million. If I remember correctly—I may want to change this for the record—for public buildings we do that. For foreign aid we do that. For any number of things we do that. Even in the case of the military, to some extent we do get partial full funding. And, therefore, it is varied. It depends on the project. Some are more fully funded than others. And, of course, it is much more difficult to cut it off on the C-5A with four squadrons, six squadrons, you may not want to go full funding, but make sure you are not doing too little initially.

Representative MOORHEAD. What are you doing with this money?

Mr. SCHULTZE. All this is an authorization for the Administration to enter into a contract. Take the Tennessee Tombigbee. That would say that unless the Congress revokes this, that over the period ahead—and it might be 10 years—you have a \$500 million authorization and appropriation which you can draw upon to pay those contracts as needed. That is in effect what the Congress really is doing now, because once the project starts, while it once in a while happens, it is almost unheard of to cut it off in the middle.

So the money is not at all cash in the sense that it is lying around, it is simply authority given to the administration to construct the project and to spend the sums necessary as the bills become due.

And as I say, when you get into the military area, it is somewhat more difficult because you have got to define what is the project, or what is the particular weapons system, and how much of them do you want to fund at once.

But I would generally agree that it is useful to go full funding.

In AEC, the Atomic Energy Commission, with some exceptions, most of the big reactors are full funded. The Congress provides the entire amount all at once. And again you know what you are doing. There are some exceptions, but generally that is true.

On the SST, one might fund 4-year research appropriation.

So at least you know what is in front of you, at least part of it when you are called upon to vote on it.

Representative MOORHEAD. In your testimony you suggest the creation of a nonlegislative committee to review the Nation's basic military posture, force levels, and so forth. It seems difficult to get a new

committee created in the Congress. Do you think that the Joint Economic Committee could perform this function?

Mr. SCHULTZE. Well, if you tell me you cannot get a new committee, yes, sir, clearly. It ought to be done. It is not that I think the Joint Economic Committee is not capable of doing it, but I think ideally we would be better to have a committee composed, in part, of members from the Armed Services and Foreign Relations and in part other members with domestic interests.

However, if you tell me that is impossible, rather than not having it done, it seems to me it ought to be done.

Representative MOORHEAD. You think that it is necessary to have—it would be ideal to have members from the Armed Services?

Mr. SCHULTZE. I do, sir.

Chairman PROXMIRE. Would the Congressman yield at that point?

Representative MOORHEAD. Certainly.

Chairman PROXMIRE. Does not the Joint Economic Committee consist of that? We have members of the Armed Services Committee and the Foreign Relations Committee, and so forth, on this committee.

Mr. SCHULTZE. You are putting me in a bind, Senator. Yes, you do. But you don't have the senior members.

Chairman PROXMIRE. Senator Symington is a senior member. And Senators Fulbright and Sparkman, the two ranking members of the Foreign Relations Committee are on this committee.

Mr. SCHULTZE. I withdraw that, obviously. Nevertheless it seems to me that a new committee should be established for this purpose. But if a new committee cannot be established, it seems to me to be important that it be done, and the Joint Economic Committee is in a position to do it.

Representative MOORHEAD. It may be that we should attempt this as an existing committee. And if we could do at least a good enough job to show Congress that this is a valuable exercise, then it may be that we should create a new committee. But before a new committee is created maybe this committee should undertake that job.

In your testimony you discuss bringing down the conventional force—the expenditure for conventional forces down by some \$10 billion. Do you, in your book, discuss the hows and wheres as to that?

Mr. SCHULTZE. Yes, sir. I can give you a very approximate rundown. The key elements are these. The military budget incorporated in the central projection—before I come to the reduction—is based on a pre-Vietnam military strategy, the two-and-a-half war business. And the conventional forces to meet those contingencies would be something like the following, the major elements: 19 $\frac{1}{3}$  active divisions and seven high priority reserve divisions; 23 tactical air wings; 15 attack carrier task forces; and appropriate accompaniment of anti-submarine warfare, antiaircraft, airlift, sealift, communications, and general support.

Now, if one went from a two-and-a-half war to a one-and-a-half war assumption, out of the 19 $\frac{1}{3}$  active divisions one could take out five to six divisions with their equipment, training and everything that goes with it. One could take out three to five air wings, one could take out six carriers and their task forces and all that went with it,

and a pro rata accompanying amount, of, as I say, antisubmarine, anti-aircraft, communications, support, and the like.

When you total up the cost of those divisions and air wings and attack carriers and a task force accompaniment, and all the things that go with it, it comes to just about \$10 million in roughly today's prices. That is essentially it. That would still have you with very substantial conventional forces. But this is roughly what one would take out.

Representative MOORHEAD. Aircraft carriers would still have an absolute superiority over all the communications of 9 to 0?

Mr. SCHULTZE. That is right, 9 to 1 helicopter carriers, that is correct. And as a matter of fact, if one changed the method of deployment, you could possibly shift some carriers from the Atlantic into the Pacific, giving you more force than you think.

In other words, the recommendation here would go from 15 to 9, but the nine might be so deployed as to give you a quicker striking force than the nine as now deployed would give you.

Representative MOORHEAD. You mentioned one or possibly two helicopter carriers. If we started counting those carriers we should also count our antisubmarine carriers which we could also use for helicopters?

Mr. SCHULTZE. That is correct.

Representative MOORHEAD. The reduction of \$4 billion in the strategic forces, can you specify that as to the ABM, the MIRV?

Mr. SCHULTZE. The \$18 million, which is the central projection, allows for the procurement of most of the following items, in other words, there are \$4 billion in the 18 for the following items: ABM, MIRV'ing as currently planned, AMSA, the new continental air defense system, and significant research effort on ULNS, the long-range underwater system—the successor to the Poseidon, the long-range underwater system, these five elements.

Now, if you went to the lower alternative from 18 to 14, ABM would be reduced to a research effort, MIRV's would be stretched out and slowed down, they would continue, but at a lower pace. Very specifically, one might not MIRV the land based missiles, which presumably are now vulnerable, as we are told, but would go ahead and MIRV some of the Poseidon. AMSA would be held a research effort. The new continental air defense system would be scrapped.

You would continue with a significant research range effort with the long-range successor to Poseidon. This set of policies would save in the neighborhood of \$4 billion a year, something like that.

Representative MOORHEAD. Testimony such as you have just given, this committee, or ideally, your proposed new committee would hear and recommend in a report to the Congress, is that your thought?

Mr. SCHULTZE. Correct. The basic idea of this—it seems to me it is realistic, although it is difficult to draw these lines—is that the particular committee I have recommended would not primarily concern itself with specific details of weapons systems or procurement or with the narrow issues involved. It would look at the broad alternative possibilities providing rough budgetary magnitudes. Now, rather than attempting to pin it down precisely it would look at the rough overall alternatives. That is correct, sir. But it would not get itself into great detail with respect to individual weapons system.

Representative MOORHEAD. I think that shifting from 15 to nine aircraft carriers, and whether we should do it by not building new ones or scrapping or mothballing the old, should be something that the new committee should determine.

Mr. SCHULTZE. Whether the new doctrine of one-and-a-half wars is consistent with 11 carriers, or eight, or whether it is four air wings or five, or whether it is six divisions on pull out or four, these are the sort of things that need not be precisely done, but simply indicate here the broad alternative facing the Nation. And here are what the rough costs of them are, not attempting to nail it down specifically.

Representative MOORHEAD. Thank you very much, Mr. Schultze.

Thank you, Mr. Chairman.

Chairman PROXMIRE. As a practical matter, would you see any objection to having this new committee as a subcommittee of this committee? Perhaps we could add some other members of the Armed Services Committee. We have Senator Symington and a very strong representation from the Foreign Relations Committee, with the chairman and ranking member. And then we could better coordinate this whole process through actual work in one committee. We have a lot of objection to proliferating committees. And, I think, this committee is off to a running headstart in working toward the priorities. This is the second year we have had it.

Mr. SCHULTZE. It seems to me that that is a quite possible alternative. I would add that, I think, in order for it to be done right it would be a subcommittee with a pretty significant staff. I think these are the kind of things that should be done initially.

Chairman PROXMIRE. It would take a good bit of staff work on the Joint Economic Committee to succeed. I talked to the staff director, and he said it would take several additional staff personnel to do it.

Mr. SCHULTZE. At least.

Chairman PROXMIRE. Can you tell us how you arrive at your figures for spending in the Vietnam war? As you know, the administration has chosen not to forecast Vietnam outlays. You assume we will be spending only \$1 billion by fiscal 1975. How did you develop this figure? What is it, \$12 billion now, which the administration will not admit to, and \$1 billion in 1975? This seems to me a happy, quite optimistic prediction.

Mr. SCHULTZE. Let me dispose of the \$1 billion. That is simply a symbol. The fact is that even if Vietnam is completely over there might be some economic and other aid to South Vietnam. I don't put much on the accuracy of the \$1 billion.

Chairman PROXMIRE. In Southeast Asia.

Mr. SCHULTZE. I am sorry, in Southeast Asia. I don't put much on the \$1 billion, it is simply a token amount, rather than having zero we put a token amount.

Chairman PROXMIRE. This committee has been trying very, very hard to get an estimate from the administration as to how much they are spending now, and they would not tell us. In previous years they have. This year they say they won't, they say the figures in previous years were not any good.

Mr. SCHULTZE. Two things. First, on the detail of this, I would suggest that you might get it from William Kaufmann, who will be testifying here later, because he is the one who put it together in de-

tail. Essentially the projection runs as follows. By some research one can get the amount of aircraft attrition, ordnance expended, artillery, et cetera, and the amount of construction done during the peak year in Vietnam.

This comes to \$23 billion as the cost for fiscal 1968—fiscal 1967 was very close to the same thing—if one goes through in some detail and tries to estimate from the various published sources the cost of Vietnam in terms of what it cost us over and above what we would have been spending anyway on the military.

Secondly, by associating that cost with the number of military personnel, it is possible as you phase down the personnel to make some rough rule of thumb estimates as to what this does to all the associated costs. In this turn we did. We then assumed that by the end of fiscal 1971 there would be 200,000 U.S. troops left in Vietnam. That was an assumption. If the 150,000 troop withdrawal that President Nixon has indicated is carried out through next April, and if that rate is continued through the end of the fiscal year, instead of there being 200,000 men, there would be about 230,00 to 240,000 men, slightly more than goes with our \$11 billion which we had in the book. That is why I have \$12 billion in this testimony.

Now, this is admittedly a rough way to get at it, but we checked it out in two or three different styles of estimating, and it seemed to come out about right.

Chairman PROXMIRE. Has the widening war in Cambodia changed your forecasts for Vietnam spending?

Mr. SCHULTZE. Basically it seems to me it is far too early to tell that. Without predicting what the consequences 6 to 10 months from now are going to be, it is impossible to predict what the impact of Cambodia will be. Another big search and destroying mission is not of itself going to change that substantially. The question is, What are the consequences of that to the future withdrawal schedule? And that I am not in a position to predict.

Representative BROWN. Would you yield just a moment?

Chairman PROXMIRE. Yes, sir.

Representative BROWN. I think it is obvious that you are basing your prediction on the assumption that the President's timetable will be followed.

Mr. SCHULTZE. The numbers we have here indicate that.

Representative BROWN. If the Cambodian campaign does what they say it will, it will make that timetable possible.

Mr. SCHULTZE. Let me state this carefully. In order to get the numbers that are incorporated here, that is correct. That timetable cannot be slowed down. That is the assumption used here. I am not competent to predict whether it is going to occur or not, I do not know.

Chairman PROXMIRE. But there has been an announced suspension, temporary suspension of the troop withdrawal, a temporary halt until sometime in July.

Mr. SCHULTZE. That is right. And the longer that lasts the more the costs go up.

Chairman PROXMIRE. And the more the costs go up the more you will have to withdraw later?

Mr. SCHULTZE. Let me make one thing quite clear. The budgetary consequences of withdrawing 150,000 men evenly throughout the year

are quite different than withdrawing the same 150,000 men concentrated at the end of the year. The latter gives you much higher budgetary costs than the former.

Chairman PROXMIRE. I am intrigued by your assertion that a scale down for a 2½ war to a 1½ war planning basis creates the possibility of a \$10 billion reduction in the annual cost of our conventional forces. The problem is, as you point out, that the military argue that our forces were never capable of handling the 2½ war contingency in the first place, and that scaling down to a 1½ war planning basis does not imply a reduction in forces or budgets. In fact, as you probably know, Secretary Laird has made such a statement himself.

How do you reply to this argument?

Mr. SCHULTZE. My argument on that is, particularly from the point of view of the Congress, it seems to me the burden of proof is clearly on those who indicate that a radical change in planning guidelines does not carry with it a substantial reduction in armed forces.

Chairman PROXMIRE. They said it would not be a radical change, because they are talking two and a half wars, but actually planning and budgeting one and a half wars.

Mr. SCHULTZE. No, sir, that I disagree with. And this is one section—this is one of the reasons—there is a section that is maybe 10 pages in the priorities book addressed to the specific relationship between the two and a half wars and the armed force strength we had. The 2.7 million men, the 19 divisions, the 23 air wings, the 15 carriers, were explicitly programed to each of those contingencies.

There was a specific programing for a NATO war, taking the consideration, the possibility of what the Warsaw Pact could get onto the battlefield within 10 days, 30 days, 90 days, and the rest. There was a specific evaluation of what would be needed during pre-mobilization stages in a conflict against the Chinese. These are carefully worked out—I am not saying they were necessarily correct, but they were not arbitrary, and the forces were quite explicitly designed for a two and a half war. For example, six carriers in the Atlantic, two in the Mediterranean and four backup.

Chairman PROXMIRE. Then we ought to have \$10 billion reduction. Where would it be in the 1970 or 1971 budget?

Mr. SCHULTZE. It seems to me it is something that we would probably have to face in over a period of 1 or 2 fiscal years. My hunch is—

Chairman PROXMIRE. Both 1970 and 1971?

Mr. SCHULTZE. No, sir. If it is going to come about we will see it in the 1972 budget. There is nothing in the 1971 budget to indicate this. The 1971 budget reduction from the prior year is pretty much accounted for by simply a phase down in Vietnam on the present schedule.

Chairman PROXMIRE. I understood the Secretary of Defense to announce that they were operating on a one-plus war planning basis. If this is so, it seems to me it should apply to the 1971 budget.

Of course, this also comes up in the Guam doctrine enunciation which explicitly said the same thing. You interpret that as an indication of a one-plus war?

Mr. SCHULTZE. It is explicitly in the President's state of the world message. It is very explicitly stated there. Secretary Laird has stated it. I think what has happened, however, is that practically speaking

this generates a substantial amount of controversy in the Pentagon to translate these new planning guidelines into force levels. And that fight has not yet been decided, as to exactly how this is going to be—

Chairman PROXMIRE. Anyway, logically you feel that this should translate the 1972 budget into a \$10 billion reduction, if they put their money where their mouth is, and the Guam doctrine and also the one-plus war planning assumption is carried out?

Mr. SCHULTZE. With the minor exception that it may take two budgets to run this through. But otherwise, yes, sir.

Chairman PROXMIRE. Just to clear up the situation with respect to the fiscal dividend, table 1 of your testimony: The Joint Committee on Internal Revenue Taxation staff a few days ago presented revised estimates of Federal revenues of fiscal 1971. If the proposed tax legislation does not materialize, and I suspect that much of it will not materialize—that staff estimates we would be operating at a deficit of over \$9 billion.

Would you present for the record the way your 1975 projection would look in the light of these new figures?

Mr. SCHULTZE. I would have to ask it for the record. I could not do it here.

Chairman PROXMIRE. For 1975 by your calculation it would be minuscule.

Mr. SCHULTZE. You would have to do a good bit more work to be sure that changes in the 1971 base affect the 1975 projection. I am not quite sure it would. But I would want to take a look at that, and I cannot answer it at the moment.

(The following information was subsequently supplied for the record by Mr. Schultze:)

The budget submitted to the Congress in February estimated FY 1971 expenditures at \$200.8 billion. In May this estimate was revised to \$205.6 billion. Further developments since this make it likely that FY 1971 expenditures will range between \$208 and \$210 billion. A very tentative examination of the detailed causes of these expenditure reestimates leads me to believe that my original 1975 expenditure estimate of \$253 billion should be revised upward to \$260–\$262 billion. On the other hand, it now appears likely that 1975 defense expenditures might be somewhat lower than the original projection—perhaps by \$3–\$5 billion. On balance therefore, the overall expenditure projection of \$253 billion for 1975 might tentatively be revised to a range of \$255 to \$260 billion. I see no reason at this time to revise the 1975 revenue estimate (\$276 billion).

Chairman PROXMIRE. Research and development funds have risen dramatically since 1960, military, R. & D., independent research and development, space, atomic energy, and so forth. And yet we have significant testimony from these like Dr. DuBridge that the results are disappointing. Is this an area where a shift or cut or reordering could or should take place? For example, would it be wise to move through grants by National Science Foundation and less through space and military research funds?

Mr. SCHULTZE. I hesitate before leaping into that one, Senator.

I think one might say two things with respect to it. First, what has happened apparently is that between 1955 and 1966 or 1967 the overall research budget grew very rapidly. Since 1967 the actual dollars devoted to research have come down somewhat in the aggregate, whereas costs continued to rise very dramatically. So that the research establishment got used not only to a very fat life, but a very rapidly escalating life, you might say, and all of a sudden in real terms it is cut.

That is the background, it seems to me. This is 3 years of reductions after a period of rapid increase.

And next, it was always the idea, never realized in practice, that the National Science Foundation would be the balance wheel, and that basic research could gradually be moved over. More of it could be done by NSF. Should there be a cut in space R. & D. or something in defense R. & D., NSF could pick up at least a purely scientific part of that. That was the idea. It has never happened in practice because NSF could never get the budget necessary to get to the point where it was big enough to swing enough weight to do this. The general thrust of my answer would be—there might be a lot of exceptions—that yes, you are correct, that some of this basic research could undoubtedly be better done, swung over to NSF and done as basic research, rather than mission research by the Pentagon and others.

Chairman PROXMIRE. In spite of the enormous amount spent by the Federal Government on research, I am sure more than any other government in the world in proportional terms, we are losing ground in many areas of research, not military research or space research, but many other areas of research that are important to our commercial activities.

Mr. SCHULTZE. I have heard that. I am not sure how true that is. Research proponents often press a program on grounds that say that you have got to, if we don't do it somebody else will, although I have some skepticism about this kind of argument.

Chairman PROXMIRE. Congressman Brown?

Representative BROWN. Mr. Schultze, I have had only a brief opportunity to look over your prepared testimony. I am sorry I was not here when you began.

You talk about tax policy as the base by which we make a choice between public and private goods. In point of fact, cannot the public sector enlarge its share of national income without raising taxes?

Mr. SCHULTZE. Given the tax system we now have, Mr. Brown, at least when we project it out with economic growth, it maintains very roughly the same percentage of GNP. Now, the reason for that is, on the one hand the individual income tax is progressive, and that takes a larger share. But our whole excise—the excise tax part of it generally tends to take a smaller share. For example, taxes on gasoline are gallonage taxes and do not reflect inflation. So when you balance it all out, I think there might be a very, very minuscule upcreep in the share of GNP taken by the Federal Government even without raising tax rates, but it is very, very small. And finally, that is more than overbalanced by the fact that the 1969 tax reform law automatically phases in over the next 5 years a number of reductions which more than offset any increase in share that the system might gradually wring out of the economy.

Representative BROWN. Of course, what I was talking about was over the past 5 years. And that is a sharp increase in public debt.

Mr. SCHULTZE. But the percentage of the total national income or gross national product taken by Federal expenditures and revenues has fluctuated in the 20-percent levels for the last 15 to 17 years, and bounded up a percentage point at the peak of Vietnam. But that is about it.

Representative BROWN. Isn't the current inflation due to the failure of previous administrations to face the choice between public and pri-

vate goods, in other words, not to pay as we go, but rather finance our expenditures in the public area through increasing our debt?

Mr. SCHULTZE. It is indeed true that failure to get a tax increase early enough—let us lay part of the fault on the administration—and, in part, 18 months after the administration recommended it it came through. In any event, lateness on the part of both the administration and the Congress helped get inflation started; there is no question of that.

Representative BROWN. There is some difference between the previous administration and the current administration. The previous administration had a very friendly Congress, whereas the current administration has some problems in a partisan sense with the Congress. I do not know whether the blame should be placed with Congress or the administration. I suppose in a partisan sense it winds up in the same place.

Mr. SCHULTZE. And after 18 months it seems to me it is a little rougher and rougher all the time to lay the blame on the prior administration. I think there is a lot of blame to be shared equally.

Representative BROWN. I really think if the budget was balanced and an attempt was made to keep it balanced we would move economically in the right direction.

Mr. SCHULTZE. It would be very helpful, that is right.

Representative BROWN. How do you think we can insure that in the future we make our decisions between public and private goods through a choice in tax policy rather than through the debt field?

Mr. SCHULTZE. Mr. Brown, there is nothing you can do that will insure that. The major suggestions I have made today—

Representative BROWN. Let me point out that some State governments have a statutory requirement that they not have public debt without public vote.

Mr. SCHULTZE. I think that would be dead wrong for the Federal Government. It seems to me there are times—not at the present.

Representative BROWN. Would you want to say why?

Mr. SCHULTZE. Surely. There are times—the early sixties being a case in point—where a deficit is a very desirable thing. I think in the early seventies it is just the opposite, because economic conditions are quite different. We should be running a fairly substantial surplus. And, I think, the deficit or surplus should be proportioned to the need of the times, whichever it might be. And these are different in different periods.

Representative BROWN. The reason for the need of a surplus is because we had a substantial deficit, isn't it?

Mr. SCHULTZE. No, sir; I do not think so.

Representative BROWN. They are not related?

Mr. SCHULTZE. I am not saying that they are not related, but that is not the basic reason for the need. It is not that you have to make it up.

Representative BROWN. I understand that. The sharp increase in debt creates certain economic circumstances.

Mr. SCHULTZE. That is not the basic reason for the need for a surplus in the first half of the 1970's. The basic reason for the need for that surplus is given in the significant increase in the private investment share of the GNP, given the desirability of rating the share of our

national income going to housing, that we cannot get the kind of monetary conditions to do that without a surplus. Under other conditions where housing demand and business investment demand are weak we need another policy. But I do not think the way to get the right policy is to legislate for a surplus forever. I think there are times when there is a need for deficits, and a time when there is a need for surpluses, and now we do need a surplus.

Representative BROWN. Let me ask for broader comment with respect to your statement where you make certain economic assumptions. How competent are you at this time to predict that we will enjoy these economic conditions 2 or 3 years from now?

Mr. SCHULTZE. Not terribly competent on the one hand. But, I think, I agree with the administration that you do not have much option but to play the game in that direction. If it does not work, we may have to adopt new policies. But it seems to me that this is what we ought to be aiming for. With one major exception, I think current policies are pushing in that direction.

Representative BROWN. What would you cite as an example?

Mr. SCHULTZE. This is primarily one having to do with an incomes policy, wage-price guidelines, and the rest. But on fiscal and monetary policy it seems to me the administration is playing the kind of ball game I have outlined here.

Representative BROWN. Might not the income policy be contradictory to the other policies being pursued?

Mr. SCHULTZE. I do not think so. It seems to me it would not threaten it. I do not think it would be a panacea. But, I think, they would be marginally useful. And since the economy has been cooled off, in making it a quicker time for that cooling off to be reflected in price and wage decisions it seems to me—

Representative BROWN. Are you suggesting imposing a ceiling on inflation?

Mr. SCHULTZE. The economy has passed the peak. What is needed now is to make sure that that gets reflected in price decisions and wage decisions.

Representative BROWN. Would you say inflation is also past the peak?

Mr. SCHULTZE. I am not about to predict that. Everybody that has been predicting that in the last year has been wrong.

Representative BROWN. Aren't you saying that you would cool down the inflationary situation faster by an income policy? Do I understand you correctly on that point?

Mr. SCHULTZE. Basically, yes, that is right.

Representative BROWN. Let me ask you further about these approaches on the international side. You say in your statement that in recent months the administration has indicated that future military force planning would be based on a contingency of one and a half wars rather than two and a half wars, and that the two-and-half-war contingency is what had been assumed previously. You also estimate scaling down our military expenditures by \$10 billion. Obviously that is not entirely a decision that can be reached just on the basis of the economic circumstance of our domestic society.

Mr. SCHULTZE. I agree.

Representative BROWN. Where, in your opinion is the best place to make the difficult decisions between domestic desirabilities and the economic demands of our foreign policy? Is it within the open forum of Congress? Is it within the Joint Economic Committee? Is it some place in the administration?

Mr. SCHULTZE. First it seems to me that it obviously has got to start with the administration.

Representative BROWN. Where in the administration do you think that decision can best be made? Where in fact does it have to be?

Mr. SCHULTZE. I think what has to be done is, given the new reorganization plan as a joint effort, it seems to me, starting with the National Security Council and its staff—

Representative BROWN. And its assessment of foreign circumstances?

Mr. SCHULTZE. And the military implications of that assessment.

Representative BROWN. It requires the United States to meet the foreign problems which we face as a nation, is that what you are saying?

Mr. SCHULTZE. Always presented in terms of alternatives, Mr. BROWN. And the reason for that is, there is no such thing as absolute security, there is no such thing as absolute meeting any of these contingencies. And what one buys when he is buying insurance—

Representative BROWN. Frequently there is no such thing as an insured assessment of what we face in the foreign field, isn't that also correct?

Mr. SCHULTZE. Yes.

Representative BROWN. Because we are often dealing, in the foreign field, with closed societies rather than open societies such as our own?

Mr. SCHULTZE. That is part of it, I agree. I do not think the lack of information is the major part, but that is part of it. My only point, however, is that it seems to me that ultimately the President has to be presented with a series of alternatives in terms of alternative military implications of foreign policies and the consequences for domestic programs. And those have to be balanced—you cannot say, "Here is absolutely what we need for the military, and everything left over is for defense," nor can one say, "Here is what we have to have for the domestic side and everything else left over is for the military." They have to be balanced. The only way I know that that balance can be done is a joint exercise in which the National Security Council staff, the National Security Council, the Domestic Affairs Council, and the Budget Bureau participate in terms of presenting to the President the alternatives and their consequences.

Ultimately, in terms of what is going to be presented to the Congress, he has to make up his mind. But it seems to me that his mind can be made up in a sense more intelligently on a more informed basis if he is presented with three, four, or five major sets of alternatives.

Representative BROWN. But it is his decision that he comes up with?

Mr. SCHULTZE. Ultimately it has to be.

Chairman PROXMIRE. I would like to ask you, Dr. Schultze, to take off your hat as an expert budget director with your background, and so forth, and give me your reactions as a human being with strong value judgments and with strong feelings on how our priorities ought to be ordered. The reason I ask the question is that I did not

want to read anything into your remarks to indicate that we can properly cut the military budget.

Your substantial projection, for example, of a \$62 billion budget in 1975 is going to be simply a projection, not an indication of your own feeling. In your book you indicate that we can have a big cut in space programs for instrumented exploration instead of manned exploration. You said this morning that you think one way of getting to the public works problem is insisting on Federal funding.

At the same time, however, you seem to put a lot of emphasis on putting more of our resources into the public sector. Galbraith and others have said that the private sector priorities should be lower than those in the public sector.

Presumably this is in the area of family assistance, education, pollution, and areas of that kind. Is it fair to make these assumptions? As I said, I do not want to read anything into your remarks. At the same time you are very helpful to us because you are someone who has given these things a great deal of thought and your value judgment would be very valuable to us.

Mr. SCHULTZE. I guess in order of priorities, of listing priorities, my own personal view is that the low end of the military budget alternatives I have indicated is one that is perfectly consistent with what appears to me at least to be the foreign policy and the national security interests of the United States, that with a more restrained strategic nuclear posture, and with a conventional war posture scaled down to the one and a half war situation, the United States is still an awesomely powerful nation but it has at least cut its military cloth to fit its legitimate interests in the rest of the world. And I don't think we buy anything, really, anything significant for the national security of the United States by going much beyond that. That is No. 1.

Point No. 2, before I start taking more resources out of the private sector and putting them in the public sector, I would personally also want to have at least some modest shift in resources from a number of older, not particularly efficient, not particularly desirable programs, into new social programs. And, I think, the other times before this committee I have indicated some of those areas.

I think a lot of them have to do with various outmoded subsidy programs which generally tend in many cases to give subsidies to people who do not need them, and, as a matter of fact, in very many cases then to give them to people who already have unconscionably high incomes. I do not know how much money one could pick up that way. I do not think it is a large amount, but, I think, it is worthwhile. Obviously even a budget director or an ex-budget director should not laugh at picking up \$2 to \$4 billion over the next 4 years for some of these.

If we did that it would give us something between \$30 and \$40 billion in free budget resources that it would be growing into by 1975. I am not convinced, I am not sure, in terms of how we can effectively spend the money, or whether we need any more than that. I think there are large areas of public need that could well and effectively use that money, reallocated primarily from other parts of the budget. But I am not sure whether there is a need to go beyond.

I would say, however, that personally I see no reason why, if it should turn out that the needs of our cities, of pollution control, of edu-

cation, of income maintenance, are such that you need more, that there is anything sacred about a 20-percent share in the national income. There is no law of nature that says 20 percent is the right amount.

Chairman PROXMIRE. The trouble is when you get into that is that I am not sure that you do not recollect your housing program. So much of that depends on an economic situation where your fiscal policy is tight enough so that you can free funds to the private sector that can be invested in housing. And you place as all of us place, a high priority in moving ahead in housing.

Mr. SCHULTZE. I agree. But I do not think it is inconsistent. One example, as I indicated earlier, you could pick up \$4 billion in additional revenue simply by refusing to let those auto excise and telephone taxes run off. You could pick up \$4 more billion simply by canceling half of the scheduled net reduction in the 1969 tax reform law.

I am not suggesting that that is either politically wise or at this stage absolutely necessary. I would prefer to get the other \$35 billion first and then see. But I certainly would not be shocked if it turned out we would go from 20 percent of the GNP to 21 percent.

Chairman PROXMIRE. You refer to "the present pause." How long do you expect the present economic pause to last? Would you call it a recession at this point? If not, why not?

Mr. SCHULTZE. First, I do not know how long it is going to last. I wish I did. I do not think I would yet call it a recession. I do not particularly see an awful lot of merit, except on the partisan side, in getting into the semantics of it. It is close enough for one reasonable man not to label it a recession, and for another to label it a pause. But it is so close that I do not want to get involved in that. I do not see much point to it.

Clearly if the economy continues to behave in the next quarter or maybe two quarters the way it has behaved in the last two, it is clearly a recession. If push came to shove, I guess I would say I think the administration with respect to the way the economy is going to behave is more likely to be right than wrong; namely, it will turn up gradually.

With respect to what is going to happen to prices, on the other hand, I am somewhat less sanguine. But I still find it hard as an economist to believe that this kind of economic sluggishness will not eventually get its way into the price index. It has not yet. I think, as I indicated in the colloquy with Mr. Brown, that time can be speeded up by the use of the Presidential power and authority in terms of guidelines and jawbone. But I hate to predict.

Chairman PROXMIRE. Unemployment has been rising, and rising rapidly and steadily for some time now, from 3.3 up to 4.8 percent. We have 3 million people out of work, every administration official has testified, including Arthur Burns, and others, that they expect unemployment to continue to increase for a little while and then hope it will ease toward the end of the year.

Under these circumstances do you think we have a sound fiscal-monetary policy?

Mr. SCHULTZE. My own preference would be for a somewhat more rapid growth in the money supply. And secondly, repeating myself,

accompany fiscal and monetary policy by something on wage-price policy.

Chairman PROXMIRE. Do you feel that if you use your wage-price guidelines, or anything short of freezing prices and wages, that we can get down to 2½ percent inflation by 1972, 1973, without having anything more than 4 percent unemployment? Will the present policies do the job?

Mr. SCHULTZE. I do not know. I will say this, that I do not think we have any option but to play that game. By that I mean, I do not think morally or any other way, politically, morally or any way you want to look at it, that we can play the game of either the major increase in unemployment to bring those prices down, or secondly, holding to a 5 percent unemployment rate indefinitely. I think that the concept of holding to a 4½ to 5 percent unemployment rate for a little while, may be a half a year, or something that, with the hope that that is going to pull price increases down, is the only way you can play the game. If it turns out you are wrong, and if it turns out that as the economy starts to move back we get no relief on prices, then we may have to recheck this. But it seems to me that we—

Chairman PROXMIRE. You say it is the only way to play the game. Are you throwing out the notion that we could have a freeze on wages and prices? A number of responsible people have so proposed.

Mr. SCHULTZE. I would not say that a freeze on wages and prices would be desirable. I think there are periods—the Korean war being an example—where it was, for particular reasons.

Chairman PROXMIRE. What is it now?

Mr. SCHULTZE. The Korean war inflation was a terrific, explosive rise. Prices went up 10 percent in about 6 months. And the price-wage controls knocked psychology in the head. And prices in most cases actually fell below the ceiling. It was a one-shot affair.

Now, given all the other tensions in society, given an unpopular war, to maintain over a substantial period of time a price-wage freeze in an economy which is already sluggish, I think, might prove extremely difficult and damaging to the Nation. Although if it turns out that in the end that as we try to move back to 4 percent unemployment, and prices accelerate again, then, I think, very seriously you are going to have to think of other measures beside fiscal and monetary policy to handle it.

I am not at the moment able to prescribe such measures. But I do not think we ought to write that policy off, namely, that fiscal monetary policy ought to cool the economy enough to get prices down.

Chairman PROXMIRE. We really have not solved the problems of trying to get inflation under control without excessive, unacceptable unemployment.

Mr. SCHULTZE. That is right, we have not.

Chairman PROXMIRE. Congressman Brown?

Representative BROWN. Let me pick up that point. Would you agree that the historical pattern in a pause or recession has been that prices do not yield until the recovery begins to get underway or the pause has bottomed out? Isn't that a fair assessment of the pattern? I think in particular of 1958, when the prices did not seem to yield until we were pretty well underway?

Mr. SCHULTZE. I would want to check it for the record, because my recollection is—the first thing we have to remember is that the 1958 recession lasted—it was a deep one, but the down phase only lasted two quarters, or maybe three at the most. I think it was two. And it is true that technically the economy was starting to turn back up. We got a leveling off in prices.

However, I think that was much more due to the time lag problem than the fact that you have got to wait for recovery. In other words, it does take time for the cooling off of the economy to affect prices and wages. But it has been an awful long time, that is the problem.

Representative BROWN. Let me present an idea. As you point out, in 1958 the down-turn was relatively sharp, but the period of time, starting when it dropped off until things were in fair shape again, was about a year or five quarters. By that time prices had leveled off substantially from the percentage of rise when the recession began. Now, if we assume that the current Administration is trying to deal with prices on the basis of a limited pause as opposed to a sharp recession, would it follow that the pause may have to extend over a somewhat longer period before the impact is felt on prices. Do you follow my argument?

Mr. SCHULTZE. I follow your point. And there is something to that. I think the disappointing thing is that even if 1958 prices were not really accelerating, and they were rising at a much lower rate than they are now. I do not remember the exact timing of it. The real problem is that now, after a period of almost a year, there has been practically no economic growth, while capacity is growing, and rising. There is as yet no absolute indication, however much people may predict, of any slackening in inflation. And there is indeed some minor acceleration in there, depending on which particular month's figure you are looking at. And I think that is the disturbing thing.

I am not saying that prices won't begin to behave better. I do not know. But, I think, it is disturbing that almost everybody expected them to behave better sooner.

Representative BROWN. In a sharp recession the psychology of inflation can be broken very quickly, because people see sharp increases in unemployment—and I mean increases beyond the 4.8 percent that we are experiencing currently—or when profits drop off drastically, all these things have an impact on inflation psychology. When there is, as you describe it, a pause as opposed to what is identified as a sharp recession, it occurs to me that the breaking of inflationary psychology takes a little more time than the impact of a sharp recession. Perhaps we have seen an indication of that recently in the stock market.

Mr. SCHULTZE. I think quite apart from the problems of the unemployment rate that is created from doing that, there is a major problem of a sharp recession in that, (a) can you control it, (b) there is almost a law of nature that once the economy moved down like that very rapidly, that the turn-around and the policies taking the turn-around are going to be a bit panicky, and you may undo a lot of good by rushing back up again. And hence, it seems to me that there is some problem with a very sharp shock to the economy in trying to do this.

I think doing it more gradually is better.

Representative BROWN. As a matter of fact, it took 5 years or longer before the unemployment rate fell below 4 percent, after the 1957-58 recession.

Mr. SCHULTZE. Really 7 years.

Representative BROWN. I guess that is right. So it took a while before we finally recovered in the social sense, if we can put it that way, from this experience.

If you substantially reduce programs, won't that have a rather substantial impact on the \$30 to \$35 billion that we are going to have by 1975 to spend on increased social programs?

Mr. SCHULTZE. I had indicated that my projections come out with much less than that. I was saying that if you adopt a low military budget alternative, and if you pick up some of these other things, you might get up to \$30 billion. It was not that you had to do that. I start with \$13 billion as what is available on the basis of current trends and policies and say that by operating with a low military budget, and by careful review of other programs, one might raise that \$13 to \$30 or \$35 billion.

Representative BROWN. And the possibility of an increase both in taxes and deficit-financing enters into that picture; does it not?

Mr. SCHULTZE. Yes; as I indicated in answer to the chairman, it seems to me that that is what personally I would like to see done first. And then secondly—

Representative BROWN. You mean the tax resources?

Mr. SCHULTZE. No; the lower military budget and reviewing other programs first. And then if it turns out that this will not meet our needs, then review the tax picture.

Representative BROWN. Let me get into one other area. Don't our national security expenditures also have other impacts on our economy? For instance, if we ask the Germans and Japanese to assume more policing and defense responsibilities, what does this do to their public and private expenditures and their ability to compete with us? For instance, would they be able to put steel down on American docks cheaper than we can produce it?

Mr. SCHULTZE. I hate to say it, but, I think, the obvious answer is that in some cases other countries which are investing a very large proportion of their resources in plant and equipment, if they devoted a commensurate share of their national income to defense as we do, they would at least find it more difficult to invest that much, probably they would be investing somewhat less, and in the long run it might have an effect on our relative competitive positions in our favor.

However, I do not think the magnitudes are so great that one could make any easy prediction of this.

Representative BROWN. There would be some impact, some place in the picture, would there not?

Mr. SCHULTZE. Some.

Representative BROWN. Yet when we look back into history, various international problems have come from those nations which we might most specifically look to in terms of this assistance at this time. It makes it a very thorny series of choices, does it not?

Mr. SCHULTZE. I agree, thorny choices are involved. On the other hand, it seems to me that one can project remote possibilities to the point of impotence. When I think of all the possible ramifications of

everything we do, almost you place yourself into a corner of impotence, because there is nothing you can do that somebody cannot show you how that might lead to undesirable consequences. And, I think, there is a limit beyond which one should try to predict this, because you end up otherwise hopelessly.

I do not think that the possibilities that you have raised, while one has to score them as possibilities, deserve a high enough ranking to really be considered in terms of the kind of future actions of the United States with respect to its foreign policy.

It seems to me that those particular ones are relatively low in the scale, although no one could write them off completely.

Representative BROWN. We presume some withdrawal from our commitments abroad in terms of troops in Europe and in the Far East, which will have some impact on the expenditure of our public funds. It seems to me that that raises some questions with reference to our domestic economy.

Mr. SCHULTZE. My only point was with respect to the impact on the domestic economy. The withdrawal of resources from the military budget, for example, it seems to me can clearly be put to good use elsewhere. Lord knows we have enough needs. I do not really worry too much about any aggregate depression.

Secondly, with respect to the impact on our allies of them picking up a slightly higher proportion of the burden, I am not quite sure what it will do to their competitive position, but I do not think it is going to help it. And so from our point of view at least it seems to me that these are not things that should stand in the way if the programs are otherwise desirable. I do not think it is really big enough to make a lot of difference.

Representative BROWN. Your question is whether we can get other nations to do what we would like to have them do?

Mr. SCHULTZE. May I just add, in my own view at least, that in terms of scaling the military back into its one and a half war assumption, I see no reason why that should depend at all upon a significant increased effort of other nations. It seems to me one can make a very good case—which, as I understand it, as a matter of fact, is what the President did in the state of the world—that it is a very realistic reflection of our own interest, and does not necessarily have to be accompanied by a big increase in the policing action of other nations.

Chairman PROXMIRE. Dr. Schultze, you have written a book that I think ought to be—I say “must” reading—I have not said that about a book before—for every Member of the Congress. And, I think, we would get a much more logical and sensible operation in the Congress if we could all read this paper book, \$2.95, Brookings, “Setting National Priorities.” I say that because I am about to ask you this.

Representative BROWN. There is no cut in this for anybody?

Mr. SCHULTZE. I do not even get one.

Representative BROWN. I wanted to protect the ethics of everybody involved.

Chairman PROXMIRE. I do not get a cut. In fact, it is in competition with a book I recently wrote entitled “Report From Wasteland.”

Why is it that ex-budget directors, ex-scientific advisors, ex-DOD officials, and ex-Secretaries of the Interior, propose vast re-ordering of priorities after they get out of office, which it appears they were unable

to accomplish while in office? I wonder if there is something about our institutions that makes it difficult or impossible to think about or accomplish these changes while they are in office? You see, one of the pictures many of us have is that the President of the United States, who after all does play the far more significant part in our priorities, is briefed every day on foreign policy, and maybe several times a day.

He often meets with the National Security Council. He is exposed to that view and that emphasis so steadily that it would seem to me that our principal source of priorities does come—and this is not at all critical of Presidents Nixon or Johnson or any others particularly—but it does come before the President with something of a bias.

Is there anything that can be done to overcome this kind of a situation? Could there be regular briefings on economic problems and domestic problems that would parallel? Or is the President just too busy in his job as commander in chief to significantly change our present system?

Mr. SCHULTZE. Let me preface, first, obviously, I have no major solutions which are going to make budget directors much less Presidents, behave that much differently. But it does seem to me that one of the difficult things about public office dealing with problems from day to day is that one with all the best will in the world, never really gets a chance to step back and take a look, not at the minor alternatives but some of the major alternatives and some of the consequences of those alternatives, not immediately but down the road 3 or 4 or 5 years—I do not mean just budgetary, but I mean in general—and that any mechanism which periodically forces high officials from the President on down to consider formally an explicit alternative course of action to the one they are now pursuing, before we get so locked in and so much a captive of our own records which you then have to justify, that almost anything that would do that would be worth fifty times its weight in staff resources or whatever else it takes to do it.

And it is that business of trying to see whether you are going in a major way before you get so far down the road that psychologically and everything else your reputation, political future and everything else is bound up in it. Obviously there is no panacea. But that business of stepping back and looking at major alternatives periodically it seems to me is terribly important at just about every major level.

Chairman PROXMIRE. How would you have the President do this? The Presidency is not really organized for this. When you appeared before before this committee you indicated, for example, that in AWACS there was no opportunity to really know whether it was any good, whether we needed it. Nobody asked the right question, it just was not put in perspective in terms of the overall priorities.

Mr. SCHULTZE. It is my understanding—I do not know what the nature of the security classification is—that an exercise of this kind was undertaken sometime last year, to develop major defense and civilian alternatives for the President.

I do not know what the outcome of this was.

Chairman PROXMIRE. That is an improvement.

Mr. SCHULTZE. One could design a mechanism maybe twice or three times a year for a major review of alternative policies. Now, you do not drag up the same old issues three times a year—I mean the change

in emphasis, and so on, and so forth. But it is technically quite possible to provide those alternatives to the President in a fairly organized way with budget costs, with their normal policy consequences. In most of these cases you do not make up your mind on one grand strategy anyway, you kind of inch your way into it. But it helps in inching your way into it to have the big picture continually, at least two or three times a year it seems to me, put before you. And I think it is possible.

Again, it does not guarantee anything. But at least it pulls one back from that inching process and allows one to see where the daily discussions are leading.

Chairman PROXMIRE. You suggest modification of Public Law 801 about 5-year projections of budget costs of proposed legislation. What can Congress do to insure compliance? After all it is a law now.

Mr. SCHULTZE. In most instances it is more honored in the breach than in the observance because many committees do want to see this information.

Chairman PROXMIRE. Anybody could ask for it and get it under the law?

Mr. SCHULTZE. There might be a fight in some cases and legitimate quarrels as to what you mean by a 5-year projection, but if a committee insists on it, it can get it. And if they really insist on getting—

Chairman PROXMIRE. In your view does this have to be the committee that has jurisdiction over the particular field? For example, could the Joint Economic Committee ask for these projections, in your view?

Mr. SCHULTZE. That I do not know.

Chairman PROXMIRE. It could try?

Mr. SCHULTZE. It could.

Chairman PROXMIRE. Maybe we will.

What is so difficult about a 5-year projection for a specific proposal? Why is it so hard to do?

Mr. SCHULTZE. Let me try with two different examples. Let us take "model cities." It would be very difficult to give a 5-year projection of "model cities," because it is not based on a formula, it is based on judgments with respect to capability, the planning capability, the using capability of various cities. It seems to me, with all the best will in the world that it would be difficult to give a 5-year projection, but one might give several alternatives based on several assumptions. On the other hand, you take something like the "family assistance plan," while one can make mistakes, nevertheless it is a formula tied to income levels, the number of people, and eligibility conditions.

And while the projection may turn out, historically, to have been in error, there is no reason why one could not insist on a 5-year projection—given certain population and income assumptions. And so, in asking for a 5-year projection, one has to be quite flexible and reasonable, depending upon the nature of the program you are projecting. Some are easily projected, and others can only be done in terms of a range of possibilities. But even that would be useful, it seems to me.

Chairman PROXMIRE. I like very much your suggestion that the Joint Economic Committee undertake to develop its own long-run budgetary projections. How would you suggest that this be timed, soon after the submission of the President's budget, or does it matter?

Mr. SCHULTZE. As soon as possible; yes, sir. That does pose difficul-

ties. But it seems to me it is doable. And also it seems to me some of the information could possibly be developed in early hearings, since the administration—I think they are to be congratulated on it—have begun to prepare, at least in summary, some of these projections.

Chairman PROXMIRE. Mr. Brown?

Representative BROWN. I just want to pursue one point. You said that there is a need in the administration—and I think you underscore that need—to stand back and look at the long-range projections and long-range plans. You served in the administration; how has that functioned? What is the vehicle for doing this? Is it the President, with all the demands placed upon him? Is there some other vehicle that we ought to look to for it?

Mr. SCHULTZE. I do not think that this would be so time-consuming for the President that the major problem would be his time. He obviously cannot get involved in the preparation of all the detailed estimates, the discussions that go behind that. But, in terms of considering the implications, it seems to me that is not enough of an absorber of his time to make this the limit. And it seems to me it is very important.

Representative BROWN. Do you think that information can be brought to him in a fairly balanced presentation? How did it work in the administration in which you served?

Mr. SCHULTZE. It seems to me the presentation has to be made in the context where there can be arguments. That is No. 1.

Secondly, it seems to me it is not so much that you make a presentation to him and present him with six grand alternatives and he says, "I pick No. 3." And you go down the line with No. 3 and that is it. Rather, what this sort of thing does is give him a framework of information within which to judge some of the consequences of a lot of individual decisions he is going to be making in the next 6 weeks. It is more in terms of a framework of information and consequences, if I really go this particular route with respect to some military strategy, here are the long-term consequences. If I adopt the family assistance plan, what is it preempting of the resources that would otherwise be available?

So that No. 1, it is really an information framework rather than something which you try to force the President to make grand global decisions.

Point 2, with respect to who ought to do the staff work and how it ought to be pulled together, I am not sure I can now judge, given the new reorganization, which my prior job leads me to view with some question. But, in any event, I would have said that it ought to be a joint operation with the Budget Bureau and the National Security Council.

I am not precisely sure what the introduction of the Domestic Affairs Council does to this, and I am not prepared to answer under those institutional circumstances. But various things like this are being done to some extent. And it is a question of pulling them together and making them most useful to the President.

Representative BROWN. We hear a great deal today about the necessity for the President to listen to the many different elements of society. But my question is, To what extent do the facts presented to

the President make the decision for him? And to what extent do the decisions rest on political acceptability?

These things can really be quite complicated. It is more than just a formula presentation of alternatives or priorities which one can pick in a vacuum and let stand.

Mr. SCHULTZE. You are quite right, Mr. Brown. In the long run. The essence, obviously, of political leadership in a democracy is leadership, not dictatorship. And it does mean making judgments about what is acceptable and what is not acceptable, how far one can get ahead of or be somewhat different from in a leadership sense from what popular opinion might be now and what kind of a compromise one can work out, with all the different elements that compose our society. And it is a very essential and important part of the leadership.

All I am suggesting is that that part of it can be done better the more information one has about the substantive consequences of one's answer. It does not mean that the kind of staff work and staff documents and alternatives are the only input into a presidential decision. I hope they never are.

Representative BROWN. Let me pursue the other side of the coin—the work of the Joint Economic Committee or any representative body of the Congress. To what extent do the alternatives which we might present reflect the areas in which the Congress may not be as sensitive as the Executive? Also there are areas in which we may be somewhat more sensitive in view of the fact that we have more direct and more frequent association with the electorate.

Mr. SCHULTZE. It seems to me that is precisely the advantage of having the Joint Economic Committee do some things in this area, that one does not want to centralize even information and presentation and substantive thinking in one place. And it seems to me that this committee and the Congress have not only the purely legislative role, but it is also an important national forum, and it is one of the major elements that ultimately has to go in the President making up his own mind as to what he is going to do. So it is not just his making requests to the Congress and getting turned down or accepted, it is also the independent role of the Congress as a reflector of the national mood and a place to crystallize ideas—I mean not putting pressure in a bad sense, but being a source of pressure in a way on the President. This is all to the good.

Representative BROWN. Suppose you have a sharply contradictory viewpoint between the Congress and the President in some area. For instance, in the amount of spending on our national problems, a situation we have found ourselves in frequently when the Congress wanted to spend more money in an area than the President wanted to spend. Where does that problem ultimately lead us?

Mr. SCHULTZE. It seems to me it leads where it has always led that neither the President nor the Congress is lacking in weapons, and what usually happens in these cases is that it comes down to somewhere in between. That is not to say that it always comes down rightly that way, but it is not a helpless Congress facing an omnipotent President or vice versa, and in the cases I know, at least, there has been a kind of balance and both sides have to give some.

Representative BROWN. You suggest that we keep that balance of tension between the Congress and the executive branch?

Mr. SCHULTZE. Yes. It is not only correct, but it is also much easier for me to agree in my present position than it might have been otherwise, you are quite right.

Chairman PROXMIRE. Thank you very, very much, Dr. Schultze.

The subcommittee will stand in recess until tomorrow morning at 10 o'clock, when we will reconvene in this room to hear Murray Weidenbaum, the Assistant Secretary of the Treasury for Economic Policy, and Mr. William Gorham, a former official of HEW who is now the president of the Urban Institute.

(Whereupon, at 12:25 p.m., the subcommittee recessed, to reconvene on the following day, at 10 a.m., Tuesday, June 2, 1970.)

## CHANGING NATIONAL PRIORITIES

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TUESDAY, JUNE 2, 1970

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMY IN GOVERNMENT  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The Subcommittee on Economy in Government met, pursuant to recess, at 10 a.m., in room G-308, New Senate Office Building, Hon. William Proxmire (chairman of the subcommittee) presiding.

Present: Senator Proxmire.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, economist; and Douglas C. Frechtling, economist for the minority.

Chairman PROXMIRE. The subcommittee will come to order.

The Joint Economic Committee in its most recent annual report repeated its recommendation that the Federal Government concentrate on national goals and priorities as a central requirement of public economic policymaking that the dollar costs required to attain primary social goals be determined, that there be an evaluation of the resources which can be called upon to reach social objectives, and that the Nation focus on the allocation of Federal revenues between the military and civilian programs.

We also stated on the basis of the studies conducted by the Subcommittee on Economy in Government—of course, that is this subcommittee—during the past year, that the primary consideration relative to further evaluation of our national priorities is the need for fuller understanding of the pervasive influence of the Federal Government on total resource use in the economy.

In order to understand how the Federal Government influences the national economy, we ought to comprehend the details of the budget, which contains a record and a forecast of Government spending, as well as the Government activities not recorded in the budget which have a major impact on the use of public and private resources. Only after such knowledge is gained does it become possible to see what our priorities have been and what our opportunities for choice and change are.

But there is another question that must be asked before the Government can presume to make so rudimentary a decision as between public and private spending. That is, what does the record show so far? How well has the Federal Government employed the vast resources entrusted to it by the taxpayers? How much success are Federal programs likely to have in the future?

We hope to explore these and related questions this morning with our two distinguished and expert witnesses. Dr. Murray Weiden-

baum, Assistant Secretary of the Treasury for Economic Policy, was formerly chairman of the department of economics at Washington University in St. Louis, and has given valuable testimony to this committee in the past.

Mr. William Gorham was with the research staff on the Rand Corp. from 1953 until 1962. In 1962 he was appointed Deputy Assistant Secretary of Defense for Manpower, serving in that capacity until 1965 when he became Assistant Secretary for Planning and Evaluation in the Department of Health, Education, and Welfare—which gives him very valuable experience in both the defense and nondefense sector of our Federal responsibilities.

In 1968, Mr. Gorham was elected president of the Urban Institute, in which position he now serves.

I think we should hear from Mr. Weidenbaum first, and then hear from Mr. Gorham.

Mr. Weidenbaum, we are ready to hear from you at this time.

**STATEMENT OF MURRAY L. WEIDENBAUM, ASSISTANT SECRETARY OF THE TREASURY FOR ECONOMIC POLICY**

Mr. WEIDENBAUM. Thank you, Mr. Chairman.

It is always a pleasure to appear before the Joint Economic Committee. Basically what I do in my prepared statement is to offer a mechanism for making more enlightened choices on national priorities.

In doing so I draw on work that I did as a professor of economics before joining the administration.

As you can appreciate, this is a very personal prepared statement. I would now like to summarize it.

In a sense, my approach builds on the planning approach—

Chairman PROXMIRE. May I say that your entire prepared statement will be printed in full in the record.

Mr. WEIDENBAUM. Thank you, sir.

My approach builds on the planning-programing-budgeting system and attempts to fill a major remaining gap. Despite its accomplishments, PPB is not coming to grips with the larger choices which have to be made in allocating Federal funds among different agencies and programs.

“Would a dollar be more wisely spent for education or for public works?” This fundamental question is not raised in the budget process at the present time. The current emphasis rather is on choosing among more specific alternatives within each category, such as education, public works, and so forth. At present the choices are usually restricted to those which can be made within each of the many agencies involved in each specific program.

What I have tried to do in contrast is to develop a program budget for the entire Federal Government. Such a programwide analysis permits us to compare alternative programs of different agencies for fulfilling broad national goals rather than merely examining the alternatives available to a single Federal agency.

The hypothetical program analysis for the entire Federal Government presented here is based on the fundamental end purposes for which Government programs are carried on.

In a world of critical international tensions, the initial purpose is to maintain the national security. A variety of programs exists in this category, ranging from our own Military Establishment to the armed forces of other nations to negotiating arms control agreements.

A second national purpose is the promotion of the public welfare. Here we find the Government operating in unemployment compensation, social security, veterans, and many other such activities.

The third major purpose is the continued development of the American economy. This covers natural resources, transportation, education, health, and other attempts to increase economic growth.

Finally, there is the routine day-to-day operations of the Government—collecting revenues and the functions of the Congress and the courts.

Table 1 in my prepared statement shows how the requested funds in the fiscal 1971 budget are allocated among these four purposes. It may come as a surprise to learn that public welfare, not national defense, receives the largest single share.

A comparatively small portion is devoted to economic development. When we examine the budget and appropriations hearings over the years we find little systematic attempt to appraise the wisdom of these implicit choices.

Perhaps the allocation of funds would have been different if the appropriation requests had been reviewed with an eye on the total picture. I believe we can gain added insight to the possible choices among programs by using the framework suggested here and analyzing the content.

For example, in the national security area we find that one-tenth of the total is comprised of programs that indirectly promote the national security, such as the space program and foreign aid.

The data in table 2 of my prepared statement can be used to indicate the types of strategic choices that can be made or currently made only by default in allocating funds for national security.

The approach suggested here can lend itself to raising questions such as the following: Would national security be improved by shifting some or all of the \$6 billion for foreign aid to the U.S. Military Establishment?

Conversely, would the national security be strengthened by moving a proportionately small share of the direct military budget, say \$500 million, to the USIA or the arms control effort?

Are we putting too much into foreign aid and not enough into the space program, or vice versa?

Would the Nation be better off if we shifted some of the funds going to civil defense to arm control, or vice versa?

The very existence of the type of information presented here may lead not only to attempts to answer questions such as these, but, more fundamentally, to widen the horizon of budget reviewers.

The second category is welfare. Over two-fifths of the 1971 budget is devoted to these programs. Again, such activities are nowhere brought together so that the various spending programs can be compared against each other, as is done in table 3 of my prepared statement. The various life insurance, unemployment and retirement programs receive the great bulk of the funds for public welfare, exceeding the entire economic development category.

However, this is hardly a conscious division. The expenditures for these programs are predetermined by permanent, indefinite appropriations and statutes. Hence it is not surprising that they have grown to dominate the nondefense budget.

We can make cross comparisons of Government programs which are not currently done. For example, the one and a half billion dollars for formal efforts to reduce poverty is less than the \$1.9 billion for foreign aid. Would some trade-off between welfare and national security result in a net advantage? This whole analysis also attempts to answer the current unanswered but fundamental question, "Would an extra dollar—a billion in the case of the Government—be more wisely spent for program A or for program B?"

When we look at the economic development category, that too is revealing. (See table 4 in my prepared statement.) We find that transportation accounts for the largest share and, when combined with resource development, it accounts for two-thirds of the total. A Government-wide budget would focus attention on questions such as, "Would a shift of funds between transportation and education be advisable between natural resources and research?"

Raising these questions is not expressing a value judgment, but indicating a pattern for governmental decisionmaking.

The approach suggested here could be incorporated in the President's budget. This would result in growing congressional and public awareness of the problems of choosing among alternative uses of Government funds. Alternatively, a congressional committee could rework the formal budget submissions along the lines suggested here.

This would provide some overall Government policy, which at present seems to be the accidental byproduct of decisions on the various department requests, rather than the guiding hand behind those decisions.

The underlying theme of this program approach is a need to array the alternatives so that deliberate choices can be made among them. It has a counterpart in the private sector. Many families might run out and spend the Christmas bonus for a new car. However, a more prudent family would carefully, even though subjectively, consider the relative benefits of a new car, a summer vacation, or remodeling the basement.

Similarly, a well-managed company would not impulsively decide to devote an increase in earnings to raising dividends, but would consider in detail the alternative uses of the funds—a new research program, rebuilding an old plant, or developing a new overseas operation.

I try to analyze the 1971 budget within this framework to see what changes in priorities are implicit in it. I take fiscal 1969 as the base for comparisons. Hence the increases and decreases between 1969 and 1971 indicate the revisions in the implicit priorities made thus far by the Nixon administration.

As shown in table 5 of my prepared statement, the welfare area is the major area of expansion. It has received more than half of the increased funds during the 3-year period, while national security in contrast has been reduced substantially.

Both economic development and operations show some expansion, but of considerably smaller magnitudes than welfare.

The lower half of table 5 of my prepared statement shows the more specific program categories which have experienced gains or losses of a billion or more during the 2-year period. By and large they correspond to the movements in larger functional categories.

However, there are two fundamental shortcomings in this analysis—and I try to correct them in my prepared statement. That is, two major types of governmental related activities are not included in the budget.

The first category consists of credit programs. The bulk of Federal credit assistance is now financed outside of the budget.

Of the \$22 billion increase in Federal and federally-assisted loans for the fiscal year 1971, only a billion and a half show up in the budget. Over \$20 billion are not contained in the budget. But table 6 in my prepared statement contains detail on where the \$20 billion goes. There is little Government control over the expansion of these federally-assisted loans outside the budget.

As long as federally-assisted loans and loan guarantees are excluded from the budget, there are strong incentives to convert from direct loans to more indirect techniques, such as loan guarantees and operations of Government-sponsored but ostensibly privately owned corporations such as Fannie Mae.

As you may know, a subcommittee of the Cabinet Committee on Economic Policy has been studying the operation of unified budget and of these credit programs specifically. As chairman of this activity, I would like to be able to report that we have a solution. However, not yet.

We have been exploring alternative ways of reviewing federally-assisted credit in a more comprehensive manner. While the precise economic impact of credit assistance is difficult to determine, I believe it would be more desirable to focus greater attention on these programs, both those in and out of the budget.

One method of doing that is to impose a ceiling on the total borrowing of Federal and federally-sponsored credit agencies, both those in and out of the budget. Alternatively, a ceiling could be enacted on the overall volume of debt created in the Federal loan insurance guarantee activities. Another alternative would be to establish quantitative controls over all Federal credit programs.

Several steps in this direction were taken in the fiscal 1971 budget. For the first time the summary table includes a section on Federal-assisted credit as well as the items in the budget.

There is a second type of Government activity not included in the budget. These are what I call tax aids, which in previous studies have been referred to as tax expenditures.

Via special exemptions, deductions, and credits, the tax system affects the private economy in ways that could be accomplished by direct Government expenditure.

For example, the expenditure side of the budget shows medical assistance. However, nowhere in the budget is account taken of the \$95 million a year foregone by the tax system because of the special exemption for sick pay.

I believe it is useful to quantify the expenditure equivalents of these provisions. This is a difficult undertaking, and I mention some of the problems in my prepared statement.

In table 7 of my prepared statement I do show for major tax aids the difference between the tax actually paid and the tax that would be paid in the absence of the provision.

As shown in table 7 of my prepared statement, personal deductions and related tax benefits to individuals constitute by far the larger single proportion of tax aids. The second largest category are those benefiting business in general, such as the since repealed investment credit and the continuing surtax exemption.

As I will bring out more clearly in a moment, the implied priorities in the allocation of tax aids differs considerably from those of direct budget outlays.

Hence what I try to do in summing up is to bring together the expenditures within the budget plus the credit programs plus the tax aids. And I do this in table 8 of my prepared statement.

We can see that in some cases direct Federal outlays constitute a small proportion of the total volume of Government related financial activities affecting a given area. In fact, in housing the great bulk of the assistance is out of the budget; \$2 billion is in the budget, while about \$15 billion is out of the budget in the form of tax aids and credit programs.

That is the biggest case, although other large extra budget activities occur in commerce and transportation, agriculture, and income security.

However, in some areas such as national defense, the direct budget outlays account for virtually all of the program area. For space, interest, and General Government there are no tax aids or credit programs at all.

In contrast, the category of general assistance to State and local governments does not show up in the budget, but there are substantial amounts of tax aids for it.

Clearly, the ranking of priorities based on just looking at budget outlays is considerably modified when we take account of these related Government activities which take the place of budget expenditures.

The most notable change is housing. And here as I rank the priorities in the budget housing is thirteenth. In table 9 of my prepared statement, which includes the extra budget items, housing goes up to fifth place. Aid to State and localities is in last place in the budget. It goes up to 10th place here. Commerce and Transportation moves from fifth position to third.

Of course, some categories move in the opposite directions, because there are no tax aids or small tax aids or credit programs. Space drops from ninth to twelfth; education from seventh to ninth; health from fourth to sixth.

Even in an economy as productive as ours, resources are limited. Claims on output must be balanced against the economy's capacity to produce. As always, priorities will be established, either by design or by default. But any enlightened attempt to reorder and establish priorities cannot take place unless we possess a clear understanding of both the existing order of priorities and the nature of possible choices.

To conclude, I believe that development of a government-wide program budget would enable us to evaluate choices which cut across

existing agency and program lines. This would be a valuable asset to our decisionmaking efforts.

In addition, bringing such extra-budget items as Federal credit assistance and tax aids into the analytical framework would enable us to have a more complete accounting of the existing order of Federal priorities.

The pressure of competing demands and the need for exercising hard choices makes public resource allocation difficult enough without further complicating matters by the absence of adequate data. Hopefully, improvement in the quality of our information along the lines suggested here can lead to improvement in the quality of our decisions.

Thank you.

Chairman PROXMIRE. Thank you, Mr. Secretary, this is a very, very fine helpful statement.

(The prepared statement of Mr. Weidenbaum follows:)

#### PREPARED STATEMENT OF MURRAY L. WEIDENBAUM

##### HOW TO MAKE DECISIONS ON PRIORITIES

It is always a pleasure to appear before the Joint Economic Committee. I hope that you find my testimony useful. Basically, what I would like to do is to offer a mechanism for making more enlightened choices on national priorities.

In doing so, I will be drawing on work that I did as a professor of economics before joining this Administration. As you will see, the methodology may be useful for illuminating both current decisions on priorities as well as future actions. As you can appreciate, this will be a very personal statement.

##### A GOVERNMENT-WIDE PROGRAM BUDGET

In a sense, the following approach builds on the Planning-Programming-Budgeting (PPB) System and attempts to fill a major remaining gap. Despite its accomplishments to date, the PPB approach is not coming to grips with the larger choices in allocating Federal funds among different agencies and programs.

"Would a dollar be more wisely spent for education or for public works?" This fundamental question is not raised in the budgetary process at the present time. The current and, of course important, emphasis is on choosing among more specific alternatives within the education and public works categories. Furthermore, the choices usually are restricted to those which can be made within each of the many agencies involved in education or public works.

A program budget for the entire U.S. Government can be developed from available budget materials. Such a government-wide program analysis permits comparing alternative programs of different agencies for fulfilling broad national goals, rather than merely examining the alternatives available to a single Federal agency.

The hypothetical program analysis for the entire Federal Government, which I present here, is based on the fundamental end purposes for which the various government programs are carried on.<sup>1</sup>

In a world of critical international tensions, the initial purpose that comes to mind is the protection of the Nation against external aggression—to maintain the national security. A variety of Federal programs exists in this category, ranging from equipping and maintaining our own military establishment, to bolstering the armed forces of other nations whom we consider actual or potential allies, to various types of nonmilitary competition, and to negotiating arms control agreements.

A second basic national purpose, one also going back to the Constitution, is the promotion of the public welfare. Here, we find the Federal Government operating in the fields of unemployment compensation, social security, veterans' pensions, and many other such activities.

A third major purpose of government programs has received an increasing amount of attention in recent years—the continued development of the American economy. This area covers the various programs to develop our natural

<sup>1</sup>This analysis draws on Chapter VII of my recent book, *The Modern Public Sector*, New York, Basic Books, Inc.

resources and transportation facilities, as well as support of education, health, research and development, and other attempts to increase economic growth.

Finally, there is the routine day-to-day operation of the government, such as the functioning of the Congress and the Federal courts, the collection of revenues, and the payment of interest on the national debt.

Table 1 shows how the requested funds in the Federal Budget for the fiscal year 1971 are allocated among the four major purposes sketched out above. It may come as a surprise to many people to learn that public welfare programs, rather than national security activities, receive the largest single share of the budget.

TABLE 1.—RUDIMENTARY PROGRAM BUDGET FOR THE U.S. GOVERNMENT, NEW OBLIGATIONAL AUTHORITY PLUS LOAN AUTHORITY, FISCAL YEAR 1971

[Dollar amounts in billions]

Broad purpose	Amount	Percent
Public welfare.....	\$95.6	41.1
National security.....	74.3	32.0
Economic development.....	35.2	15.1
Government operations, etc.....	27.5	11.8
Total.....	232.6	100.0

Source: App. A.

A comparatively small portion is devoted to the economic development items, such as education, research, natural resources, etc. An examination of the Federal Budget and congressional appropriation hearings over the years reveals little systematic attempt to appraise the wisdom or desirability of these overall choices implicitly made in the allocation of government resources among these major alternative uses.

It may be mere conjecture to conclude that, possibly, the allocation of funds would have been somewhat different if the appropriation requests had been reviewed with an eye on the total picture, instead of examined as individual appropriation items in relative isolation. Added insight to the possible program choices that can be made, using the type of framework suggested here, may be gained from a somewhat deeper analysis of the content of each of these categories.

#### *National security*

As would be expected, the bulk of the national security budget is devoted to the U.S. military forces. However, one-tenth of the total is comprised of programs that would promote the national security through somewhat more indirect means, such as conducting nonmilitary forms of competition (NASA and USIA) or increasing the military capabilities of friendly nations.

The data in Table 2 can be used to indicate the types of "strategic" choices that can be made—or are currently being made only indirectly—in allocating funds for national security. First of all, these various defense-related programs are not, to my knowledge, currently brought together and viewed as a totality anywhere in the budget process. The groupings, of course, are arbitrary and illustrative; some, for example, may contend that NASA's contribution to American economic development is greater than its national security role.

TABLE 2.—NATIONAL SECURITY PROGRAMS (FISCAL YEAR 1971)

[Dollar amounts in billions]

Program category	Amount	Percent
U.S. military forces.....	\$68.2	91.8
Scientific competition (NASA).....	3.3	4.5
Foreign nonmilitary aid.....	1.9	2.6
Foreign military forces.....	.5	.7
Psychological competition (USIA).....	.3	.4
U.S. passive defense.....	.1	(1)
Arms control and disarmament.....	(2)	(1)
Total.....	74.3	100.0

<sup>1</sup> Less than  $\frac{1}{2}$  of 1 percent.

<sup>2</sup> Less than \$50,000,000.

TABLE 3.—PUBLIC WELFARE PROGRAMS—(FISCAL YEAR 1971)

[Dollars in billions]		
Program category	Amount	Percent
Life insurance and retirement (including medicare).....	\$60.8	63.6
Public assistance.....	9.0	9.4
Assistance to farmers and rural areas.....	8.0	8.4
Veterans' compensation and pensions.....	7.4	7.7
Unemployment insurance.....	4.0	4.2
Urban housing and facilities.....	3.7	3.9
Anti-poverty programs.....	1.5	1.6
Specialized welfare programs.....	1.2	1.2
Total.....	95.6	100

The approach suggested here could lend itself to first raising and then answering questions such as the following:

Would national security be improved by shifting some or all of the \$5.7 billion for foreign aid and non-military competition to the U.S. military establishment itself?

Conversely, would the national security be strengthened by moving a proportionately small share of the direct military budget, say \$500 million, to the USIA or the arms control effort and thereby obtaining proportionately large increases in these latter programs?

Are we putting too much into foreign economic aid and not enough into the space program? Or vice versa?

Would the Nation be better off if we shifted some of the funds now going to passive (civil) defense to the U.S. Arms Control and Disarmament Agency? Or vice versa?

The very existence of the type of information presented here may lead not only to attempts to answer questions such as these, but, more fundamentally, to widen the horizons of budget reviewers.

#### *Public welfare*

Over two-fifths of the 1971 budget is devoted to programs in the general area of the public welfare. Again, these activities are nowhere brought together so that the various spending programs can be compared against each other. The tabulation of public welfare programs contained in Table 3 shows a rather large assortment.

The various quasi-life insurance, unemployment compensation, and retirement programs receive the great bulk of the funds for public welfare. However, this may be hardly a conscious decision. The level of expenditure for these programs—such as the Old-Age and Survivors' Insurance System—is predetermined by basic, continuing statutes; they are financed by permanent, indefinite appropriations which are not subject to review during the budget process because they do not even appear in the annual appropriation bills. Hence, it is not surprising that these programs have grown to dominate the nondefense budget, exceeding by far the total outlays for the various economic development programs.

Likewise, the expenditures under the various agricultural price support programs (which dominate the category of "Assistance to Farmers and Rural Areas") exceed all of the outlays for the programs of urban housing, anti-poverty, and other specialized welfare activities combined. Again, the farm subsidy program is generally set by the substantive laws on price supports and farm aid, rather than through annual appropriations.

Also, this level of detail permits some cross-comparisons of government programs which are not currently made. For example, the \$1.5 billion for formal efforts to reduce poverty in the United States is less than the \$1.9 billion for foreign economic aid. Would some trade-off between the public welfare and national security areas result in a net advantage? This type of analysis is attempting to answer the fundamental question, "Would an extra dollar (a billion, in the case of the government) be more wisely spent for Program A or for Program B?"

### *Economic development*

In this exploratory categorization of government programs, a number of activities are listed under the heading, "Economic Development." A good share of them, such as the development of needed natural resources or the improvement of necessary transportation facilities, may contribute to the more rapid growth and development of the American economy. Others, such as various subsidies, may be more questionable. Of course, it is inevitable that any such classification will contain many borderline cases.

A brief examination of the composition of the Economic Development category is revealing (see Table 4). Transportation facilities account for the largest single share, and when combined with natural resource development and related aids to business, account for almost two-thirds of the total. A government-wide program budget would focus attention on questions such as, "Would a shift of funds between transportation and education be advisable? Between natural resources and research?" Raising these questions need not be taken as expressing value judgments, but rather as indicating a pattern for governmental decision-making.

TABLE 4.—ECONOMIC DEVELOPMENT PROGRAMS—(FISCAL YEAR 1971)

[Dollars in billions]

Program category	Amount	Percent
Transportation facilities.....	13.0	36.9
Natural resources and regional development.....	10.1	28.7
Health research and development.....	5.3	15.1
Education and general research.....	4.2	11.9
Manpower development.....	1.7	4.8
Aids and subsidies to business.....	.9	2.6
Total.....	35.2	100

### *Government operations*

The final category of government programs represents the general costs of operating the government, the relatively day-to-day functions. More than 80 percent of the funds in this category cover the payment of interest on the public debt. The bulk of the remaining outlays for government operations is devoted to collecting internal revenue and the housekeeping activities of the General Services Administration.

### *Implementation*

The incorporation in the President's Budget Message and the annual budget document of the approach here suggested might result in growing congressional and public concern and awareness of the problems of choosing among alternative uses of government funds. In the absence of an automatic market mechanism, such an approach might introduce a healthy degree of competition in governmental resource allocation. In a sense, the adoption of a government-wide program budget would represent a logical expansion of the current program budgeting effort to work across rather than only down the traditional departmental lines.

An alternative means of implementation would be for a Congressional committee staff to rework the existing budget submissions within this framework for review, say, by the entire Appropriations Committee prior to its detailed examination of individual appropriation requests. This would permit the parent appropriation committees to set general guidelines and ground rules for the detailed budgetary review performed by the specialized subcommittees. It would also permit some improvement over the current situation, in which overall government policy often seems to be the accidental byproduct of budget decisions on the various departmental requests—rather than the guiding hand behind those decisions.

The underlying theme of this program approach to government budgeting is the need to array the alternatives so that deliberate choice may be made among them. It has its counterpart in the private sector. Many families might rush out and spend the Christmas bonus for a new car; a more prudent family

may carefully although subjectively, consider the relative benefits of a new car, a long summer vacation, or remodeling the basement. Similarly, a well-managed company would not impulsively decide to devote an increase in earnings to raising dividends, but would consider in detail the alternative uses of the funds—embarking on a new research program, rebuilding an obsolescent manufacturing plant, or developing a new overseas operation.

#### APPLICATION TO THE FISCAL YEAR 1971 BUDGET

It might be useful to analyze the President's budget for the fiscal year 1971 using the framework here presented so as to see what changes in priorities are implicit in it. The actual figures for the fiscal year 1969 are taken as the basis for comparison; hence, the increases (and decreases) between 1969 and 1971 are indicative of the revisions in priorities made thus far by the Nixon Administration.

As shown in Table 5, the Public Welfare area is the major area of expansion; it has received slightly more than one-half of the increased funds during the two-year period. In contrast, National Security has been reduced substantially. Both Economic Development and Government Operations show expansion between 1969 and 1971, but of considerably smaller magnitudes than Public Welfare.

The lower-half of the table shows the more specific program categories which have experienced gains or losses of \$1 billion or more during the two-year period. They correspond by and large to the movements in the larger functional categories.

TABLE 5.—Major shifts in the Federal budget, fiscal years 1969–71

	Amount of change
[Dollars in billions]	
A. Basic goal:	
Public welfare.....	+15.9
Economic development.....	+10.4
Government operations, etc.....	+6.6
National security.....	-7.3
B. Program area:	
Life insurance and retirement (including medicare).....	+12.8
Natural resources and regional development.....	+4.2
Transportation facilities.....	+3.6
Public assistance.....	+2.6
Interest payments.....	+2.4
Civilian and military pay increases.....	+1.4
Contingencies.....	+1.2
Manpower development.....	+1.0
U.S. military forces.....	-7.3

#### TWO SHORTCOMINGS IN THE ANALYSIS

Any analysis of governmental priorities is inherently limited to the items which are contained in the budget itself. At present two major types of governmentally-related activities are not included in the budget proper. Let us try to identify these activities and attempt to incorporate them into the analysis.

##### *Governmental credit programs*

The first category of items omitted from the Federal Budget consists primarily of uses of the credit of the Federal Government. The bulk of Federal credit assistance programs is now financed outside the budget by means of (1) various loan guarantee techniques and (2) loans made by Federally-sponsored but ostensibly privately-owned agencies.

Of the estimated \$22.2 billion net increase in Federal and Federally-assisted loans outstanding for the fiscal year 1971, only \$1.6 billion are direct loans which show up in the budget. Table 6 contains detail on the composition of the \$20.6 billion of Federally-assisted credit programs which are not contained in the budget proper. There is little Government control over the expansion of these Federally-assisted loans outside the budget and, hence, little overall consideration can be given to their impact on financial markets and on the economy.

TABLE 6.—NET CHANGE IN OUTSTANDING FEDERALLY ASSISTED PRIVATE CREDIT

[In millions of dollars]

Selected programs	1969-70		1970-71	
	Guaranteed and insured	Government sponsored	Guaranteed and insured	Government sponsored
National defense; foreign military aid.....	90		25	
International affairs and finance:				
Foreign economic aid.....	366		513	
Export-Import Bank.....	1,179		1,301	
Agriculture and rural development:				
Farmers Home Administration.....	587		2,258	
Banks for cooperatives.....		97		103
Intermediate credit banks.....		436		479
Federal land banks.....		577		582
Commerce and transportation:				
Economic Development Administration.....	14		24	
Maritime Administration.....	23		131	
Small Business Administration.....	365		481	
Interstate Commerce Commission.....	-10		-10	
Community development and housing:				
Urban renewal.....	371		456	
Public housing.....	1,043		1,426	
Communities loans.....	40		55	
Federal Housing Administration.....	5,202		7,877	
Mortgage-backed securities (GNMA).....	500		1,000	
Fanny Mae (FNMA).....		5,648		4,600
Federal home loan banks.....		4,487		2,400
Education and manpower:				
Student loans.....	713		704	
Academic facilities loans.....	100		200	
College housing loans.....	50		200	
Health; medical facilities.....				92
Veterans benefits and services, Veterans Administration.....	130		1,888	
General government.....	-2		111	
<b>Total.....</b>	<b>10,751</b>	<b>11,245</b>	<b>18,731</b>	<b>8,164</b>
Deduct: double counting.....	-6,548		-5,938	
<b>Net total.....</b>	<b>4,203</b>	<b>11,245</b>	<b>12,793</b>	<b>8,164</b>

The largest single category of Federally-assisted private credit is to the home mortgage market. This is accomplished through a variety of mechanisms. The Federal Housing Administration and the Veterans Administration guarantee and insure individual home mortgages. The now privately-owned Federal National Mortgage Association (Fanny Mae) operates a secondary market for FHA mortgage lenders. The Federal Home Loan Banks raise and provide funds for the savings and loan institutions which are important sources of mortgage credit. Most recently, the wholly Federally-owned Government National Mortgage Association (Ginny Mae) issues mortgage-backed securities, which is an attempt to sell indirectly mortgages to investors who prefer other types of investment instruments.

So long as Federally-assisted loans and loan guarantees are excluded from the budget and thus are not subject to effective controls, there are strong incentives to convert from direct loans to these more indirect techniques. We need to acknowledge that these indirect techniques possess important advantages (particularly from the viewpoint of the program advocates) as well as disadvantages.

Viewed objectively, these Federally-assisted borrowings are absorbing a rapidly increasing portion of the total of private credit flows in the economy, up from 13 percent in the fiscal year 1969 to perhaps 25 percent in fiscal 1971. Because they are based on the credit standing of the U.S. Government, these programs are largely insulated from the credit rationing impact of monetary policy and financial market restraints imposed on other private loans. Beyond that, in many cases, Federal interest subsidies insulate these borrowers from increases in market rates of interest.

As you may know, a subcommittee of the Cabinet Committee on Economic Policy has been studying the operation of the unified budget, with special attention to the treatment of Federal credit programs. As chairman of this activity, I would like to be in a position to report that we have come up with a sure fire solution. However, that is not the case, at least not yet.

We have been exploring alternative methods whereby the various forms of Federally-assisted credit can be reviewed in a more comprehensive manner so as

to permit more effective allocation of credit resources. While the precise economic impact of credit assistance is difficult to determine, certainly it would be desirable to focus greater attention on these programs, both those "in" and "out" of the budget, in the formulation of overall fiscal and monetary policy.

One method of providing some aggregate control over these "extra-budget" credit programs would be to impose a ceiling on the total borrowing of Federal and Federally-sponsored credit agencies, both those "in" and "out" of the budget. Also, such a ceiling could be enacted on the overall volume of debt created under Federal loan insurance and guarantee activities.

Another alternative would be to establish quantitative controls over all Federal credit programs, including government-guaranteed and government-sponsored loans as well as on direct lending by Federal agencies.

Several steps in this direction were taken in the fiscal 1971 budget document. For the first time, the basic summary table in the President's Budget Message included a section on outstanding Federal and Federally-assisted credit. Moreover, the companion volume of special analyses of the budget contains an expanded section on "Federal Credit Programs," which provides considerable detail on Federal loan guarantees and government-sponsored agency credit.

Any comprehensive analysis of governmental priorities needs to take account of the operation of these Federally-assisted credit programs. They can strongly influence the allocation of credit and, hence, the distribution of real resources, thus adding to the economic impact implied from an examination limited to the budget proper.

#### *Tax aids*

There is a second type of governmentally-related activity which is not included in the budget proper. Through special exemptions, deductions, and credits, and through departures from general concepts of net income, the tax system operates so as to affect the private economy in ways that might alternatively be accomplished by direct Government expenditures. For example, the expenditure side of the budget properly records items for medical assistance. However, nowhere in the budget is account taken of the \$95 million a year foregone by the tax system by reason of the special exemption for sick pay paid to employees.

The natural resource agencies of the Federal Department, such as the Department of the Interior, dutifully record outlays for programs in those areas. However, no mention is made of the substantial assistance to natural resource industries through depletion allowances and other special tax provisions.

It may be useful, therefore, to attempt to quantify the expenditure equivalents of at least the more obvious benefit provisions. To be sure, this is a difficult undertaking involving—as in the other classifications presented in this statement—many arbitrary categorizations. Just which tax measures can be said to fall in the category of special provisions often requires subjective decisions.

It is difficult to decide which tax rules are integral to a tax system in order to provide a balanced tax structure and a proper measure of net income—as opposed to those provisions which represent departures from that net income concept to provide relief, assistance, or incentive to a particular group or activity.

Tax aids have the outward appearance of involving no government costs. They are, in effect, netted out of receipts by the taxpayers themselves so that taxes paid by taxpayers, and hence taxes collected by the Government, are net after adjustment for tax concessions. There is a real cost to the Government in terms of foregone revenue and to the economy as a whole in terms of the increased share of current national output available to the beneficiary of the particular tax aid.

In theory, government accounting could take account of the explicit inclusion of a non-cash transaction such as tax aids. There is some precedent in business accounting practices. One business item related to sales, sales discounts, is explicitly measured. Sales discounts are similar to tax aids; both are non-monetary transactions.

The tax aid as measured in Table 7 is the difference between the tax actually paid and the tax that would otherwise be paid in the absence of the tax aid provision. The difference is solely the immediate revenue effect on the public sector and hence the immediate, direct income effect on the private sector. No induced or indirect effects are taken into account, although these could be significant in some cases.

TABLE 7.—SUMMARY OF ESTIMATED TAX AIDS

[In millions of dollars]

Tax aids by budget function	Fiscal year—	
	1968	1969
National defense.....	500	550
International affairs and finance.....	370	410
Agriculture and rural development.....	930	1,000
Natural resources (e.g., depletion allowances).....	1,605	1,765
Commerce and transportation (e.g., investment credit and surtax exemption).....	7,775	9,200
Community development and housing (e.g., deduction of interest and taxes on residence).....	3,950	4,800
Income security (e.g., personal deductions).....	12,950	15,905
Health (e.g., deduction of medical expenses).....	2,600	3,000
Education.....	720	800
Veterans' benefits and services.....	550	600
Aid to State and local governments (e.g., deduction of State-local taxes).....	4,600	6,150
Total.....	36,550	44,180

Source: App. B.

Table 7 is an updated version of a Treasury Department analysis earlier referred to as "Tax Expenditures." A few words of caution are essential. First of all, the very phrase, "Tax Expenditures," is a contradiction in terms. In reviewing the staff work that underlies that earlier work, I found that the original term was "Tax Aids." I believe that it is more useful to utilize that term.

My more fundamental concern is that a mere tabulation of tax aids should not be labeled a listing of "loopholes." The purpose is informational, to illuminate the cost of these provisions. As a general matter, I find the case rather persuasive that tax incentives often can result in more of a private sector solution of some pressing national problem than a direct Federal expenditure.

However, I see no need to beg the question as to whether direct expenditures or tax aids are preferable in any given program area. Tax aids are one among alternative uses of potential Federal revenues and any comprehensive analysis needs to take account of them. Like the earlier attempt previously cited, the current effort is not a complete listing of all the tax provisions which vary from a strict definition of net income. In good measure, the purpose is to be illustrative rather than exhaustive.

As shown in Table 7, personal deductions and related tax benefits to individuals in the category of "Income Security" constitute by far the largest single portion of tax aids—\$16 billion out of \$44 billion in the fiscal year 1969.

Tax provisions benefiting business in general—such as the since-repealed investment credit and the continuing surtax exemption (shown under "Commerce and Transportation")—are the second largest type of tax aid. Their estimated cost, in foregone revenue, came to \$9 billion in the fiscal year 1969.

The third largest tax aid category benefits are directed to state and local governments. The deductibility of state and local taxes and related provisions came to an estimated revenue cost of \$6 billion in 1969.

As will be brought out more clearly in the following section, the implied priorities in the allocation of tax aids differs somewhat from that of direct budget outlays.

#### A SUMMING UP

It may be useful to attempt to bring together in one analysis the direct outlays of the Federal Government, the tax aids, and the various credit programs. Frankly, I hesitate to do so for fear of adding the proverbial apples and oranges—although those do add up to pieces or pounds of fruit. In this case, they all add up in terms of dollars, but not necessarily in terms of total economic impact. There are undoubtedly different effects on resource allocation among direct Federal purchases, transfer payments, loans, tax aids and credit-backing. Nevertheless, I believe that the results of a total "summing up" are helpful to any comprehensive analysis of governmental priorities.

Table 8 shows, on the basis of the Federal Government's existing functional classification, direct outlays as well as some of the related governmental programs that are not included in the budget.<sup>2</sup>

<sup>2</sup> I am indebted to Dr. Michael S. March for the idea of using the functional approach to compare budget programs and federally assisted credit activities. His forthcoming volume on national priorities and the federal budget should make an important contribution. Dr. March is a Federal Executive Fellow at the Brookings Institution on leave from his regular assignment at the Bureau of the Budget.

TABLE 8.—FEDERAL GOVERNMENT OUTLAYS AND RELATED ACTIVITIES, FISCAL YEAR 1969

[In millions of dollars]

Function	Direct outlays	Selected tax aids	Government- assisted credit	Total
National defense.....	81,240	550	115	81,905
International affairs and finance.....	3,785	410	490	4,685
Space research and technology.....	4,247	-----	-----	4,247
Agricultural and rural development.....	6,221	1,000	2,308	9,529
Natural resources.....	2,129	1,765	-----	3,894
Commerce and transportation.....	7,873	9,200	220	17,293
Community development and housing.....	1,961	4,800	8,656	15,417
Education and manpower.....	6,825	800	632	8,257
Health.....	11,696	3,000	-----	14,696
Income security.....	37,399	15,905	-----	53,304
Veterans benefits and services.....	7,640	600	1,558	9,798
Interest.....	15,791	-----	-----	15,791
General government.....	2,866	-----	-----	2,866
Assistance to State and local governments.....	-----	6,150	-----	6,150
Adjustments.....	-5,117	-----	-2,244	-7,361
Total.....	184,556	44,180	11,735	240,472

In a number of cases, it can be seen that the direct Federal outlays constitute a relatively small proportion of the total volume of governmentally-related financial activity affecting a given program area. The leading example may be community development and housing where only \$2.0 billion, or one percent, of the Federal expenditures were devoted to this area in the fiscal year 1969, but the assistance through \$4.8 billion of tax aids and \$8.7 billion of credit programs came to over six times the budget amount. Other program areas where the extra-budget activities are substantial include commerce and transportation (\$9 billion of tax aids), income security (\$16 billion of tax aids), and agriculture (\$3 billion of tax aids and credit assistance).

However, in the case of national defense, the direct outlays account for virtually all of the program area. For space, interest, and general government, no tax aids or governmentally-assisted credit activities are shown.

In contrast, the category of general assistance to state and local governments shows no direct Federal expenditures in the fiscal year 1969, but substantial amounts of tax aids (mainly through the deductibility of state and local taxes and the tax exemption of interest on state and local bonds). The proposed program of Federal revenue sharing would involve direct Federal expenditures for unrestricted aid to states and localities.

Clearly, the implied ranking of priorities which is based on examining direct Federal Budget outlays is subject to considerable modification when account is taken of those related Government activities which take the place of direct expenditure. However, that implicit change in priorities is hardly drastic.

The most notable change is housing which goes up from 13th place to 5th. Aid to states and localities rises from last place to 10th, and commerce and transportation moves from 5th position to third.

Of course, some other categories move in the opposite direction. Space drops from 9th to 12th, education from 7th to 9th, and health from 4th to 6th (see Table 9).

At the least, some attempts to more formally include tax aids and credit programs in an analysis of Federal priorities would appear to be desirable.

TABLE 9.—*Two views of implied priorities, fiscal year 1969*

<i>Direct Outlays</i>	<i>Total Government-Related Activities</i>
1. National Defense	1. National Defense
2. Income Security	2. Income Security
3. Interest	3. Commerce and Transportation
4. Health	4. Interest
5. Commerce and Transportation	5. Housing
6. Veterans	6. Health
7. Education and Manpower	7. Veterans
8. Agriculture	8. Agriculture
9. Space	9. Education and Manpower
10. International	10. Aid to States
11. General Government	11. International
12. Natural Resources	12. Space
13. Housing	13. Natural Resources
14. Aid to States	14. General Government

## CONCLUSION

This presentation has offered several analytical techniques for improving the quality of decision-making on national priorities. As we enter the 1970's, filled with a mixture of hope and uncertainty toward our national future, it seems clear that many difficult and important decisions and choices will face national policy makers.

Even in an economy as rich and productive as ours, resources are limited. Claims on output must be balanced against the economy's capacity to produce. As always, priorities will be established, either by design or by default, to permit the satisfaction of some demands over others. But any enlightened attempt to reorder and establish priorities cannot take place until we possess a clear understanding both of the existing general ordering of priorities and the nature of the possible choices to be made.

Development of a government-wide program budget, enabling us to evaluate choices which cut across existing agency and program lines, would be a valuable asset to our decision-making efforts. In addition, bringing such "extra-budgetary" items as Federal credit assistance and Federal tax aids into the analytical framework would enable us to have a more complete accounting of the existing order of Federal priorities.

In this statement, I have tried to show how both of these analytical techniques can assist Federal policy makers. The pressure of competing demands and the need for exercising hard choices makes this process difficult enough without further complicating matters by the absence of adequate information. Hopefully, improvement in the quality of our information can lead to improvement in the quality of our decisions.

## APPENDIX A

## HYPOTHETICAL GOVERNMENTWIDE PROGRAM BUDGET, FISCAL YEAR 1971

[In billions of dollars]

Category	Interior	HEW	HUD	VA	AEC	Defense	State	Treas- ury	Post Office	Com- merce	Labor	Agricul- ture	NASA	DOT	CSC	Other	Total
<b>National security:</b>																	
U.S. military forces.....					1.2	67.0										0.1	68.2
U.S. passive defense.....						.1											.5
Foreign military aid.....																1.9	1.9
Nonmilitary aid.....													3.3				3.3
Scientific competition.....																.3	.3
Psychological competition.....																	
Arms control.....																	
<b>Total.....</b>					1.2	67.1							3.3			2.8	74.3
<b>Public welfare:</b>																	
Insurance and retirement.....	50.9					3.2					4.0					1.9	60.8
Unemployment benefits.....															4.9		4.9
Public assistance.....	9.0																9.0
Veterans' benefits.....				7.3													7.4
Assistance to farmers.....												8.0					8.0
Urban housing.....			3.0			.7											3.7
Specialized welfare.....	1.2																1.2
Antipoverty.....																1.5	1.5
<b>Total.....</b>	61.1	3.0	3.0	7.3		3.9				4.0		8.0			4.9	3.4	95.6
<b>Economic development:</b>																	
Natural resources.....	6.1				1.2	1.3				0.3		0.6					10.1
Manpower.....											1.7						1.7
Transportation.....								0.6		.4				11.3		.8	13.1
Education.....	3.6									.4							4.2
Health.....	3.2			2.0													5.3
Business subsidies.....										.1							.9
<b>Total.....</b>	6.1	6.8		2.0	1.2	1.3		.6	1.2	1.7	.6			11.3		2.3	35.3
<b>Operations:</b>																	
Interest.....								19.0									19.0
Legislative.....																.4	.4
Judicial.....																1.3	1.3
Regulation.....										.2							.2
Housekeeping.....								1.5							.1	.8	2.5
Foreign relations.....							0.5									.8	1.2
Revenue sharing.....																.3	.3
<b>Total.....</b>					.5	20.5		.2							.1	3.9	25.0
<b>Allowances:</b>																	
Grand total.....	6.1	68.0	3.0	9.4	2.4	72.3	.5	20.5	.6	1.2	5.8	8.6	3.3	11.3	5.0	14.7	232.6

## APPENDIX B

*Explanation of tax aids*

An important recent development in the effort to make the Federal Budget a more useful tool of economic policy has been an increasing awareness of the growing magnitude of fiscal benefits accruing to various categories of taxpayers. Over the years the Federal income tax structure has gradually accumulated a host of special deductions, credits, exclusions, exemptions and preferential rates designed to achieve various social and economic objectives. It has been recognized that these selective reductions in tax liabilities have the same fiscal impact on the budget surplus or deficit as direct increases in expenditures. In this context they have been termed "tax expenditures." A more appropriate term might be "tax aids."

In the broadest sense a tax aid can be defined as any identifiable reduction in tax liability by an individual or business compared to a tax base totally devoid of any deduction from income or distinction of treatment of different kinds of income. Such a definition of tax expenditures would include differences in tax liability because the individual was married or single, old or young, healthy or disabled, lived at home or abroad, was charitable or uncharitable, was a homeowner or renter, etc.

But to group together without distinction all deviations from a theoretically neutral tax system would be hopelessly cumbersome and reduce the usefulness of the tax expenditure concept as an added measure of the total fiscal impact of the Federal Budget. The more practical approach is to group by functional spending category those tax aids intended to encourage private action to resolve various social and economic problems or to give fiscal relief to those who might receive an inadequate share of current productive resources under a completely neutral tax system. In most cases these tax aids are clearly an alternative to an equivalent increase in Federal expenditures that would otherwise be required.

The first compilation of tax aids under this approach was published in the 1968 Annual Report of the Secretary of the Treasury. This compilation helped create public discussion and improved understanding of the program aspects of tax aids. It also helped to stimulate program analysis of tax aids, an approach which has received the endorsement of President Nixon. In his Tax Message to the Congress of April 1969 the President stated: "Tax dollars the government deliberately waives should be viewed as a form of expenditure, and weighed against the priority of other expenditures. When the preference device provides more social benefit than government collections and spending, that 'incentive' should be expanded; when the preference is inefficient or subject to abuse, it should be ended".

In addition to its value as a catalyst for program analysis, the compilation has value for economic analysis. Such compilations focus on tax aids as important determinants of the size of budget deficits and surpluses. The overall magnitude of foregone revenue due to tax aids is substantial and, if the budget is not balanced, the deficit and surplus is only a small fraction of that magnitude. Year to year changes in tax aid magnitudes, either because of economic growth or through legislative actions, affect substantially the size of the budget deficit (or surplus) and the expansionary (or restrictive) course of the economy.

## ESTIMATED TAX AIDS, FISCAL YEARS 1968 AND 1969

[In millions of dollars]

Tax aids by budget function	1968	1969
National defense: Exclusion of benefits and allowances to Armed Forces personnel.....	500	550
International affairs and finance:		
Exemption for certain income earned abroad by U.S. citizens.....	40	45
Western Hemisphere trade corporations.....	50	55
Exclusion of gross-up on dividends of less-developed country corporations.....	50	55
Exclusion of controlled foreign subsidiaries.....	150	165
Exclusion of income earned in U.S. possessions.....	80	90
Total.....	370	410

## ESTIMATED TAX AIDS, FISCAL YEARS 1968 AND 1969—Continued

[In millions of dollars]

Tax aids by budget function	1968	1969
<b>Agriculture and rural development:</b>		
Farming: Expensing and capital gain treatment	800	860
Timber: Capital gain treatment for certain income	130	140
Total	930	1,000
<b>Natural resources:</b>		
Expensing of exploration and development costs	300	330
Excess of percentage over cost depletion	1,300	1,430
Capital gains treatment of royalties on coal and iron ore	5	5
Total	1,605	1,765
<b>Commerce and transportation:</b>		
Investment credit	2,300	3,000
Excess depreciation on buildings (other than rental housing)	500	550
Dividend exclusion	225	260
Capital gains: Corporation (other than agriculture and natural resources)	500	525
Excess bad debt reserves of financial institutions	600	660
Exemption of credit unions	40	45
Deductibility of interest on consumer credit	1,300	1,600
Expensing of research and development expenditures	500	550
\$25,000 surtax exemption	1,800	2,000
Deferral of tax on shipping companies	10	10
Total	7,775	9,200
<b>Community development and housing:</b>		
Deductibility of interest on mortgages on owner-occupied homes	1,900	2,200
Deductibility of property taxes on owner-occupied homes	1,800	2,350
Excess depreciation on rental housing	250	250
Total	3,950	4,800
<b>Income security:</b>		100
Disability insurance benefits		100
Provisions relating to aged, blind, and disabled: Combined cost for additional exemption for aged, retirement income credit, and exclusion of social security payments	2,300	2,700
Additional exemption for blind	10	10
"Sick pay" exclusion	85	95
Exclusion of unemployment insurance benefits	300	325
Exclusion of workmen's compensation benefits	150	180
Exclusion of public assistance benefits	50	50
Treatment of pension plans:		
Plans for employees	3,000	4,000
Plans for self-employed persons	60	135
Exclusion of other employee benefits:		
Premiums on group term life insurance	400	400
Deductibility of accident and death benefits	25	25
Privately financed supplementary unemployment benefits	25	15
Meals and lodging	150	165
Exclusion of interest on life insurance savings	900	1,000
Deductibility of charitable contributions (other than education)	2,200	3,000
Deductibility of child and dependent care expenses	25	25
Deductibility of casualty losses	70	80
Standard deduction	3,200	3,600
Total	12,950	15,905
<b>Health:</b>		
Deductibility of medical expenses	1,500	1,600
Exclusion of medical insurance premiums and medical care	1,100	1,400
Total	2,600	3,000
<b>Education and manpower:</b>		40
Educational expense deduction		40
Additional personal exemption for students	500	500
Deductibility of contributions to educational institutions	170	200
Exclusion of scholarships and fellowships	50	60
Total	720	800
<b>Veterans' benefits and services: Exclusion of certain benefits</b>	550	600
<b>Aid to State and local government:</b>		
Exemption of interest on State and local debt	1,800	2,000
Deductibility of nonbusiness State and local taxes (other than on owner-occupied homes)	2,800	4,150
Total	4,600	6,150

Table B presents an updating of data on estimated tax aids for the fiscal years 1968 and 1969 on the basis of the current functional breakdown of Federal expenditures. The present compilation is not intended to provide a full and complete accounting in a theoretical sense of all tax aids in the income tax structure. It is, in fact, a minimal selection of tax aids—minimal in the sense of including only acceptable and practical choices. Certain tax provisions are omitted because their inclusion would require controversial or highly theoretical justifications. Others are omitted because they underlying data is difficult to compile and present in understandable form or because the amounts involved are not quantitatively significant. In short, the choice of the tax aids listed is largely governed by the criteria of public acceptability and practicality.<sup>1</sup>

Chairman PROXMIRE. Let me first ask a few questions about what you call the governmentally related activities and then I will return to the governmentwide program budget. I am simply astounded at the magnitude of assistance rendered to the private sector by the Federal Government which is not reflected in the budget. And I think that this is a most helpful function that you perform this morning in highlighting that.

According to your figures, about \$21 billion in federally assisted credit programs and \$44 billion in tax aids or tax expenditures are not shown by the budget document.

Mr. WEIDENBAUM. I believe that we are moving in that direction.

Chairman PROXMIRE. Why can't they move fast enough to do it?

Mr. WEIDENBAUM. Of course, there is a basic conceptual problem here. The budget total properly should reflect the expenditures and the revenues of the Federal Government. Now, the credit programs are not part of the direct expenditures or revenues of the Federal Government. In other words, Fannie Mae technically has become a privately owned organization, although with strong ties to the Treasury.

Chairman PROXMIRE. Well, that is true. But of course, as we know, this is one of the reasons why it is set up this way, because all Presidents like to keep their budgets down, and all Congresses like to do the same. What we are interested in, however, is the impact of the Federal Government on the economy—at least many of us are, and I think the public is, and has a right to know. And Congress should be honest with itself, and these facts ought to be clearly disclosed. Perhaps they should not be in precisely the same category, but they ought to be disclosed by the same emphasis and clarity.

Mr. WEIDENBAUM. I said steps were being taken in that direction, the fiscal 1971 budget has more information in the document on these credit programs than any preceding budget document. In fact, the very summary table in the budget message shows—with an addendum item—the impact of these credit programs.

Chairman PROXMIRE. But there should be some way in which we can get the attention of the press and the public to really appreciate that this is the impact that counts, this is the area where the Government is having a tremendous effect on the economy that is ignored and neglected and overlooked. And then it is not very helpful unless you can get people to pay attention to it.

Mr. WEIDENBAUM. Senator, I agree with you strongly. We in the Treasury Department in our public statements as well as our private work tried our best to get across to the public not only the size, but the

<sup>1</sup> For a detailed explanation of the tax aids in Table B, see *Annual Report of the Secretary of the Treasury on the State of the Finances for the Fiscal Year Ended June 30, 1968*. Washington, D.C., U.S. Government Printing Office, pp. 330-337.

importance of these Government credit programs. They may not be in the budget, but they are not a free good; there is a true economic cost involved. We are trying our best to get that point across. And this is one of the reasons I came up with the kind of calculations I did here, although I should caution you, there is the problem of adding apples and oranges. Adding a loan guarantee to a direct expenditure to a tax aid is a problem of adding perhaps not comparable items.

Chairman PROXMIRE. That is the problem. You cannot simply add it all up and say, we are not stating the full budget when we state it is about \$200 billion, we have to throw in another \$44 billion of tax aids and another \$21 billion in Federal assisted programs and add them all up, and then you get \$250 or \$260 or \$270 billion. That would not be it at all, and I am not asking that. But it seems to me that with the understanding that you have developed in the Treasury that you could somehow get this idea across more vividly than we have by tucking it away in the addendum.

Mr. WEIDENBAUM. I think so, because to those who say, don't add apples and oranges, they do not add up to anything, maybe the overly cute answer is, I think they do, they add up to pounds of pieces of fruit.

Chairman PROXMIRE. Does the Treasury plan to present regular and systematic credit assistance and tax aid estimates in the future?

Mr. WEIDENBAUM. I will put it this way. The special analysis in the budget document on credit programs is being expanded. The Treasury has made a major input into this, and of course we will continue to do so. I have requested that this entire study be published in the annual report of the Secretary of the Treasury for the current fiscal year, which will give it some distribution.

In addition, as chairman of the Subcommittee of the Cabinet Committee on Economic Policy dealing with the unified budget and credit programs, I am pleased to report that we have a major effort underway to come up with ways of providing a better handle on these credit programs, including the ones outside the budget, than we now have.

Chairman PROXMIRE. Of course, I suppose the practical point is, what analysis has been done of the purposes served by tax aids, the cost and benefits of each tax aid, and the distributional impact?

Mr. WEIDENBAUM. To my knowledge very little.

Chairman PROXMIRE. We really get at some of these tax aids, the depletion allowance, and so forth, on the basis of the pressure, the political pressure of organized groups. And if we do not have some kind of an analysis based on justification and merit and benefit, it would seem to me we are in a very weak position to resist this kind of lobbying pressure.

Mr. WEIDENBAUM. I think that the idea of tax aids, as I call them, or tax expenditures as the previous administration called them, is a good idea. I think in their enthusiasm the previous efforts went down the wrong track, frankly. The previous effort tried to do two things simultaneously. One, develop this new body of data, which was a major contribution in its own right; and then simultaneously show how this information on tax aids could be used for policy purposes to further a very specific policy, i.e., curtail tax aids. My own purpose here is far less ambitious, but I think more useful.

Chairman PROXMIRE. I would not say they curtail tax aids, at least that was not the thrust of my question. It is to determine whether or not they are justified and the extent to which they are justified, and apply the same kind of cost-benefit analysis to the extent you can that you would apply to expenditures, and if you can, justify and cut them back, or cut them back to the point where they can be justified.

Mr. WEIDENBAUM. Hence the very first step is to get a series of data. When the people who first developed the GNP, if they at the same time they showed how the GNP accounts could be used to foster a specific economic philosophy, I think we still would be debating, should we introduce the GNP statistics into the Department of Commerce. The thing to do here, I think, and I think very strongly, is to develop the basic data—and a lot more work needs to be done before the concept and numbers are really good enough to go into the budget. I do not think they are now. I think we need to do the kind of factual, professional work to develop this important new body of data. And then I think that the next step after we have developed a good reporting system is to do the kind of comparisons you suggest between budget items, credit programs, and tax aids—cost-effectiveness analysis, benefit-cost analysis, and, in a sense, to examine in which cases is the better alternative within the budget, in which cases is the better alternative without the budget.

Chairman PROXMIRE. How far away are we from doing that?

Mr. WEIDENBAUM. Quite far, I would say.

Chairman PROXMIRE. Can it be done in a couple of years?

Mr. WEIDENBAUM. Several years. The decision I made in order to get the tables for my prepared statement was to use by and large the concepts developed by the preceding administration. I think they are very rough. And I would feel most uncomfortable having those rough arbitrary concepts incorporated into a policy document.

I think they are fine for the informational purpose that I have in mind today.

Chairman PROXMIRE. Could we get a special analysis as separately provided so that at least Members of the Congress and economists, university economists, newspaper people, and so forth, could have them available?

Mr. WEIDENBAUM. Of course, with the problems and the stafftime involved, I do not want to commit the Treasury, but I will be pleased to transmit your request to the Secretary.

Chairman PROXMIRE. I am very grateful.

Charles Schultze yesterday impressed on us the importance of looking ahead to the future costs of new expenditure programs. Similar importance would seem to attach to the future impacts of tax aids and credit programs. Is it possible to make estimates of these, say, 5 years into the future?

Mr. WEIDENBAUM. It is possible; yes.

Chairman PROXMIRE. Why wouldn't it be just as useful?

Mr. WEIDENBAUM. First of all, it would be even more difficult.

Chairman PROXMIRE. Why?

Mr. WEIDENBAUM. Because of the detail needed above and beyond the detail which is available in preparing these 5-year projections.

Chairman PROXMIRE. It would seem to me that you make assumptions, based on given rates, given tax rates, assumptions as to the gross

national product and personal income, and so forth, and you get your tax yields, and then you project the expenditures, the tax expenditures, tax aids, for 5 years?

Mr. WEIDENBAUM. I must say I would rather have the job of projecting the tax aids than the credit programs, which deal with guarantees and credit operations which are not, as I pointed out, under the real control of the Federal Government. I think that would be the stickier one, much rougher one, to deal with.

Chairman PROXMIRE. What you could do is the ones that are under the control?

Mr. WEIDENBAUM. The ones that are in the budget and under our control presumably are included in the Budget Bureau's 5-year projections. I think of the old Pentagon saying, Senator, "If you want it bad you get it bad."

And I think that is the problem here. We can generate numbers, but the confidence in them might be kind of limited.

Chairman PROXMIRE. Of course, one of the advantages in getting these projections is that you test them all the time to determine whether they are true or false, or whether they work out, and you constantly refine your method of estimation based on your experience. And there may be, of course, some serious mistakes, but you can refine them as you go along.

Returning now to the Government-wide program budget, explain for the record what the advantages are to expenditure analysis from the categories you have set up. What is the difference between your categories and the traditional ones contained in the budget?

Mr. WEIDENBAUM. The long, excessively long, with 13 or 14 major categories in the existing functional classification, I find not quite useless for this purpose, but just cumbersome. But there is a more basic point than that. The functional classification now used is an after-the-fact analysis. After the decisions are made, the people in the Bureau of the Budget then add them up by function to see what the functional totals are. My approach is to use the program analysis as the basis for decisionmaking. In other words, right now we find out what the implied priorities are by adding up a myriad of individual unrelated program decisions. I think we need to make the choice between transportation and natural resources, between education and health, by design, not by default.

Chairman PROXMIRE. Can you give us a little example as to how your categories can help us make a choice, a theoretical example, of course?

Mr. WEIDENBAUM. A theoretical example, because I would not want to beg the question.

For example, let us turn to economic development, the category closest to the heart of our committee. Table 4 in my prepared statement shows that transportation, the greatest part of which is highways, accounts for 37 percent of economic development, and education 12 percent. I would like to see some benefit-cost analysis, some rates of return computed.

I do not want to beg the question, but some of the work I am familiar with—

Chairman PROXMIRE. How much of education do you put into economic development? Obviously you must put a lot of it in the other categories, perhaps in public welfare.

Mr. WEIDENBAUM. I put all the general programs into it, the Office of Education.

Chairman PROXMIRE. We have been unsuccessful in getting any benefit-cost analysis from the highway people.

Mr. WEIDENBAUM. Let us take natural resources, the second largest area, 29 percent. As you are most familiar with, some of the benefit-cost ratios here are not exactly overwhelming. Using low-interest rates, with difficulty you can get a benefit-cost ratio of 1.1 to 1.2 in a lot of these projects.

Chairman PROXMIRE. You are talking about the dams and the canals, and so forth?

Mr. WEIDENBAUM. Yes, sir.

If you used an interest rate that corresponds with what the Treasury itself is paying for its money—which may not be the proper one, the proper rate may be the social cost of capital, which is higher—but just take the 8 percent or so that we are paying, if you use that interest rate, a good share of the natural resource projects would show that the costs exceed the benefits. If you apply the same interest rate to education as a whole, at least the work I am familiar with shows that the benefits exceed the costs, and by a respectable margin.

This would give some basis for a reallocation.

But I must say I felt more comfortable as a college professor making these suggestions than as a bureaucrat defending his own agency's budget.

Chairman PROXMIRE. Your approach to a Government-wide program budget builds upon the planning-programing-budgeting system which you state "is not coming to grips with the larger choices in allocating Federal funds among different agencies and programs."

This subcommittee as you know, has made an exhaustive study of the planning-programing-budgeting system, and we find even greater shortcomings than you indicate. I wonder if you have any further comments on what should be termed a failure, not of systematic economic analysis but our attempt to employ and implement this system?

Mr. WEIDENBAUM. I would be pleased to. I would be glad to provide some off-the-top-of-my-head comments. I have prepared a little paper—it has never seen the light of day—explaining what the shortcomings are.

Chairman PROXMIRE. How little a paper is it?

Mr. WEIDENBAUM. Maybe 5 or 10 pages.

Chairman PROXMIRE. That paper will be printed in the record at this point.

(The paper referred to for inclusion in the record at this point follows:)

#### PPBS AND THE BUSINESS FIRM

(By Murray L. Weidenbaum)

To those that have read the available literature, it appears at first blush that all that a company needs to do in order to bolster a lagging sales trend, or to counter a declining profit rate, or to increase its share of the market, or to retain creative executives, or to keep stockholders happy, is just to institute a planning, programming and budgeting system (PPBS) modeled after the Pentagon experience. This interest in the application of economic analysis to resource allocation questions is commendable.

However, I am duly chastened by the knowledge that the zeal of the newly converted is usually great and often excessive. Hence, I believe that it is useful

first to, in a sense, step back, reflect, and reexamine some of the fundamental postulates of the new planning and programming and budgeting and then try to put the details of format and form filling out into some more substantive perspective.

#### THE RUDIMENTS OF BUSINESS PLANNING

I think that it may be helpful to examine the fundamentals of business planning and then see the contribution that PPBS can make to it. As anyone who has sat through at least one long-range planning session knows, all business firms are supposed to deliberately and systematically make their plans for the future. They establish goals and objectives for the enterprise. They then identify opportunities that are likely to exist in the foreseeable environment. They then proceed to choose from among the alternative opportunities that may help them achieve their objectives. And, finally, they evaluate the expected performance in a feedback or loop-closing fashion.

We also know that we need to develop operational plans as well as longer term plans, divisional plans as well as corporate plans, R & D plans as well as business plans, and strategic plans as well as tactical plans. Why some of us have done all of that and still not gotten a hold of the keys to the kingdom of heaven, if there is any such restful place for the weary breed of planners, business or governmental.

Please do not misunderstand my intent. I have little quarrel with the need to conceptualize or to prepare an adequate framework for planning for an organization. This is clearly a necessary, but possibly not sufficient, condition for successful forward thinking by a business firm. Many of the shortcomings of business forward thinking—under which may be subsumed planning and programming and budgeting—are the result of faulty application rather than inadequate theorizing. I should like to present a few of the most frequent shortcomings, at least as I have found them in my own industrial experience, and then indicate how PPBS can contribute to eliminating them.

#### TRUE LONG-RANGE PLANS ARE RARITIES

I have found that most of the output of business long-range planning groups is far from true long-range business plans. Most of the specific reports prepared by these groups that I have examined are more in the nature of scheduling current programs with long lead times rather than the development of true long-range business plans which I take to be development of courses of *action* to deal with the future. My qualification for determining what is a business plan is no more rigorous than the dictionary definition that to plan is "to devise or project, as a method or course of action."

In practice, so-called planning documents usually seem to focus on analyzing future potentials and requirements of existing product lines and programs—expected sales and profits, projected manpower and facilities and so forth. Some of these plans do cover the future potentials and requirements of new products but almost inevitably, these are limited to those products on which the company already was currently working in either the preliminary design or prototype stage. There seem to be few business plans which attempt to bridge the inevitable gap between the future results of current programs and the requirements of long-term targets. Even fewer business planning efforts involve an explicit choice among the major alternative means of achieving the long-term targets and goals of the firm. This of course provides the basic opportunity for a system which integrates planning and programming and budgeting.

#### THE ROLE OF TOP MANAGEMENT IN FORMAL PLANNING

In discussing their long-range problems with chief executives of large manufacturing companies over a considerable period of time, I do not recall any important reference to the content of their long-range plans other than some vague mention of having that sort of activity going on—somewhat akin to hiring a proper quota of engineers from a given minority group.

Some of the more thoughtful executives quickly point out that the basic statistical data in the formal planning documents are useful to them in their own planning. This divorce of the formalized planning process from the actual planning and, more important, from the decision-making is made even clearer when it is realized that many chief executives are supposedly charged with long-range planning as their primary responsibility and have delegated the operating

activities to an executive vice president or some other subordinate. Even in such cases, one customarily finds the formal planning organization somewhere down in the bowels of the corporate staff, possessing a rather tenuous relationship to the supposedly planning-minded chief executive.

Again I note in passing the potential role of PPBS, to link planning as an intellectual exercise and budgeting as an expression of management decision-making—programming of course being the mechanism for the link.

#### PLANNING AND TRIVIA

The third basic shortcoming of business planning, at least as I have found it, is in the excessive amounts of trivia contained in typical company long-range business plans. This may, in more than a small way, help to explain why formal business plans are so seldomly used as decision-making tools. The usual business firm's long-range plan informs the reader in wearying detail of monthly delivery schedules, the recruiting budget, square footage of storage space by type, and so forth. I will consider this paper to be successful if just one of the readers takes to his company the conviction that, in preparing a business plan for 1974, it is not essential to compute overhead rates to four decimal places.

#### LONG-RANGE PLANNING AND SUBSTANTIVE PROBLEMS

Perhaps the basic shortcoming in the present practice of business planning is the failure to come to grips with the key problems facing the company and/or its industry. This may be the inevitable result of the fetish or dogma which maintains that the planning must be done by the line departments, and that the headquarters organization should mainly concern itself with aggregating divisional and departmental submissions. Hence, if a headquarters staff does do some developmental long-range planning, such as examining those new or potential areas which do not fall within the current jurisdiction of, or have been overlooked by, the operating divisions, it is generally careful not to intrude upon the formal business planning process with this sort of thing.

The headquarters staff often is looked upon merely to add some class or polish to the planning process, such as a broad brush evaluation of the external environment or providing an analysis of the public relations image of the corporation. As a result, the major substantive problems—such as the declining space market for the aerospace industry or increasing government competition for many commercial industries—often simply fall between the cracks or are dealt with outside of the formal planning process.

#### THE ROLE OF PPBS

The purpose in reviewing the mistakes of the past, and that is essentially what has been covered thus far, is quite simple. On the one hand, there is great danger of PPBS being so mechanically implemented by business firms that it falls into the same mold as what has come to be conventional business planning and hence, perpetuates the same mistakes. Or on the other hand, as I see it, the major contribution that PPBS can make is precisely to overcome the key shortcomings that have just been described.

At this point it would be extremely helpful to briefly review the basic concepts of PPBS. We can obtain the essence of the matter simply by going back to the fundamental definitions. I suggest that the reader note how different they may be from the way the same terms are used in the typical business firm.

*Planning.*—The study of objectives, of alternative ways of achieving objectives, of future environments, and of contingencies and how to respond to them. The purpose of planning is to explore alternatives to stimulate ideas about tradeoffs and management strategies, to identify problems, to formulate theories, and, of course, to generate data.

*Programming.*—A method or system of describing activities according to objectives or "outputs"—sales or profits, in this case—and of relating these objectives to the costs or "inputs" needed to produce the outputs.

*Budgeting.*—The activity through which funds are requested, appropriated, apportioned, and accounted for.

The contributions that can and should result from instituting such a broad-gauged PPBS approach in a modern corporation are threefold:

(1) *Combining long term planning with short term budgeting*, so that the annual budget is not something separate and apart from the planning exercise but really represents the first year of the long term planning effort.

(2) *Presenting an array of alternative means of achieving the company's goals and objectives.* This is what PPBS really is all about—the choice among alternatives. It is not a means of justifying the already agreed upon intentions of the management; it is not a means of forecasting; it is not even a sophisticated internal information and communication system—or at least it should not be just these things. If PPBS has any contribution to make to the business firm, it is to present to top management the major alternative means of achieving the company's objectives, together with—and this is the differentiating characteristic—an objective methodology for selecting among these alternatives.

(3) The third contribution, hence, is getting the line and staff managements aware of the potentialities of cost-effectiveness analysis, benefit-cost analysis, and similar applications of the general family of analytical techniques which we like to call systems analysis.

When then President Lyndon Johnson first announced the establishment of PPBS on a government-wide basis, he referred to it as a “very new and very revolutionary system.” Some of the people who have utilized return on investment techniques for a number of years may be just a bit skeptical of the “revolutionary” character of PPBS. Of course, they are right. Companies that array alternative capital investments and compare them via a sophisticated return on investment analysis or discounted cash flow technique already are using the basic concepts of PPBS. There is an important proviso here—providing that the results of these analyses directly determine the company's capital asset budget. That does not mean just serving as a screen for the routine items but constituting the primary evaluation mechanism for major investment decisions.

Moreover, it is the rare company that applies this same approach of choosing among alternatives in an objective and quantifiable fashion to other activities, such as research and development, marketing, manufacturing, advertising, and so forth.

#### PROBLEMS OF IMPLEMENTATION

I believe that we should candidly acknowledge the very real difficulties that will be encountered in attempting to establish an effective PPBS program in a business firm or in any type of organization for that matter. Many of the obstacles will arise from the simple and almost inevitable fact that important changes will result in the “pecking order.” Some organizations and individuals will view the potential changes as threats, others as opportunities.

Shifts in the location and flow of decision-making authority are likely to occur and these may well alter organizational structures. Perhaps the most important and far-reaching organizational shift will be the reduction or elimination of the traditional separation of business planning, financial analysis, and economic research staffs.

Additional changes in backgrounds and education of management will occur. Requirements for staffing the PPBS units themselves and recruiting line officials who understand and can effectively utilize the new managerial techniques, will impose additional duties on company personnel organizations. This will inevitably widen the array of managerial skills for which a company recruits.

Many companies may not wish to go the McNamara route of bringing in a group of truly brilliant “whiz kids” who can implement PPBS in rather speedy fashion. They may prefer the slower route of developing the skill of their own management personnel. This second approach may have the compensating advantage of reducing internal objections to the changes to be made.

Those companies who wish to rely primarily on home-grown capabilities need to be aware of the training requirements for typical PPBS personnel. There are three key aspects here. The first is grounding in quantitative analysis. I do not mean just college algebra, but calculus, computer programming, simulation techniques, probability theory, linear programming, and other advanced statistical methodology.

The second key facet of a PPBS education is modern economic analysis. The emphasis is on modern. The old-line, institutionally-oriented principles course or the diverting problems seminar just will not do. The training here includes microeconomic analysis covering the determination of prices, profits, and output by individual firms and industries and macroeconomic theory covering the behavior of the national economy.

The third and final aspect of PPBS training draws upon the mathematical and economic techniques in what we call systems analysis. This is the application stage, where the future PPBS users are trained in using the advanced methodology in preparing and reviewing plans and budgets.

Upon reflection, there may be two levels at which such training should be provided. Clearly, the most detailed instruction should be given to the personnel who will be varying on the analysis. Perhaps a broader brush, but not too superficial, exposure would be sufficient for the more senior executives who assign and review these analyses. A certain minimum understanding may simply be necessary both to avoid being snowed by the fancy footwork and to find the holes which often occur in even the most sophisticated analyses.

#### CONCLUSION

It may be a great temptation for a company listening to a representative of another company tell how useful PPBS has been to their operations to then go back and quickly attempt to duplicate the formats and apply the procedures to their own company in the expectation that they can achieve the same useful results.

I doubt if I can emphasize too greatly the fundamental concern that the contribution of a comprehensive planning, programming, and budgeting system is not in filling out forms and running endless computations, but in the conceptually simple yet operationally difficult task of (1) identifying the overriding objectives of the organization; (2) developing an array of feasible alternatives for achieving them; (3) systematically choosing from among the alternatives; and (4) converting the results into operational decisions.

In concluding this sermon, it might be appropriate to make prouder mention of the patron saint of planning, whose spirit no doubt accompanies all pioneering efforts in this field. It may not be generally known, but he is the famous Scottish poet, the late Robert Burns. It may not be generally known, but he is the famous Scottish, the late Robert Burns. Of course, his claim to this position is based on a simple line of his poetry which can be translated into contemporary English as "the best laid plans of mice and men still can get fouled up."

Mr. WEIDENBAUM. Basically I am concerned that they tried to PPB too much, so to speak, that to seek planning-programing-budgeting for every last bureau, even when methods of analysis are not up to it, I think is futile. And, of course, the present administration has been cutting back the overly ambitious scope of PPB, and concentrating on those areas where the return is highest. In a sense this goes back, I think, to the original setup.

Chairman PROXMIRE. I am interested in hearing you say "the over-ambitious scope." I think it has been so limited and so inadequate as to what it can do or should do. When you have an agency like the Highway Department or the Space Agency both telling us that they just do not use it at all, and they do not even attempt to make a cost analysis, it seems to me it is hard to say that it is overambitious.

Mr. WEIDENBAUM. This gets to the heart of the matter.

Chairman PROXMIRE. I would like to know whether it has been employed.

Mr. WEIDENBAUM. Everyone cites the Pentagon as the great use, although I may have some reservations on that too. It certainly was most highly developed in the Pentagon, but not overnight. The people at RAND must have spent 10 years or more developing the framework, and analyzing the military problems, applying the rudiments of PPB, before Charlie Hitch and his crew ever got to the Pentagon. How could they ever expect that, not 10 years but 10 weeks literally would be enough to apply PPB to all the major civilian agencies? Without that background and preparation I think the effort was destined to convert PPB to, in many cases, a paper shuffling, wheel-spinning operation.

You cannot tackle the major problems of an agency in 10 weeks, because it will take you longer than that to know what they are doing.

Chairman PROXMIRE. We are really talking about economic analysis, of which PPB is a refinement. It is not an invention.

Mr. WEIDENBAUM. As an economist I like to talk about it as applied economic analysis, but I am sure our political scientist friends would call it applied political science, applied operations research, et cetera.

Seriously, I think the major shortcoming was to set up this tremendous flow of paper before the analytical work had been done on the major substantive programs, problems, and issues.

I think that in this economic development category we have some of the basic areas where benefit-cost analysis can be applied. I would think that we would be much better off applying this talent—and these are talented people who are involved—one of those people as you know is to the left of me, symbolically and otherwise (referring to Mr. Gorham).

Chairman PROXMIRE. Only physically?

Mr. WEIDENBAUM. Yes, sir.

To education, manpower, health, resources, transportation—these are all areas where, at universities and research institutions, a tremendous amount of some very good work has gone into the analysis of alternatives. And I would hope that a new type of PPB effort could concentrate on that type of situation.

Chairman PROXMIRE. I think, Mr. Weidenbaum, what you are assuming is that somebody in Congress or somewhere is going to take PPB so seriously they were going to make all their decisions based exclusively and solely on some arithmetic result. And that isn't it at all. What we are interested in is getting economic analysis, and to some extent benefit-cost analysis, which will be one guide of a number which will determine our decisions. In some of these areas we do not have any hard fact, objective study at all, whereas we had in the DOD Office of Systems Analysis—on the C-5A—to give you a specific example, a study as to whether we ought to get a fourth squadron. The Office of Systems Analysis and the Secretary of Defense's office have made a study of this, two studies, and both of them came down: No, we should not get it.

The Secretary of Defense went ahead with it, and so did the Congress. But this kind of study is at least helpful in getting some kind of notion of each element in your system, whether it is economically wise to go ahead. There may be other reasons that are far more important. But we cannot begin to get enough of this kind of thing. We can misuse it, and say that this is all that counts. And, of course, anybody that does is foolish. But it seems to me the more of this kind of economic analysis we can get the more intelligent our decisions can be if we use this information properly.

Mr. WEIDENBAUM. Mr. Chairman, I think you have made a very significant point, that policy decisions cannot and should not be made solely on the analysis that comes out of the computer, or out of an economist, for that matter.

One of the things that I was concerned with in my analysis of Government spending programs before joining the administration was not only what we call the efficiency effects; that is, the benefit-cost type of analysis, but what economists call the distributional effect, or in plain

English, the allocation of the benefit by, say, income class, and by region. And it strikes me that even though economic analysis might show that project A has a higher benefit-cost ratio than project B, it still might be the proper thing for the Congress to fund the project with the lower benefit-cost ratio, because of the distributional effects. It goes to the poorer region.

Chairman PROXMIRE. I think we agree on that, we are on all fours on that. It is just that I feel that getting this information is useful to us. And we have gotten so little of it, there are so many areas where you have physical construction. For instance, building a highway there is no reason in the world why Congress should not know what the benefits and the costs are and have some kind of a ratio that you can make a decision on. But just because it is funded with the gasoline tax, and it is insulated in the appropriations process and is pretty much automatic, and based on a formula which is arrived at politically—nobody ever asked whether we should build a road from nowhere to nowhere, which we are doing in some parts of our country, or use those resources elsewhere.

Mr. WEIDENBAUM. I wonder sometimes in my more dismal moments whether benefit-cost analysis has served a useful or negative function. How useful has it been to have the blessings of a benefit-cost ratio greater than one poured over all the projects over the years.

Chairman PROXMIRE. It has been badly used. You pointed out the interest rates and the discount factor. That is our problem here. It is not the point of trying to get some facts in economic analysis.

Let me ask you this. As you point out, there are problems in assigning specific problems to one category or another. And I am asking about this because I think any Member of Congress who looks at your analysis would have a feeling one way or the other on it. Some people might say, this is the Nixon administration, where they are really pushing our resources into the public welfare category and taking them out of the military category and, therefore, this is a constructively oriented administration. Let me say that one person's view of public welfare may be another's view of economic development. Where I have particular difficulty, however, is in the category of national security. Indeed, this committee has recommended that the budget document more clearly define defense or national security outlays to include those activities which are not within the Defense Department but which are defense-related.

Now, in your category for national security, you do not include such defense-related expenditures as the Veterans program, and you shift \$5.2 billion, according to your appendix A of your prepared statement, on defense spending into public welfare. Do you believe that this is an adequate picture of the totality of defense and defense-related spending?

Mr. WEIDENBAUM. First of all, let me point out, as I say in my prepared statement, this is not meant to be a self-serving statement by a member of the Nixon Administration. This draws on a book that I wrote before joining the administration. If some of this is considered favorable to the administration, I am pleased, of course. But if some of it is unfavorable to the administration it has not been doctored. I have tried to come up with a neutral concept.

Now, there are a number of categories that are borderline. Where do you put veterans education? Do you put it under veterans or under education?

This has been the problem of every classification of Government spending I have ever worked on over a period exceeding 20 years, now.

Chairman PROXMIRE. Veterans' pensions, I think, is a very good example on this problem. It would seem to me that this is a cost of past wars. And I say that for this reason. If you have a veteran who is wounded in the battlefield and you give him assistance on the battlefield with a medic, of course you can put that under welfare, because it is a welfare problem; you are improving his welfare by improving his health by maybe cutting off his leg and letting him live. When he is in the hospital and is not a member of the military forces you could call that welfare.

And, similarly, as I understand it, both his pension and any health care that he gets is completely dependent on his being able to prove that his injury was service connected or that his pension is based on a certain time in the armed services. And this is compensation in part for an inadequate compensation that all of us received when we were in the armed services in the event that we retired.

Mr. WEIDENBAUM. There are two types of programs. Compensation is for service-related disability. Pension is just for indigent veterans. And that, I think, is the kind of comparison—in other words, if a man is a veteran—

Chairman PROXMIRE. Yes; but why is it veterans and not for everyone?

Mr. WEIDENBAUM. We have a program for everyone. It is called public assistance. That is why I put the veterans pensions and compensation in the same category as the public assistance. Because if a man is not a veteran, we do not let him starve either; we give him public assistance. If he qualifies he will get unemployment compensation. He will get social security. If he is a veteran the VA budget picks up this welfare cost. But by and large, except for a small differential of rates, these are welfare costs that the Federal Government would be picking up whether the man is a veteran or not.

Chairman PROXMIRE. It may or may not be true now. But there certainly was a long period before we had a retirement welfare program which was at all comparable to the pension that veterans received. It was true during the thirties, and it was true in World War I. It has had a long history since the Civil War or before.

Mr. WEIDENBAUM. If you want a tabulation showing all of the defense related expenditures of the Federal Government, they are far bigger than my category of national security. You could prorate the Division of Disbursement of the Treasury Department. After all, the major share of checks it issues—

Chairman PROXMIRE. But what you have done, Mr. Weidenbaum, is to take the insurance and retirement payments made by the Pentagon itself, and categorized them as welfare not defense in your appendix A of your prepared statement and you have taken the urban housing paid for by the Pentagon, military housing, and called that public welfare.

Mr. WEIDENBAUM. Precisely. Again, I presume that the transfer payment called retired pay to retired members of the Armed Forces is in lieu of social security public assistance. If these men did not qualify for that type of retirement program, they would qualify for another type of Government retirement program.

Chairman PROXMIRE. I am not sure that—

Mr. WEIDENBAUM. It is not central to my analysis, you appreciate.

Chairman PROXMIRE (continuing). Many people would necessarily accept your analysis as saying that social security payments are a welfare program. Social security many people feel is a form of insurance. It is a specific part separated from the usual budget that presumably is financed, although some people question it, on the basis of payroll taxes which people pay in during their working years and then get back after their retirement. It is quite separate from the usual concept of public welfare as being an assistance program, or a program of that kind. And unemployment compensation is paid for by an employer over a period of time specifically earmarked for compensation when he lays his personnel off.

It is something a little different, it would seem to me, than to be blanketed into a total public welfare category and then compared with national security and told, we spend more on public welfare.

Mr. WEIDENBAUM. I have in mind the kind of welfare phrase that is used in the Constitution, to promote the general welfare, the kind of activities of the Department of Health, Education, and Welfare. As I indicated, these are exploratory titles and categories. If you like the general idea of a Government-wide program budget, I would only encourage you to have your staff perhaps develop a more satisfactory alternative.

Chairman PROXMIRE. I think that is a very good point you are making. And I do not mean to be critical of you. I think it is very helpful that you have these. The very fact that they strike some spark here indicates that you are on the right track here; that you are beginning to think about these things, and you certainly challenge us with this kind of division. But I think we have to be a little careful if we intend to organize our analysis on this basis and then say we have an administration that is moving more in the direction of public welfare than any previous administration, because we can show that the unemployment compensation and social security are both increasing.

Incidentally, we have increased social security much more than the administration wanted us to increase it, much more.

Mr. WEIDENBAUM. That is right.

Chairman PROXMIRE. And next year they will be in the position of the best welfare administration we have ever had.

Ninety percent of our national security expenditures are direct expenditures on U.S. military forces. Only 10 percent are on nonmilitary efforts to achieve international peace and security. This is true even if you move foreign relations into the national security category—as one might argue it is logical to do. Arms control isn't even a big enough item to show up in the table. Would it not seem logical to conclude that, at the margin, we could obtain much more national security per dollar expended by shifts from military to nonmilitary efforts within this category?

Mr. WEIDENBAUM. I certainly am not in a position to answer the question, but that is precisely the kind of question that I raise in my prepared statement. It is precisely the kind of question that a Government-wide program budget would bring to the forefront, and it is the kind of question that is not now even raised, much less answered. At the present time, these are simple tables; they are meant to be. But the very notion of arraying these alternatives, I think, just provokes this kind of questioning of the need for reallocation.

Chairman PROXMIRE. Let me just ask a general question.

Mr. WEIDENBAUM. Of course, I would not suggest increasing expenditures for any category without scrutinizing in detail its budget submission. I am sure you as a member of the Appropriations Committee appreciate that.

Chairman PROXMIRE. Yes, I do.

Former Budget Director Schultze basically supported the thrust of this administration's fiscal monetary policy. I am sort of inclined to agree—if I were sure I knew what these policies were. But he felt, I believe, he could not assure us these would meet the basic problem of the day—reducing inflation without increasing unemployment.

As a very competent economist and Assistant Secretary of the Treasury, how do you feel about this?

Mr. WEIDENBAUM. I am not sure if Mr. Schultze has accurately and completely described the economic policies of the administration. I do not know if I am the most appropriate man to do that. But I am going to take a stand. As I see it, what we are trying to do is, we are succeeding slowly—and I emphasize both words—succeeding and slowly.

Chairman PROXMIRE. Let us give an explanation of that succeeding. I think that takes some doing these days. Given unemployment, and given inflation, how are you succeeding?

Mr. WEIDENBAUM. First of all, we clearly slowed down the economy, the overheated economy that we inherited, to squeeze the demand-pull inflationary pressures out of the economy, which was essential. Until you can do that there was no expectation at all that you could make any headway in the fight against inflation. And that we have done.

Chairman PROXMIRE. Where was the evidence that we had an excessive demand, when you recognize that we were operating at about 85 percent of capacity when President Nixon took over? And, as far as manpower resources are concerned, weekly hours of work throughout American industry, at that time, were relatively moderate, they were less than they have been often in the past. As a matter of fact, now they are the lowest hours per week that we have in some 20 years, and we are operating at less than 80 percent of capacity now.

Mr. WEIDENBAUM. Those capacity figures are frankly suspect enough that I rarely cite them in my own statements. I do rely more heavily on the estimates of the high employment economy—it used to be the full employment budget or full employment economy—

Chairman PROXMIRE. What we had to do is create more economy in order to—

Mr. WEIDENBAUM. I did not say that.

Chairman PROXMIRE. You are relying primarily on those statistics?

Mr. WEIDENBAUM. I said that we had excessive demand, that the demand for goods and services of the American economy exceeded our

capacity to supply them at the then current prices. That is how I would define a demand-pull inflation. We certainly have gone beyond that.

I do see some of the early results of that. The wholesale price index clearly, when you look at the wholesale price index for each month of this year, has a strong downward trend. I do not think there is any question in my mind about that.

If you look at the seasonally adjusted consumer price index for each month of 1970, the increase is a downward sloping line. The rate of inflation, the rate of price increase—

Chairman PROXMIRE. You must be looking at different figures than I am. You say the seasonally adjusted consumer price index, the increase is a downward sloping line? I am looking at it right now, and it is an upward sloping line.

Mr. WEIDENBAUM. Seasonally adjusted or unadjusted?

Chairman PROXMIRE. Seasonally adjusted. I realize that last month the seasonally adjusted figure reduced the raw data from 7.2 percent annual rate increase to a 6 percent annual rate increase. But that does not give me much encouragement. Does it give you much?

Mr. WEIDENBAUM. I will have to ask my trusty assistant to bring up my book of data.

Chairman PROXMIRE. Here is what I have, all items—

Mr. WEIDENBAUM. First of all, I have here the wholesale price index. It is quite clear that the increases in January and February were much higher than the March-April-May pattern. In March there was an increase of 0.2, in April there was no increase at all, although, as I said at the time, I would not give that much weight to one particular month. In May, the increase was 0.2. This clearly is a—

Chairman PROXMIRE. May was what?

Mr. WEIDENBAUM. May was 0.2 percent.

Chairman PROXMIRE. Are you saying that we have turned the corner on inflation?

Mr. WEIDENBAUM. I say that the rate of inflation, as measured by the consumer price index as seasonally adjusted and as measured by the wholesale price index, is measurably lower, thus far, in 1970 than was the trend in 1969.

Chairman PROXMIRE. I do not know. In July 1969 the wholesale price index went up 0.1 of a percent. In August it went up one-tenth of a percent. In September it went up two-tenths of a percent. That is about comparable to what it is now.

Mr. WEIDENBAUM. Between May 1969 and 1970 the wholesale price index went up  $5\frac{1}{2}$  percent. That is substantially higher—

Chairman PROXMIRE. In what period?

Mr. WEIDENBAUM. Over the past year, from May 1969 to—

Chairman PROXMIRE. But, after all, you are referring to a couple of months. You admit it went up in January and February and March—

Mr. WEIDENBAUM. I am talking about a whole year, from May 1969 to May 1970, the wholesale price index went up 3.5 percent. The annual rate for April and May—I worked up the annual rate, and it is 1.2 percent. That is a lot lower; 1.2 versus 3.5. I would say we are making progress, Senator.

Chairman PROXMIRE. Take a look at the GNP deflator of the economic indicators. It went up more rapidly the first quarter of the year.

Mr. WEIDENBAUM. I should caution you that there is a statistical problem in the first quarter. For some reason, which I can defend on theoretical grounds, certainly not on empirical grounds, we assume there is no increase in productivity on the part of Government employees such as you and me.

Chairman PROXMIRE. That is a pretty good assumption.

Mr. WEIDENBAUM. I am not willing to yield that for either one of us.

Chairman PROXMIRE. Let us just include the Congress.

Mr. WEIDENBAUM. Hence, each time there is a governmentwide pay increase the entire cost of that pay increase shows up as an increase in prices in the GNP deflator. Hence, the first quarter of 1970, which was a period of a large pay increase for Government employees, it shows an inordinate increase in the GNP deflator.

Hence, I do not think we get a useful result by comparing that quarter with the quarters in 1969.

Chairman PROXMIRE. At any rate, you do see some straws in the wind. I think you are remarkable that you see them. It is a little hard for me to see them based on the recent statistics, and I think it is hard to rely much on wholesale prices, because they have been stable for long periods when the consumer price went up. And as you know, they have not been increasing anything like as much as consumers' prices have been over the past few years. For example, consumers' prices have gone up 34 percent over the 1957-59 base, and wholesale prices only 16 percent.

Mr. WEIDENBAUM. I do not want to claim too much at all.

Chairman PROXMIRE. At any rate, you are saying that we are making some slow progress in your view, we have slowed down in the economy, wholesale prices are not increasing quite as rapidly. Do you feel that we need anything else in monetary fiscal policy? How about a wage price freeze or jawboning, or incomes policy, wage-price guideline?

Mr. WEIDENBAUM. I have given that considerable thought recently. Personally, I think the time has come to give some serious consideration to some form of incomes policy.

Chairman PROXMIRE. By incomes policy you mean wage-price guidelines?

Mr. WEIDENBAUM. In my analysis so far I find there is quite an array of items which can be included in an incomes policy. That is one of the problems that has caused a good deal of public confusion.

Chairman PROXMIRE. Yes; there is. For instance, Chairman Burns made a speech on incomes policy indicating that he felt that the time has come for this. But he was not very specific in that speech. And there was no chance to question him. And there was some confusion as to how far he would go. I think it is very important to spell out what you mean by incomes policy. In the first place, would you mean that the Council of Economic Advisers, for example, should attempt to determine what is a justified increase in wages over the next year or so, and the rate at which wages should be settled, and to the extent that they can, allowing of course variations, and the extent to which price increases can properly or should properly reflect costs? Have you worked that out?

Do you think then the President could call attention to specific instances in which industries or labor unions in their demands exceed the guidelines?

Mr. WEIDENBAUM. You have described one among many possibilities.

Chairman PROXMIRE. What is your reaction to that, Mr. Weidenbaum? Do you think it is something we should do now, or not?

Mr. WEIDENBAUM. I have a long, so far very pleasant, relationship with this committee. I like to be as helpful as I can.

Chairman PROXMIRE. You are a very responsive witness. You can say yes or no.

Mr. WEIDENBAUM. In my present position I am economic adviser to the Secretary of the Treasury. And I feel obligated to give him just all the advice I possibly can. And I assure you, Mr. Chairman, that in this area of incomes policy I have been giving the Secretary of the Treasury my full views and advice.

Chairman PROXMIRE. What can you tell us that you have been telling him?

Mr. WEIDENBAUM. I mean it most sincerely, I do not think it would be appropriate for me to pass on the confidential counsel—

Chairman PROXMIRE. I am asking, what can you tell us that would not be a breach of confidence? What can you say as Assistant Secretary of the Treasury to us this morning that you think would be helpful?

Mr. WEIDENBAUM. Well, I volunteered earlier the statement, I think, that the time has come to seriously consider incomes policy.

Chairman PROXMIRE. I think that is very helpful, if you would tell us what you mean by incomes policy.

Mr. WEIDENBAUM. As I see it, there is an array of alternatives. In fact, I must say that in this array, which I would like to present, the extremes offend me. One extreme is compulsory direct wage and price controls.

Chairman PROXMIRE. You are against that?

Mr. WEIDENBAUM. Not only for philosophical grounds, but on pragmatic grounds I do not think they will work.

Chairman PROXMIRE. Then on the other extreme I presume it would be simply an attempt to—

Mr. WEIDENBAUM. To stand up and say, please be patriotic and do not raise your wages and prices.

Chairman PROXMIRE. Where is the middle ground?

Mr. WEIDENBAUM. And then there is a whole spectrum of alternatives between those two extremes.

Chairman PROXMIRE. Give us one that you think would be acceptable in practice.

Mr. WEIDENBAUM. Let me not beg the question. Let me just give you the various alternatives in this middle ground. One clearly is types of guideposts for noninflationary wage and price behavior. These can be formulated in a number of different ways, by a Government agency, by a board appointed by the President, by one set up under legislation. This can be voluntary, or it can be compulsory. You could have a watchdog committee set up by the President or by the Congress which focuses on individual wage and price decisions, and makes comments, and perhaps points the finger at very ostentatiously large wage and price decisions.

Chairman PROXMIRE. It is in this general area that you think it might be wise public policy now under present circumstances?

Mr. WEIDENBAUM. I think it is in this middle ground that serious consideration needs to be given.

Chairman PROXMIRE. I think that is very, very helpful.

Thank you very much, Mr. Weidenbaum. You have been most helpful to us. And I do apologize if I got you on some delicate ground. But I think you handled it very well. And your prepared statement is a fine contribution.

Mr. WEIDENBAUM. Thank you.

Chairman PROXMIRE. Mr. Gorham, we are delighted to have you. We want to thank you for your patience, and you go right ahead and present your prepared statement as you may wish. And any part of your prepared statement that you abbreviate or skip over will be printed in full in the record.

#### STATEMENT OF WILLIAM GORHAM, PRESIDENT, THE URBAN INSTITUTE, WASHINGTON, D.C.

Mr. GORHAM. Mr. Chairman, it is a pleasure to participate in this committee's persistent efforts to explore how we can make our public choices more informed and rational. It is a pleasure to participate in bringing coals to Newcastle, which I feel I am doing.

The thrust of this inquiry is to reexamine our national priorities and the way in which they are determined. I would like to address a closely related issue: How well are we prepared to accomplish whatever purposes find their way onto our national agenda?

Experience is a valuable thing, but it obviously has not been enough. To use the famous old example, a cat who has once sat on a hot stove will never sit on a hot stove again. But he will never sit on a cold stove, either.

This is the problem I think we run into when we rely too much on the wisdom of experience. We are not always able to extract the right lesson from the experience we have had.

Recent American history seems cluttered with the wreckage of decisions and policies undertaken by men who were both intelligent and experienced.

In this light I have only one recommendation to make to this committee. It concerns the use of intellectual tools to help establish national priorities. In a system of government such as ours, I feel it undesirable for the executive branch to have a virtual monopoly on research capability. It seems to me that if legislators are ever to gain advantage over their predecessors in coping with great policy issues, it will come through the establishment of a really first-rate analytical organization serving the legislative branch.

However we do or will set priorities for public action, it is the knowledge base on which we heavily depend to determine how we should address ourselves to the particular problems finding their way onto the public agenda.

I do not have to justify before this committee the need for improving the accuracy of our aim against the specific social targets which the American people place before their Government.

When we fumble too many of the problems we have undertaken to solve, each failure weakens the public will to "do something" in a collective way.

The question is: Why don't we do better?

One reason is that when the public is ready to place an item on its "do" list, their leaders are not always ready with a well thought out, pre-tested, or at least promising solution. Moreover, they are not always ready with an honest and competent appraisal of the success of previous or current attempts to deal with the issue in question.

Sometimes it seems that we learn only what the cat learned, to stay off the stove, hot or cold.

To seal the argument let me cite three examples. First, through a miracle of political trading the Congress passed the Elementary and Secondary Education Act of 1965. It featured in its main title, title I, aid to the education of poor youngsters. There are very few who have looked closely at this program who feel that it did much of value toward its purposes. Nor is there now—as a saving grace—a coherent body of information on which to base subsequent attempts to tackle the problem.

Of course it might be argued that no one could have predicted the passage of such a bill, therefore it is understandable that the Government was unprepared to offer substantial guidance on effective uses of the funds. But if that were the case, a survey of expected uses, and an assessment of those uses, may have suggested a slower phase-in of spending, experimentation, or both. This would appear to have been a more responsible road.

A second example is medicaid.

The inadequacy of health services to the poor has been a source of concern and modest public action for a long time in the country. In 1965 the Congress passed as a provision of the Social Security Act a payments mechanism for the medically indigent—title 19. It is fair to say that the provision was passed with virtually no one knowing—or perhaps even asking—what impact the provision would have on: (1) The status of health of the poor, (2) the delivery of services to the poor, (3) the system of health care, or (4) the price of health services generally.

All these issues are central to the choice and yet they were either not addressed or they were addressed in the most cursory way prior to enactment of the legislation. While medicaid has undoubtedly done some good—in some States considerable good—it certainly could have been made much more effective had more forethought been taken before its passage as law.

Finally, the overall war on poverty would have to be counted among the wars for which insufficient preparation had been made. The process by which decisions were made regarding the kinds of things to be done, how much, and by whom, was distressingly weak. The slogans—for example, "making taxpayers out of tax eaters"—were a poor substitute for carefully weighed options.

This is not to say that the war was not worth undertaking; nor that given the time available to get to the front, we did not do as well as could be expected. These examples are not meant as an attack on those who promoted or passed the legislation. They do in my opinion, however, illustrate poorly captured opportunities. And the weakness

in each case stems from inadequacy in the executive and the congressional preparation for consideration of public programs.

I have cited these particular programs because I know a little more about them than others. However, let me assure you a faulty process is spawning similar failures daily. The Omnibus Crime Control and Safe Streets Act of 1968 was addressed to high crime. Yet there are few authorities who have studied the matter who really believe that we know how to expend funds against crime effectively.

Certainly another reason government is not ready to take advantage of the emergence of public willingness to get on with some collective purpose is that we have not made the necessary investments to know where the winners are among our current programs. Evaluation of the things we do is still taking baby steps and faces some formidable institutional barriers, which I will remark on later.

Let me assure you that I do not mean to imply by what I have said that we should hold our action unless we are absolutely assured we know exactly what to do. Most learning is learned by doing, and Government programs have never been, and probably never will be, different. But good stewardship would seem to demand that we inform ourselves as well as we can in advance of the crisis of action, and that we have mechanisms for doing so.

Before offering suggestions to improve our ability to launch and guide Government programs I would like to turn my attention to some candidate agenda items in which substantial ignorance on how to proceed exists. Since the Urban Institute, of which I am President, was organized to make sustained inquiries into these and other national policy issues. I will draw on its beginning efforts.

#### INCOME AND DISTRIBUTION

While most income and its distribution are determined largely in the private sector, the Federal Government—alone—directly transfers in cash about \$50 billion annually and many other billions in earmarked subsidies to individuals. Moreover, the tax structure is our most self-conscious and broadest instrument of redistribution. In addition, most other Government programs, including the \$80 billion Defense budget, have profound short- and long-term impact on the distribution of income.

A large number of conditions in our society which have captured public attention diminish or disappear as levels of income rise. Of course, some new ones emerge. In any case, given the profound importance of income and its distribution, it is surprising that we do not, and indeed do not have the capacity to, place before the public the income implications of the programs we consider.

With some few exceptions such as new individual tax rates and direct transfers such as social security benefits the way in which new Government programs will redistribute income is rarely spelled out. Until we can—and routinely do—spell out redistributive effects, we obscure an implication of Government programs—always worth discussing and frequently central to the decision.

While this issue is usually explicit in direct transfer programs, the ability to spell out implications of alternatives in administration proposals as they emerge in the heat of congressional consideration

has been very limited. It has been recently accomplished in connection with the proposed family assistance plan (FAP). It is worth saying a word about this, since it does illustrate a class of aids which should be brought to the support of the legislative process.

A computer model of the FAP was developed which calculates for any variation in the income guarantee level, definition of eligibility, and so forth, the 10-year budget costs and the distribution of benefits by the economic and demographic characteristics of the recipients. An assortment of such research tools could greatly facilitate informed legislative action.

FAP is a relatively straight forward transfer, and modeling its impact is correspondingly straightforward. This is decidedly not the case with programs having only indirect or long-term effects on income, such as educational programs. These require more sophisticated models and understanding of quite complex interrelationships.

We have in our own organization the past year started development of computer models which would permit predicting the long-term effects of a variety of social welfare programs. Of course, they will never be any better than the understanding of the relationships among the things we try to do and the things we wish to change.

While modest unencumbered direct income transfers, such as the FAP or social security payments, solve many individual problems, they often go only a little way toward relieving certain conditions of lower income households, such as poor health, bad housing, and so forth.

Besides cash we have many programs which provide direct services to low-income families, such as the OEO neighborhood health centers.

We have others which increase the supply of things which they consume, such as interest subsidies on new low- and moderate-income rental housing.

Finally, we provide earmarked cash, good only for the purchase of particular commodities, such as food stamps. But the choice of mode—cash, services, supply subsidy, or earmarked income—has been based on little systematic inquiry into the relative effectiveness of the alternatives.

In the case of medicaid, which I mentioned earlier and which is closest to earmarked income, it appears that the program has generally yielded only modest increases in medical services for those eligible. The greatest portion of the cost of the program is transferred from Federal and State governments to the providers of medical services.

That happened because the supply of medical services, at least in the short run, is unresponsive to higher demand. Consequently, the price of the services and not the amount supplied increased. Perhaps it should be called doctors' aid.

In housing, our principal mode of improving services is through supply subsidies given to producers of new housing. The other alternatives of providing operating subsidies or earmarked allowances have barely been considered. The Department of Housing and Urban Development has encouraged the Urban Institute to analyze the full range of policy options for increasing the quality of housing service for low-income families. While it is too early to make definitive

recommendations, it is not too soon to doubt the optimality of our current housing strategy.

#### INFLATION AND UNEMPLOYMENT

I will turn now to a second area in which we do not seem to have all the answers, as suggested by the earlier conversation between you and Dr. Weidenbaum; namely, the joint issues of unemployment and inflation.

Our efforts to attain maximum production and employment tend to produce inflation which, as you know, has an uneven impact on income distribution. When we restrain inflation by monetary tightness, increasing taxes, or decreasing expenditures, unemployment tends to increase.

We have never really explicitly weighed the social and economic impacts of inflation and unemployment and thereby sought in a deliberate way the least bad balance for the Nation. Unfortunately, we do not know how to do that yet. We do know that as unemployment rises in the fight on inflation, it has uneven impacts in different regions, cities, among the races, sexes, occupations, and age groups. The resulting concentration of the burden of unemployment makes the problem much more severe.

Moreover, even though some labor markets are loosened, others remain tight and continue to contribute to inflationary pressure. We really need to give more attention to the two dynamic determinants of unemployment: The duration of job search before a job is found, and the turnover rate that reflects how long the particular match of worker and job remains mutually satisfactory. To reduce unemployment, job-worker matches must take place faster and the quality of the matches, in terms of job tenure, must be improved. Both of these, in turn, depend on how long the jobs in each market segment match the unemployed workers.

National economic growth and price stabilization policy have particular relevance to cities. Contrary to some of the fears expressed in the late fifties and early sixties, the cities experienced job growth during the economic expansion, although the responses lagged behind national growth.

The average rate of growth in unemployment in SMSA's, which we recently examined, was 3 percent in the central city and 6 percent in their suburbs during the 1965-67 period, a considerable expansion when compared with the rates of 1.1 percent and 4.7 percent in the period 1959 through 1965.

Recent statistics on city unemployment rates showed the major SMSA's are among the first to feel the impact of rising unemployment. As expected, the central cities of these SMSA's are experiencing the most severe problems. Within the central cities, unemployment rates are high and rising in poverty areas among the blacks and the young.

The Department of Labor estimates that over 30 percent of teenage blacks in urban poverty areas were unemployed during the first 3 months of this year, compared with about 20 percent in 1958. Unemployment rates among Negroes, mostly concentrated in racially segregated sections of our major cities, continue at about twice the rates for whites.

These facts underline the importance of a more satisfactory resolution of the unemployment dilemma than we have achieved so far. We suspect that solutions are to be found in programs designed to reduce the duration of unfilled vacancies and period of unemployment, and to increase the duration of job-people matches once they are made.

A good strategy to cope with central city employment problems cannot be specified with much confidence at the moment. Our work on occupational distribution of recent job growth in central cities suggests that high central city unemployment rates are not simply the result of a geographical and skill mismatch of people and jobs as commonly believed. We are now attempting to determine the relative importance to employment experience of the characteristics of the local labor market, on the one hand, and the personal characteristics of the members of the labor force on the other.

It is already clear that some programs to change the demand for labor and the structure of jobs will be desirable to supplement the more conventional programs for training and placement of jobseekers.

Though we will spend \$3½ billion in 1970, our present manpower programs are probably too small to have any impact on the inflation-unemployment problem. Most are oriented toward the disadvantaged rather than the overall inflation-unemployment process. A manpower program capable of making an important contribution to the reduction of both inflation and unemployment would probably need to be different and, perhaps, larger than our present one and give much more attention to filling critical job vacancies.

To design such a program we will have to know more than we do now.

#### URBAN GROWTH POLICY

Finally, I would like to turn to last year's most asked national policy question: Where are the next hundred million Americans going to live?

Many people are disturbed by the current and expected pattern of urban growth. In recent months the President, Members of Congress, and others have called for an urban growth policy. The Nation does not have an articulated policy nor an integrated set of programs aimed explicitly at shaping the future growth of urban America. Our urban growth policy is a hodgepodge of Federal, State, and local programs whose ends and means are frequently in conflict and whose results at times exacerbate commonly recognized problems.

"Growth centers" and "new towns" are much discussed. However, our understanding of why cities grow or do not grow and of what can be expected from policies designed to affect such growth is seriously deficient. For example, if we decide to promote the growth of small and medium-sized urban centers, experience indicates that the proper selection of these growth centers is just as important as the design of the policies to be applied. Ability to benefit from incentives varies widely among places.

At present we do not have a sound basis upon which to evaluate the consequences of alternative urban policies and the criteria for selecting urban growth centers.

This is hardly a complete list of items that might find a place on the national priority agenda. However, it is certainly not atypical

with regard to the state of knowledge on how to proceed. If the state of our knowledge is shaky, our ability to become informed and thereby prepare for intelligent public policy is not much sounder.

The institutions and structures we have are weakly equipped to learn from experience, and we have taken precious few steps to create new ones.

As suggested in my illustrations, we must know more about the problems we are trying to solve, know more about the effects of our current and past efforts to deal with these problems, and in these ways and others prepare more effectively for program development and budget choices.

I will offer a personal action list for a wise and well-motivated Congress. The Congress should:

Continue support of individual scholarship. There are faults with our scholarly community, but not faults which will be corrected by starving them or their work. It is safe to say that most gains to our basic understanding stemmed from the work of individual scholars plying their trade in their own ways.

Encourage the development of interdisciplinary institutes. There are many problems of our society which will be understood much faster if mechanisms for massing intellectual resources are developed and nurtured. A number of prototypes for such enterprises exists. If they are not encouraged substantially and financially they will languish.

Rekindle the spluttering flame of PPB. This committee has done much already on the subject. In my judgment PPB is absolutely right in concept. It requires more sustained support from the Congress, the White House, and the BOB. It requires patience. Its message and value is care in considering what the Government has done and might do. New initials will be needed but the job must be done.

Require objective evaluation of Government programs. Some considerable progress has been made here. It will require continued attention. Some reorganization within each Federal agency will be necessary to get objective information. Congress will have to figure out some way to reward those who tell the truth about programs, or they will get only selective truth, which could easily be worse than nothing.

Encourage the appointment of bridging persons within speaking distance of all major actors in the decision process, congressional as well as executive. Even when the knowledge for better choice is available somewhere, it frequently does not find its way to those actually making the decisions. The best way to meet this problem is to encourage all major parties to a decision to have close to them someone who knows what is known or knows how to find out.

Encourage experimentation in social problem-solving. Many of the problems we have taken on have never been understood well enough to design effective solutions. We will have to experiment. Precedents for such experimentation are just coming into their own. They require encouragement or they will fall prey to those who have little patience and those who would rather the target of the experiment was not on the agenda at all.

Subject to scrutiny established old programs as well as proposed additional ones. Congressional attention is not naturally directed to

the existing base of programs. The current scrutiny of the Defense Establishment is perhaps an exception to this.

I would now like to come back to the main theme of the hearing by emphasizing two points.

First, setting priorities in the absence of some sense of the resources required for each purpose is not really possible in a resource-constrained world.

Second, when our government performs some social purpose poorly we fail on at least four counts. We waste resources which would have been used with more personal satisfaction by those who forfeited them. We leave our purposes insufficiently accomplished. We lessen the willingness of the policy to persevere against the condition itself. And finally, we weaken our citizens' confidence in the public sector in general. The problem becomes regarded as insoluble, the government incompetent, or both.

Since many public purposes are pressed by a very fragile majority in coalition, the cost of poor government performance can be a shrunken agenda. If there were no alternative to poor performance, this outcome would be cause for resignation (perhaps with a heavy heart). But when good performance is possible, loss of the agenda item is a diminishment of us all.

Thank you, Mr. Chairman.

Chairman PROXMIRE. Thank you very much for a most thoughtful statement.

You talk about the possibility of weighing the pains and difficulties that developed in inflation on the one hand and unemployment on the other, so that we can work out what would be least bad. And then you go into an analysis of manpower training programs and mobility of jobs. And mobility of labor is one way we can go about it. Can we get more than this out of economic analysis in your view, Mr. Gorham? In other words, can we arrive at some kind of a notion on the Phillips curve, the conclusion on the part of many competent economists that after a certain level of unemployment is reached, any further diminution in unemployment must be accompanied by inflation and that inflation continues for some time.

Mr. GORHAM. I believe that even the most optimistic Phillips curve movers would agree that there will be some level of unemployment below which the price level rises. However, a growing group of economists and others in this country and elsewhere, including economists on the staff of the Urban Institute, believe that we do not have to accept the particular relationship between unemployment and inflation which this country appears to have. Indeed with a sensible set of government programs designed for the purpose we can have a better Phillips curve which provides a lower level of unemployment for any given level of inflation. Other countries do it. And they feel—and I agree—that we probably can too. But we have a lot to learn.

Chairman PROXMIRE. You see, in your analysis here you seem to conclude—the implication may be unfair—you seem to conclude that what we really have to do is understand what the job vacancies are—we do not have those statistics. incidentally, this committee has been trying to get them—what the job vacancies are, the demand for labor on the one hand, and then the supply of labor, and try with manpower train-

ing to provide that these people who are unemployed can find those jobs, and we can do something about it in that way, in a way that would be deflationary rather than inflationary. But at the present time the 4.8 percent unemployment, with such a high proportion of minority groups as you point out in your statement, does it not seem that we do need more aggregate demand, that we need more aggregate employment?

Mr. GORHAM. Nothing that I suggested in my statement should argue against more aggregate demand. It is not an argument against pressing for more aggregate demand. It rather is an argument for a very close look at the specific mechanism by which tight labor markets create price pressures. That specific mechanism is not understood.

It is suggested in my statement, and by Charles Holt, who has done a great deal of this work, that there are particular critical vacancies which even with general slackness in the labor market provide fuel for inflationary pressures. To locate these areas and to act against them would reduce inflationary pressures.

Chairman PROXMIRE. But actually when you look at the situation it is very hard to see that. For example, the area where we have had the biggest increase in wages has been in the construction trade. The area where we have the biggest unemployment is in the construction trades. We had in Milwaukee late last winter or early this spring 30 percent unemployment. Settlements are very high, as you know. And there does not seem to be much correlation between a scarcity of labor, although there should be, and the classical economic analysis says there is. When you look at the facts, say, you have a sharp increase in the cost of automobiles this year, and an excess of automobile workers and heavy unemployment in the area—it seems that there is little correlation for some reason between a tight labor market and then higher prices.

Mr. GORHAM. I think if one looks, as you are suggesting, into specific industrial sectors such as construction—which I have not done, and I speak really as one ignorant of the specific sectors that we are discussing—one might find special situations.

I think in construction the barriers to entry might create special problems for inflationary pressures, and these might be examples where union pressure is effective.

Chairman PROXMIRE. In your analysis you pointed out, partly facetiously but partly seriously, that medicaid could be called doctors' aid to some extent, inasmuch as there was a limited amount, in the short run at least, of medical resources, health resources, and when you increase this program sharply and suddenly it has inflationary implications, many of the indigents do not get the care even though they should theoretically get it, and that a careful analysis of this—if the question had been asked in advance, perhaps we could have forestalled this and had a more sensible program. Could the same kind of analysis be useful in the family assistance program that President Nixon has proposed that is going to come before us for a vote very soon in the Senate, and it has already been acted on in the House?

As you say, this is a straightforward program. There are several alternatives involved here. I think there is a lot of merit in the program, but at the same time an enormous cost can be involved. The initial cost is reasonably modest, comparatively modest, \$4 billion.

But this could go up to \$20 billion or more if you set a higher rate, and there is a great temptation to do it.

Could economic analysis in your view help us here, or do we just have to trust our political instincts?

Mr. GORHAM. First, it should be said that quite a large amount of analysis did go into the development of the family assistance plan. It was not invented overnight. It is really the culmination of many years of work by a fairly substantial number of people both within and outside of the Government. It is really quite different from medicaid. Medicaid is largely operating—

Chairman PROXMIRE. Similarly, there was a lot of analysis going in various ways, maybe not of a specific program, but of various health insurance programs.

Mr. GORHAM. Well, I think there probably was a great deal of analysis of health insurance programs. But there was almost no analysis of a payment mechanism to the medically indigent, that I know about. It could have taken place somewhere else in HEW. But I think it did not take place. But medicaid went through a very complex and constrained medical delivery system, whereas in the case of the family assistance plan, basically money is transferred from the general population to the poor. And how effective they are in using their money will depend on what sort of purchasers they are, how they consume their money.

I think there are some important issues around FAP which are unknowns, and not easily knowable without a great deal of experience.

The relationship between a transfer payment such as FAP and the work behavior of the individual is very dimly perceived. The experience in New Jersey where one of the first large-scale experiments with this sort of an income payment was undertaken seemed to suggest that work behavior was virtually not a factor.

The fear of many that if you give the unworthy along with the worthy poor some income, they are going to stop working is neither justified nor disapproved by the early returns of the New Jersey experiment. One can only say that very few Government programs had as much information to go on as FAP had on that issue, little as it was.

Chairman PROXMIRE. Do you have a report or study you can submit for the record on the family assistance program?

Mr. GORHAM. Let me explain what our role has been. We have been acting for the Congress and for the administration as technical consultants. We have provided the cost and effect estimates. We will be happy to provide for the record a record of those activities and those estimates.

Chairman PROXMIRE. We would like it very much, it would be very helpful to use.

(The following information was subsequently supplied for the record by Mr. Gorham:)

The following list of computer work performed for the Department of Health, Education, and Welfare since August of last year itemizes each separate job specification. Nearly every item in this inventory list represents an income maintenance proposal, but each one represents a unique mix of allowance rates, coverage and offset tax structures. The standard output of each printout is explained at the end of the inventory.

## INCOME MAINTENANCE COST AND COVERAGE ESTIMATES PERFORMED FOR HEW

(1) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 only to the next five members (a guarantee for a family of four of \$2400), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, including Social Security benefits in adjusted gross income for Federal income tax liability calculation. Dated August 28, 1969.

(2) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding means-tested income), at 100 percent, covering families of all sizes. Dated August 31, 1969.

(3) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding means-tested transfer income, interest, rent and dividends) at 50 percent, taxing interest, rent, and dividend income at 100 percent, covering families of all sizes, and dated September 1, 1969.

(4) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding means-tested transfer income) at 50 percent, covering families of all sizes, and dated September 1, 1969.

(5) 1966 Vanishing Income Supplement paying \$625 to the first two family members and \$375 only to the next five family members (a guarantee for a family of four of \$2000), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated September 1969.

(6) 1966 Vanishing Income Supplement paying \$500 to the first two members and \$300 only to the next five family members (a guarantee for a family of four of \$1600), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated September 1969.

(7) 1966 Vanishing Income Supplement paying \$875 to the first two family members and \$525 only to the next five members (a guarantee for a family of four of \$2800), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated September 1969.

(8) 1966 Vanishing Income Supplement paying \$1000 to the first two family members and \$600 only to the next five members (a guarantee for a family of four of \$3200), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated May 9, 1970.

(9) 1966 Vanishing Income Supplement paying \$1125 to the first two family members and \$675 only to the next five members (a guarantee for a family of four \$3600), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated September 1969.

(10) 1966 Vanishing Income Supplement paying \$625 to the first two family members and \$375 only to the next five members (a guarantee for a family of four \$2000), taxing annual family money income less means-tested transfer income at 70 percent, covering families of all sizes, dated September 1969.

(11) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four of \$1600), taxing annual family money income less means-tested transfer income at 70 percent, covering families of all sizes, dated September 1969.

(12) 1966 Vanishing Income Supplement paying \$750 to the first two members and \$450 to only the next five members (a guarantee for a family of four of \$2400), taxing annual family money income less means-tested transfer income at 70 percent, covering families of all sizes, dated September 1969.

(13) 1966 Vanishing Income Supplement paying \$875 to the first two family members and \$525 only to next five members (a guarantee for a family of four of \$2800), taxing annual family money income less means-tested transfer income at 70 percent, covering families of all sizes dated September 1969.

(14) 1966 Vanishing Income Supplement paying \$625 to the first two family members and \$375 only to the next five members (a guarantee for a family of four of \$2000) taxing annual family money income less-tested transfer income at 30 percent, covering families of all sizes. Dated September 1969.

(15) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family money income less means-tested transfer income at 30 percent, covering families of all sizes, dated September 1969.

(16) 1966 Vanishing Income Supplement paying \$875 to the first two family members and \$525 only to the next five members (a guarantee for a family of four of \$2800), taking annual family money income less means-tested transfer income at 30 percent, covering families of all sizes dated September 1969.

(17) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 only to the next five family members (a guarantee for a family of four \$2400), taxing annual family money income less means-tested transfer income at 30 percent, covering families of all sizes, dated September 1969.

(18) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four of \$1600), taxing annual family earned income over \$720 at 50 percent, covering families with children, taxing family unearned income (excluding means-tested transfer income) at 100 percent, including Food Stamp estimates. Dated September 15, 1969.

(19) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 only to the next five family members (a guarantee for a family of four of \$2400), taxing annual family earned income over \$720 at 50 percent, covering families with children, taxing unearned income (excluding means-tested transfer income) at 100 percent. Dated September 16, 1969.

(20) 1966 Vanishing Income Supplement paying \$625 to the first two family members and \$375 only to the next five family members (a guarantee of \$2000 for a family of four), taxing annual family earnings over \$720 at 50 percent, taxing family unearned income (less means-tested transfer income) at 100 percent, covering families with children. Dated September 16, 1969.

(21) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to the next five family members (a guarantee for a family of four of \$2400), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated September 22, 1969.

(22) 1966 Vanishing Income Supplement paying \$750 to the first two family members, \$450 to the next five members, and \$225 to every member thereafter (a guarantee for a family of four of \$2400) taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated September 23, 1969.

(23) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 only to the next five family members (a guarantee for a family of four of \$2400), taxing annual family money income less means-tested transfer income over \$720 at 50 percent, covering families of all sizes and dated September 23, 1969.

(24) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding means-tested transfer income) at 50 percent, covering families with children, including Food Stamp estimates. Dated October 1, 1969.

(25) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding means-tested transfer income) at 50 percent, covering families of all sizes, including Food Stamp estimates. Dated October 2, 1969.

(26) 1968 Vanishing Income Supplement paying 500 to the first two family members and \$300 only to the next five family members (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding means-tested transfer income) at 50 percent, covering families of all sizes, including Food Stamp estimates, containing cost and coverage estimates based upon family work experience. Dated October 10, 1969.

(27) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, tax-

ing family unearned income (excluding means-tested transfer income) at 50 percent, covering families with children. Dated October 10, 1969.

(28) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four of \$1600), taxing annual family earned income over \$720 at 50 percent and annual family unearned income receipts (less nonadult Public Assistance) at 50 percent, covering only families with children with the head in the labor force 50 weeks or more, dated October 10, 1969.

(29) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five members (a guarantee for a family of four of \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience. Dated October 10, 1969.

(30) 1966 Vanishing Income Supplement paying \$1675 to the first two family members and \$1075 only to the next five family members (a guarantee for a family of four of \$5500), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated October 14, 1969.

(31) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five members (a guarantee for a family of four of \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (less means-tested transfer income) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience. Dated October 14, 1969.

(32) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 only to the next five family members (a guarantee for a family of four of \$2400), taxing annual family money income less means-tested transfer income at 50 percent, correcting for sample income underreporting, covering families of all sizes dated October 27, 1969.

(33) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to the next five family members (a guarantee for a family of four of \$2400), taxing annual family money income (less means-tested transfer income) at 50 percent, covering families of all sizes, dated October 27, 1969.

(34) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income receipts (less nonadult Public Assistance) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience. Dated October 29, 1969.

(35) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children without Public Assistance. Dated October 29, 1969.

(36) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (less nonadult Public Assistance) at 50 percent, covering families with children with Public Assistance. Dated October 29, 1969.

(37) 1971 Vanishing Income Supplement paying \$875 to the first two family members and \$525 to every member thereafter (a guarantee for a family of four \$2800), taxing annual family money income (less means-tested transfer income) at 50 percent, covering all family sizes. Dated October 30, 1969.

(38) 1971 Vanishing Income Supplement paying \$1000 to the first two family members and \$600 to every member thereafter (a guarantee for a family of four \$3200), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes. Dated October 30, 1969.

(39) 1971 Vanishing Income Supplement paying \$1125 to the first two family members and \$675 to every member thereafter (a guarantee for a family of four \$3200), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated October 30, 1969.

(40) 1971 Vanishing Income Supplement paying \$1250 to the first two family members and \$750 to every member thereafter (a guarantee for a family of four \$4000), taxing annual family money income less means-tested transfer income at 50 percent covering families of all sizes. Dated October 30, 1969.

(41) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 only to the next five family members (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children. Dated October 30, 1969.

(42) Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family money income less means-tested transfer income at 70 percent, covering families of all sizes. Dated October 30, 1969.

(43) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family money income less means-tested transfer income at 30 percent, covering families of all sizes. Dated October 30, 1969.

(44) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee of \$1600 for a family of four), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated October 30, 1969.

(45) 1971 Vanishing Income Supplement paying \$625 to the first two family members and \$375 to every member thereafter (a guarantee for a family of four \$2000), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated October 30, 1969.

(46) 1971 Vanishing Income Supplement paying \$750 to the first two family members, \$450 to the next five members and \$225 to every member thereafter (a guarantee of \$2400 for a family of four) taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes, dated October 30, 1969.

(47) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four of \$2400), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes. Dated November 5, 1969.

(48) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family money income less means-tested transfer income at 50 percent, correcting for sample income underreporting, covering families of all sizes. Dated November 5, 1969.

(49) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes. Dated November 5, 1969.

(50) 1966 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family money income less means-tested transfer income at 50 percent, correcting for sample income underreporting, covering families of all sizes. Dated November 5, 1969.

(51) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent, taxing unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience. Dated November 11, 1969.

(52) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four of \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families without Public Assistance dated November 11, 1969.

(53) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four of \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (less nonadult Public Assistance) at 50 percent, covering families with Public Assistance. Dated November 11, 1969.

(54) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four of \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children. Dated November 11, 1969.

(55) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children, including a 10 percent increase in OASDI benefits. Dated November 11, 1969.

(56) 1975 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children. Dated November 11, 1969.

(57) 1975 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children, including a 10 percent increase in OASDI benefits. Dated November 11, 1969.

(58) 1971 Vanishing Income Supplement paying \$1675 to the first two family members and \$1075 to every member thereafter (a guarantee for a family of four \$5500), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes. Dated December 2, 1969.

(59) 1971 Vanishing Income Supplement paying \$1675 to the first two family members and \$1075 to every member thereafter (a guarantee for a family of four \$5500), taxing annual family money income less means-tested transfer income at 100 percent, covering families of all sizes. Dated December 2, 1969.

(60) 1973 Vanishing Income Supplement paying \$1075 to the first two family members and \$625 to every member thereafter (a guarantee for a family of four \$3400), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes. Dated December 2, 1969.

(61) 1975 Vanishing Income Supplement paying \$1400 to the first two family members and \$800 to every member thereafter (a guarantee for a family of four \$4400), taxing annual family money income less means-tested transfer income at 50 percent, covering families of all sizes. Dated December 2, 1969.

(62) 1968 Vanishing Income Supplement paying \$500 to the first two family members, \$300 to the next four persons, \$200 to the next family member, and \$100 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings at 50 percent, taxing family unearned income (excluding non-adult Public Assistance transfer income at 100 percent, covering families with children. Dated December 30, 1969.

(63) 1966 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (less non-adult Public Assistance) at 50 percent, covering families of all sizes, containing extensive cost and coverage estimates based upon family work experience, correcting for sample income underreporting. Dated January 20, 1970.

(64) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance), at 50 percent, covering families of all sizes, containing extensive cost and coverage estimates based upon family work experience. Dated January 20, 1970.

(65) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience, correcting for sample income underreporting. Dated January 20, 1970.

(66) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families of all sizes, containing extensive cost and coverage estimates based upon family work experience, correcting for sample income underreporting. Dated January 20, 1970.

(67) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience. Dated January 20, 1970.

(68) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children, (male heads only), containing extensive cost and coverage estimates based upon family work experience. Dated January 26, 1970.

(69) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings over \$720 at 50 percent, taxing family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children, (male heads employed full-time, full-year), containing extensive cost and coverage estimates based upon family work experience. Dated January 26, 1970.

(70) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering only female-headed families with children, containing extensive cost and coverage estimates based upon family work experience. Dated January 26, 1970.

(71) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children, containing extensive cost and coverage estimates based upon family work experience, restricted to female heads employed full-time, full-year. Dated January 26, 1970.

(72) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children (female heads potentially employable), containing extensive cost and coverage estimates based upon family work experience. Dated January 27, 1970.

(73) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children (female heads potentially employable, no kids under 6 years), containing extensive cost and coverage estimate based upon family work experience. Dated January 27, 1970.

(74) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing annual family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children (male heads potentially employable), containing extensive cost and coverage estimates based upon family work experience. Dated January 27, 1970.

(75) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing annual family unearned income (less non-adult Public Assistance) at 50 percent, covering only male-headed families with children, containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(76) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing annual family unearned income (less non-adult Public Assistance), at 50 percent, covering families with children (male heads employed full-time, full year), containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(77) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing annual family unearned income (less non-adult Public Assistance) at 50 percent, covering families with children (male heads potentially employable), containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(78) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income over \$720 at 50 percent, taxing annual family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children (female-headed), containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(79) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing annual family unearned income (excluding non-adult Public Assistance), at 50 percent, covering families with children, (female heads employed full-time, full-year) containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(80) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing annual family unearned income (excluding non-adult Public Assistance), at 50 percent, covering families with children, (female heads potentially employable) containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(81) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance), at 50 percent, covering families with children (female heads potentially employable with no kids under 6), containing extensive cost and coverage estimates based upon family work experience. Dated February 3, 1970.

(82) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance), at 50 percent. Covering families with children (head less than 50 years), containing extensive cost and coverage estimates based upon family work experience. Dated February 16, 1970.

(83) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance), at 50 percent, covering families with children (head under 40 years), containing extensive cost and coverage estimates based upon family work experience. February 16, 1970.

(84) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing family unearned income (excluding non-adult Public Assistance) at 50 percent, covering families with children (head under 30 years), containing extensive cost and coverage estimates based upon family work experience. Dated February 16, 1970.

(85) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing annual unearned income (excluding non-adult Public Assistance), at 50 percent, covering families with children (head under 50 years), containing extensive cost and coverage estimates based upon family work experience. Dated February 16, 1970.

(86) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing annual unearned income (excluding non-adult Public Assistance) at 50 percent,

covering families with children (head under 40 years), containing extensive cost and coverage estimates based upon family work experience. Dated February 16, 1970.

(87) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earned income above \$720 at 50 percent, taxing annual family unearned income (excluding nonadult Public Assistance) at 50 percent, covering families with children (head under 30 years), containing extensive cost and coverage estimates based upon family work experience. Dated February 16, 1970.

(88) Special tabulations covering work experience of Vanishing Income Supplement (print-out numbers 29 & 41) population. Dated February 16, 1970.

(89) 1971 Harris Plan dated February 21, 1970.

(90) 1972 Harris Plan dated February 21, 1970.

(91) 1973 Harris Plan dated February 21, 1970.

(92) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$200 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families with children. March 7, 1970.

(93) 1968 Vanishing Income Supplement, paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance at 100 percent, covering families with children. March 7, 1970.

(94) 1971 Vanishing Income Supplement, paying \$500 to the first two family members a \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance at 100 percent, covering families with children. March 7, 1970.

(95) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings at 50 percent and family unearned income less nonadult Public Assistance at 100 percent, covering families with children. March 7, 1970.

(96) 1975 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families with children. March 7, 1970.

(97) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(98) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(99) 1975 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(100) 1968 Vanishing Income Supplement paying \$530 to the first two family members and \$320 to every member thereafter (a guarantee for a family of four \$1700), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering all family sizes. March 7, 1970.

(101) 1968 Vanishing Income Supplement paying \$560 to the first two family members and \$340 to every member thereafter, (a guarantee for a family of four \$1800), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(102) 1968 Vanishing Income Supplement paying \$690 to the first two family members and \$340 to every member thereafter (a guarantee for a family of four \$2200), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(103) 1968 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 50 percent, covering families of all sizes. March 7, 1970.

(104) 1968 Vanishing Income Supplement paying \$750 to the first two family members and \$50 to every member thereafter (a guarantee for a family of four \$240), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(105) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 50 percent, covering families of all sizes. March 7, 1970.

(106) 1971 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(107) 1975 Vanishing Income Supplement paying \$750 to the first two family members and \$450 to every member thereafter (a guarantee for a family of four \$2400), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(108) 1968 Vanishing Income Supplement paying \$950 to the first two family members and \$550 to every member thereafter (a guarantee for a family of four \$3000), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(109) 1968 Vanishing Income Supplement paying \$1125 to the first two family members and \$675 to every member thereafter (a guarantee for a family of four \$3600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(110) 1971 Vanishing Income Supplement paying \$1125 to the first two family members and \$675 to every member thereafter (a guarantee for a family of four \$3600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent covering families of all sizes. March 7, 1970.

(111) 1975 Vanishing Income Supplement paying \$1125 to the first two family members and \$675 to every member thereafter (a guarantee for a family of four \$3600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes. March 7, 1970.

(112) 1968 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 50 percent, covering families of all sizes. March 7, 1970.

(113) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipt at 50 percent, covering families of all sizes. March 7, 1970.

(114) 1968 McGovern Plan paying \$600 for each child under 18 years of age and dated March 7, 1970.

(115) 1968 McGovern Plan paying \$780 for each child under 18 years of age and dated March 7, 1970.

(116) 1971 McGovern Plan paying \$600 for each child under 6 years of age and dated March 7, 1970.

(117) 1971 McGovern Plan paying \$780 for each child under 6 years of age and dated March 7, 1970.

(118) 1971 McGovern Plan paying \$600 for each child under 18 years of age and dated March 7, 1970.

(119) 1971 McGovern Plan paying \$780 for each child under 18 years of age dated March 7, 1970.

(120) Special tabulations of the Vanishing Income Supplement population (print-out Number 94) dated April 20, 1970.

(121) 1971 Goodell Plan taxing annual family money income less means-tested transfer income at 80 percent, and dated April 23, 1970.

(122) 1972 Goodell Plan taxing annual family money income less means-tested transfer income at 80 percent, and dated April 23, 1970.

(123) 1973 Goodell Plan taxing annual family money income less means-tested transfer income at 80 percent, dated April 23, 1970.

(124) 1974 Goodell Plan taxing annual family money income less means-tested transfer income at 80 percent, dated April 23, 1970.

(125) 1975 Goodell Plan taxing annual family money income less means-tested transfer income at 80 percent, dated April 23, 1970.

(126) 1980 Goodell Plan taxing annual family money income less means-tested transfer income at 80 percent, dated April 23, 1970.

(127) 1971 Javits Plan dated April 30, 1970.

(128) 1972 Javits Plan dated April 30, 1970.

(129) 1971 Javits Plan mandating an AFDC payment level of \$1800 to an AFDC-eligible family of four, and dated April 30, 1970.

(130) 1972 Javits Plan mandating an AFDC payment level of \$1800 to an AFDC-eligible family of four, and dated April 30, 1970.

(131) 1973 Javits Plan dated April 30, 1970.

(132) 1974 Javits Plan dated April 30, 1970.

(133) 1975 Javits Plan dated April 30, 1970.

(134) 1971 Goodell Plan taxing annual family money income less means-tested transfer income at 57 percent, and dated May 10, 1970.

(135) 1972 Goodell Plan taxing annual family money income less means-tested transfer income at 57 percent, and dated May 10, 1970.

(136) 1973 Goodell Plan taxing annual family money income less means-tested transfer income at 57 percent, and dated May 10, 1970.

(137) 1974 Goodell Plan taxing annual family money income less means-tested transfer income at 57 percent, and dated May 10, 1970.

(138) 1975 Goodell Plan taxing annual family money income less means-tested transfer income at 57 percent, dated May 10, 1970.

(139) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee for a family of four \$1600), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families with children but excluding the aged and disabled, and dated May 4, 1970.

(140) 1971 Vanishing Income Supplement paying \$700 to the first two family members and \$400 to the next five members and \$300 to every member thereafter, (a guarantee of \$2200 for a family of four), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families with children, but excluding the aged and disabled, and dated May 14, 1970.

(141) 1971 Vanishing Income Supplement paying \$500 to the first two family members and \$300 to every member thereafter (a guarantee of \$1600 for a family of four), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes but excluding the aged and disabled, and dated May 26, 1970.

(142) 1971 Vanishing Income Supplement paying \$700 to the first two family members \$400 to the next five members, and \$300 to every member thereafter (a guarantee of \$2000 for a family of four), taxing annual family earnings above \$720 at 50 percent and family unearned income less nonadult Public Assistance receipts at 100 percent, covering families of all sizes but excluding the aged and disabled, dated May 26, 1970.

(143) Special day care tabulations of Vanishing Income Supplement plan #94 population. Dated June 14, 1970.

## OUTPUT EXPLANATIONS

Standard output for an estimated income maintenance scheme consists of four sections. In addition, on special request, a fifth section containing cost and coverage estimates of recipient units based upon extensive family unit work experience is available. The contents of the five sections of output are spelled out below.

*Section 1*

Section One consists of 16 tables. Each table contains (i) the number of households receiving a net allowance (the gross allowance less the offset tax) and the average net allowance classified by family money income (less means-tested transfer income) levels before the simulations (ii) the number of households receiving the net allowance plus residual welfare and this average amount classified by the same income item as in (i), (iii) the number of households with preallowance disposable income (family money income less Federal income and Social Security taxes) and the average preallowance disposable income amount classified by preallowance disposable income levels, (iv) the number of households with post-allowance family money income (preallowance family money income less preallowance means-tested welfare plus post-allowance residual welfare plus the net allowance) and this average amount classified by post-allowance family money income levels, and (v) the number of households with post-allowance disposable income (post-allowance family money income less post-allowance Federal income taxes and Social Security taxes) and this average amount classified by post-allowance disposable income levels.

The income level classifiers in each of the five parts of each section one table represent 19 income levels, identical for each part. These are as follows: under 500, 500-999, 1000-1499, 1500-1999, 2000-2499, 2500-2999, 3000-3499, 3500-3999, 4000-4499, 5000-5999, 6000-6999, 7000-7999, 8000-8999, 9000-9999, 10,000-11,999, 12,000-14,999, 15,000-24,999, 25,000 and over.

The above information is provide in each of 16 tables for the following 16 groups and subgroups of the population :

- (1) All families and unrelated individuals.
- (2) Male head under 65 years.
- (3) Male head 65 years or older.
- (4) Female head under 65 years.
- (5) Female head 65 years or older.
- (6) White head of household.
- (7) Nonwhite head of household.
- (8) Rural households.
- (9) Urban households.
- (10) Northeastern households.
- (11) North Central households.
- (12) Southern households.
- (13) Western households.
- (14) Unrelated individuals.
- (15) Families with children.
- (16) Families without children.

*Section 2*

Section two of the computer print-out includes the number of family units and number of persons covered by the income maintenance program. Family coverage and total costs for preallowance means-tested programs and post-allowance residual welfare programs are included—in total and by assistance category. Section two also contains the following dollar totals: (i) total gross allowance, (ii) total offset tax, (iii) pre- and post-allowance poverty gaps, low-income gaps, Federal tax liabilities, and Social Security benefits, (iv) recoupment net cost (total net allowance plus reduced Federal income tax liabilities), (v) policy net cost (recoupment net cost less pre-allowance means-tested transfers plus post-allowance residual welfare), (vi) Food Stamp costs, (vii) Social Security taxes, and (viii) poverty gap and low-income gap reductions.

The cost and coverage information listed above is related for each of 29 groups and subgroups of the population indicated below :

- (1) National totals.
- (2) Male head.
- (3) Female head.
- (4) White head.

- (5) Nonwhite head.
- (6) Head under 65.
- (7) Head 65 or older.
- (8) Families with children.
- (9) Families without children.
- (10) Northeast.
- (11) North central.
- (12) South.
- (13) West.
- (14) Inside SMSA—national.
- (15) Central city—national.
- (16) Urban fringe—national.
- (17) Inside SMSA—southern.
- (18) Central city—southern.
- (19) Urban fringe—southern.
- (20) Outside SMSA—national.
- (21) Urban—national.
- (22) Rural—national.
- (23) Outside SMSA—southern.
- (24) Urban—southern.
- (25) Rural—southern.
- (26) Rural farm—national.
- (27) Rural non-farm—national.
- (28) Rural farm—southern.
- (29) Rural nonfarm—southern.

### *Section 3*

For 19 separate family money income levels—identical in structure to the 19 income levels described in Section One—Section Three produces the following information:

- (1) Total number persons, families.
- (2) Average preallowance adjusted gross income, Federal income tax, poverty and low-income gaps, and disposable income.
- (3) Average allowance and total allowance families and average offset tax and total offset tax families.
- (4) Average post-allowance Federal tax liabilities and number of tax-paying families.
- (5) Average Social Security tax payment and number of tax-paying families.
- (6) Average post-allowance disposable income, poverty gap and low-income gap.
- (7) Average post-allowance increase in disposable income and average post-allowance poverty gap and low-income gap reductions.

The above information is listed for the following 33 groups and sub-groups in the population in Section 3 output:

- (1) All families and unrelated individuals.
- (2) Families.
- (3) Unrelated individuals.
- (4) Families with children.
- (5) Families with no children.
- (6) Families with one child.
- (7) Families with two children.
- (8) Families with three children.
- (9) Families with four children.
- (10) Families with five children.
- (11) Families with six or more children.
- (12) Family head under 65 years.
- (13) Family head 65 years or over.
- (14) Family head male.
- (15) Family head female.
- (16) Male head under 65 years.
- (17) Male head 65 years or older.
- (18) Female head under 65 years.
- (19) Female head 65 years or older.
- (20) Families receiving income-determined transfers.
- (21) Families not receiving income-determined transfers.
- (22) Families with children receiving income-determined transfers.

- (23) Families with no children receiving income-determined transfers.
- (24) Families with one child receiving income-determined transfers.
- (25) Families with two children receiving income-determined transfers.
- (26) Families with three children receiving income-determined transfers.
- (27) Families with four children receiving income-determined transfers.
- (28) Families with five children receiving income-determined transfers.
- (29) Families with six or more children receiving income-determined transfers.
- (30) Male head under 65 years receiving income-determined transfers.
- (31) Male head 65 years or older receiving income-determined transfers.
- (32) Female head under 65 years receiving income-determined transfers.
- (33) Female head 65 years or older receiving income-determined transfers.

#### Section 4

Section four output lists the number of families, number of persons, number of children, number of elders, post-allowance change in disposable income, and total net allowance of the following population groups:

- (1) Initially below poverty line—stay poor, cross poverty.
- (2) Allowance recipients in two subgroups listed in (1).
- (3) Between low cost and poverty line—go below poverty line, stay below low cost line, cross low cost line.
- (4) Allowance recipients in three subgroups listed in (3).
- (5) Initially above low cost line—go below line, stay above line.
- (6) Allowance recipients in two subgroups of (5).

Information indicated above is listed for the following population groups and subgroups in section four output:

- (1) All households.
- (2) Household size—1.
- (3) Household size—2.
- (4) Household size—3.
- (5) Household size—4.
- (6) Household size—5.
- (7) Household size—6.
- (8) Household size—7 or more.
- (9) Head under 65 years.
- (10) Head 65 years or over.
- (11) Male head.
- (12) Female head.
- (13) White head.
- (14) Nonwhite head.
- (15) Northeast.
- (16) North central.
- (17) South.
- (18) West.
- (19) Farm.
- (20) Nonfarm.

#### Section 5

Section 5 output contains cost and coverage estimate information identical to that provided in Section 2; however, the information is listed in Section 5 for an additional 129 subgroups of the population. These subgroups are generally based upon the work experience and education of the family head as well as the family size. Each category is described below:

- (1) Full-time worker 50-52 weeks.
- (2) Full-time worker 27-49 weeks.
- (3) Full-time worker 1-26 weeks.
- (4) Part-time worker 50-52 weeks.
- (5) Part-time worker 27-49 weeks.
- (6) Part-time worker 1-26 weeks.
- (7) Non-worker—no work found.
- (8) Non-worker—ill, disabled.
- (9) Non-worker—caring for home, family.
- (10) Non-worker—going to school.
- (11) Non-worker—in institution.
- (12) Non-worker—in Armed Forces.
- (13) Non-worker—retired.

- (14) Non-worker—other.
- (15) Part-time worker—slack work.
- (16) Part-time worker—found only part-time work.
- (17) Part-time worker—ill or disabled.
- (18) Part-time worker—full-time not desired.
- (19) Part-time worker—going to school or keeping house.
- (20) Part-time worker—other.
- (21) No earners in family.
- (22) One earner in family.
- (23) Two earners in family.
- (24) Three or more earners in family.
- (25) Kids under 6 years in family.
- (26) Family receives transfer income.
- (27) Family does not receive transfer income.
- (28) Occupation not available—family size 2-3.
- (29) Occupation not available—family size 4-6.
- (30) Occupation not available—family size 7 or more.
- (31) Professional, technical—family size 2-3.
- (32) Professional, technical—family size 4-6.
- (33) Professional, technical—family size 7 or more.
- (34) Farmers, farm managers—family size 2-3.
- (35) Farmers, farm managers—family size 4-6.
- (36) Farmers, farm managers—family size 7 or more.
- (37) Managers, officials, and proprietors—family size 2-3.
- (38) Managers, officials, and proprietors—family size 4-6.
- (39) Managers, officials, and proprietors—family size 7 or more.
- (40) Clerical workers—family size 2-3.
- (41) Clerical workers—family size 4-6.
- (42) Clerical workers—family size 7 or more.
- (43) Sales workers—family size 2-3.
- (44) Sales workers—family size 4-6.
- (45) Sales workers—family size 7 or more.
- (46) Craftsmen, foremen—family size 2-3.
- (47) Craftsmen, foremen—family size 4-6.
- (48) Craftsmen, foremen—family size 7 or more.
- (49) Operatives—family size 2-3.
- (50) Operatives—family size 4-6.
- (51) Operatives—family size 7 or more.
- (52) Private household workers—family size 2-3.
- (53) Private household workers—family size 4-6.
- (54) Private household workers—family size 7 or more.
- (55) Service workers—family size 2-3.
- (56) Service workers—family size 4-6.
- (57) Service workers—family size 7 or more.
- (58) Farm laborers—family size 2-3.
- (59) Farm laborers—family size 4-6.
- (60) Farm laborers—family size 7 or more.
- (61) Laborers (except farm)—family size 2-3.
- (62) Laborers (except farm)—family size 4-6.
- (63) Laborers (except farm)—family size 7 or more.
- (64) Industrial category not available—family size 2-3.
- (65) Industrial category not available—family size 4-6.
- (66) Industrial category not available—family size 7 or more.
- (67) Agriculture, forestry, or fisheries—family size 2-3.
- (68) Agriculture, forestry, or fisheries—family size 4-6.
- (69) Agriculture, forestry, or fisheries—family size 7 or more.
- (70) Mining—family size 2-3.
- (71) Mining—family size 4-6.
- (72) Mining—family size 7 or more.
- (73) Construction—family size 2-3.
- (74) Construction—family size 4-6.
- (75) Construction—family size 7 or more.
- (76) Manufacturing—durable goods—family size 2-3.
- (77) Manufacturing—durable goods—family size 4-6.
- (78) Manufacturing—durable goods—family size 7 or more.
- (79) Manufacturing—nondurable goods—family size 2-3.
- (80) Manufacturing—nondurable goods—family size 4-6.

- (81) Manufacturing—nondurable goods—family size 7 or more.
- (82) Transportation—family size 2-3.
- (83) Transportation—family size 4-6.
- (84) Transportation—family size 7 or more
- (85) Communications—family size 2-3.
- (86) Communications—family size 4-6.
- (87) Communications—family size 7 or more.
- (88) Utilities and sanitary services—family size 2-3.
- (89) Utilities and sanitary services—family size 4-6.
- (90) Utilities and sanitary services—family size 7 or more.
- (91) Wholesale trade—family size 2-3.
- (92) Wholesale trade—family size 4-6.
- (93) Wholesale trade—family size 7 or more.
- (94) Retail trade—family size 2-3.
- (95) Retail trade—family size 4-6.
- (96) Retail trade—family size 7 or more.
- (97) Finance, insurance and real estate—family size 2-3.
- (98) Finance, insurance and real estate—family size 4-6.
- (99) Finance, insurance and real estate—family size 7 or more.
- (100) Business and repair services—family size 2-3.
- (101) Business and repair services—family size 4-6.
- (102) Business and repair services—family size 7 or more.
- (103) Personal services—family size 2-3.
- (104) Personal services—family size 4-6.
- (105) Personal services—family size 7 or more.
- (106) Entertainment and recreation services—family size 2-3.
- (107) Entertainment and recreation services—family size 4-6.
- (108) Entertainment and recreation services—family size 7 or more.
- (109) Professional and related services—family size 2-3.
- (110) Professional and related services—family size 4-6.
- (111) Professional and related services—family size 7 or more.
- (112) Public administration—family size 2-3.
- (113) Public administration—family size 4-6.
- (114) Public administration—family size 7 or more.
- (115) Education of head 0 years—family size 2-3.
- (116) Education of head 0 years—family size 4-6.
- (117) Education of head 0 years—family size 7 or more.
- (118) Education of head 1-8 years—family size 2-3.
- (119) Education of head 1-8 years—family size 2-3.
- (120) Education of head 1-8 years—family size 7 or more.
- (121) Education of head 9-12 years—family size 2-3.
- (122) Education of head 9-12 years—family size 4-6.
- (123) Education of head 9-12 years—family size 7 or more.
- (124) Education of head 13-20 years—family size 2-3.
- (125) Education of head 13-20 years—family size 4-6.
- (126) Education of head 13-20 years—family size 7 or more.
- (127) Family size 2-3.
- (128) Family size 4-6.
- (129) Family size 7 or more.

Chairman PROXMIRE. Also the result of the New Jersey experiment, if you can give us that.

Mr. GORHAM. You would have to get that from the Office of Economic Opportunity. We do not have copies of those results.

(At the request of Chairman Proxmire the following information was subsequently supplied for the record by the Office of Economic Opportunity:)



preliminary  
results  
of the

**NEW JERSEY  
GRADUATED  
WORK  
INCENTIVE  
EXPERIMENT**

**Office of  
Economic  
Opportunity**

PRELIMINARY RESULTS OF THE  
NEW JERSEY GRADUATED WORK INCENTIVE EXPERIMENT

Conducted by

The Office of Economic Opportunity

February 18, 1970

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## INTRODUCTION

The Office of Economic Opportunity in 1968 initiated an experimental project in New Jersey to measure the effects of a program that assures families a minimum income level in a manner designed to protect their incentive to work.

This experiment is being conducted by the University of Wisconsin, Institute for Research on Poverty in conjunction with MATHEMATICA, INC., a Princeton, N. J., research firm. One of the purposes is to study test families to determine the degree to which income maintenance payments increase or reduce work effort. The income maintenance payments are reduced as a family's other income rises, and the experiment is carefully designed to assure that the earning of income always profits rather than penalizes the beneficiary. The experiment, which is being financed by more than \$5 million in grants, will be completed at the end of 1972.

The first significant data from the New Jersey project have now been analyzed. These data would be valuable under any circumstances, for their implications would suggest ways to reform our welfare system. But they have assumed particular importance in recent months because the operation of the New Jersey experiment in many ways is similar to the operation of the Family Assistance Program proposed by the President.

Two important differences between the New Jersey experiment and the Administration program, however, should be kept in mind in evaluating this data. First, the New Jersey experiment contains no requirement that participants accept work training or a job to receive benefits. Secondly, it does not provide the extensive day care facilities that are an integral part of the President's program.

The addition of these two provisions as proposed in the Family Assistance Program would be expected to have a positive effect on work incentive. Therefore, we can

assume that the New Jersey data give a conservative estimate of the trends that could be expected were all elements of the President's Family Assistance Program implemented.

The New Jersey data now available were gathered from August, 1968, through October, 1969, in Trenton, Paterson, and Passaic from 509 of the 1,359 participating families. They are based on the experiences of 364 families receiving various levels of support payments and a control group of 145 families not receiving payments. The control group is used for purposes of comparison with the experimental group, since their characteristics at the beginning of the experiment were similar to those of the experimental group. We can therefore tell whether the payments have had any effect at the end of the experiment by looking at any differences between the two groups.

## CONCLUSIONS

This experiment was specifically designed to provide evidence about the effects such a program would have for the person it is designed to assist, give realistic cost estimates, and offer suggestions for implementation.

We believe that these preliminary data suggest that fears that a Family Assistance Program could result in extreme, unusual, or unanticipated responses are unfounded.

Furthermore, we believe these preliminary data from the New Jersey project indicate that a Family Assistance Program is practical. The data suggest that:

1. There is no evidence that work effort declined among those receiving income support payments. On the contrary, there is an indication that the work effort of participants receiving payments increased relative to the work effort of those not receiving payments.
2. Low income families receiving supplementary benefits tend to reduce borrowing, buy fewer items on credit, and purchase more of such consumer goods as furniture and appliances.
3. The Family Assistance Program, excluding the Day Care Program and Work Training provisions, can be administered at an annual cost per family of between \$72 and \$96. Similar costs for the current welfare system run between \$200 and \$300 annually per family.

## RESULTS

The data were analyzed for the purpose of gathering preliminary information on four questions (Chart I):

How is work incentive affected by supplementary assistance payments?

How does such assistance affect the spending behavior of the beneficiaries?

What are the effects of the higher income levels on family stability?

What are the estimated administrative costs of the proposed Family Assistance Program?

## CHART I

AREAS OF INFORMATION

- A. WORK EFFORT
- B. SPENDING BEHAVIOR
- C. FAMILY STABILITY
- D. ADMINISTRATIVE COSTS

## CHARACTERISTICS OF FAMILIES IN THE EXPERIMENT

Chart II reflects the characteristics of the families in the experimental group at the beginning of the project.

As this chart shows, the average test family had 5.8 members, nearly one-fourth had eight or more family members, and nearly 70 percent had children younger than 6. The average age of the male head of household was 35.6 years. About 36 percent of the families were white, another 36 percent were black, and the remainder were principally Spanish-speaking Puerto Ricans.

The majority of participants in the test group rented apartments from public and private landlords and the majority had less than a high school education. Sixty-three percent of the heads of household who were employed worked as skilled workers and 35 percent as unskilled laborers. All but 8 percent of the heads of household were employed and 66 percent of those who were employed usually worked full time. The average family income at the beginning of the experiment was \$4,248 per year, and this income is being supplemented during the experiment by an average benefit of \$1,100 per year per family.

## CHART II

CHARACTERISTICS OF FAMILIES IN EXPERIMENT

Average family size is 5.8 persons

36 percent are Black

36 percent are White

28 percent are Spanish-speaking

81 percent did not graduate from high school

8.6 years is the median educational level

63 percent are skilled workers

35 percent are unskilled workers

92 percent are employed

Average family income \$ 4,248

Average level of benefits \$ 1,100

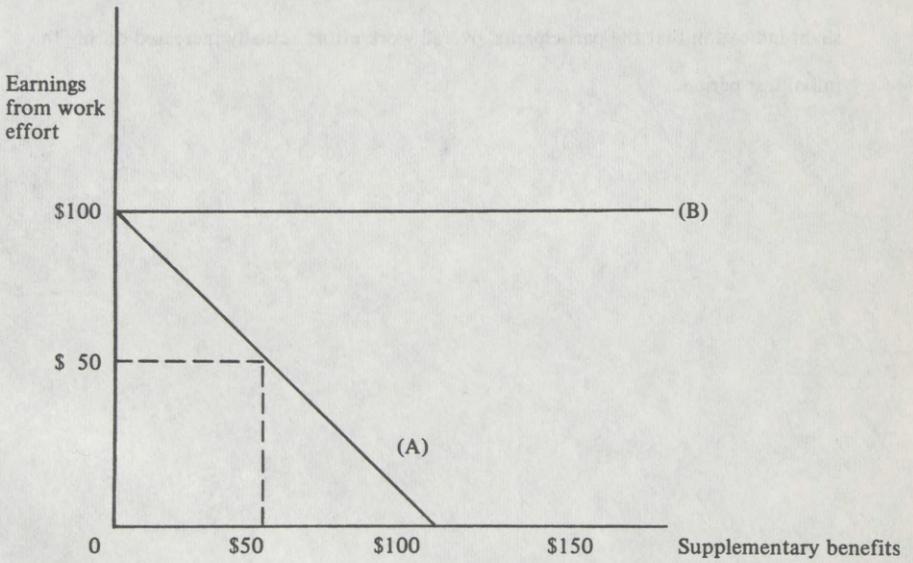
### ALTERNATIVE WORK EFFORT BEHAVIOR

Chart III shows two alternative extremes of possible work effort behavior.

Line A shows the pattern that would be followed by a participant who reduced his work effort dollar for dollar as the supplementary benefits increased, until his work effort reached zero. Thus his total income remained the same, although he had completely stopped working. This is, of course, the maximum possible disincentive effect.

Line B shows the pattern that would be followed by a participant whose work effort remained constant. The payments had no effect on his incentive to work.

CHART III

ALTERNATIVE WORK EFFORT BEHAVIOR

#### ACTUAL WORK EFFORT BEHAVIOR

Chart IV indicates actual work effort on the part of the participants. On the basis of these data, we can say that work effort did not decline for the group analyzed, but rather that it followed a pattern close to Line B on Chart III. There is, in fact, a slight indication that the participants' overall work effort actually increased during the initial test period.



## CHART IV

ACTUAL WORK EFFORT BEHAVIOR

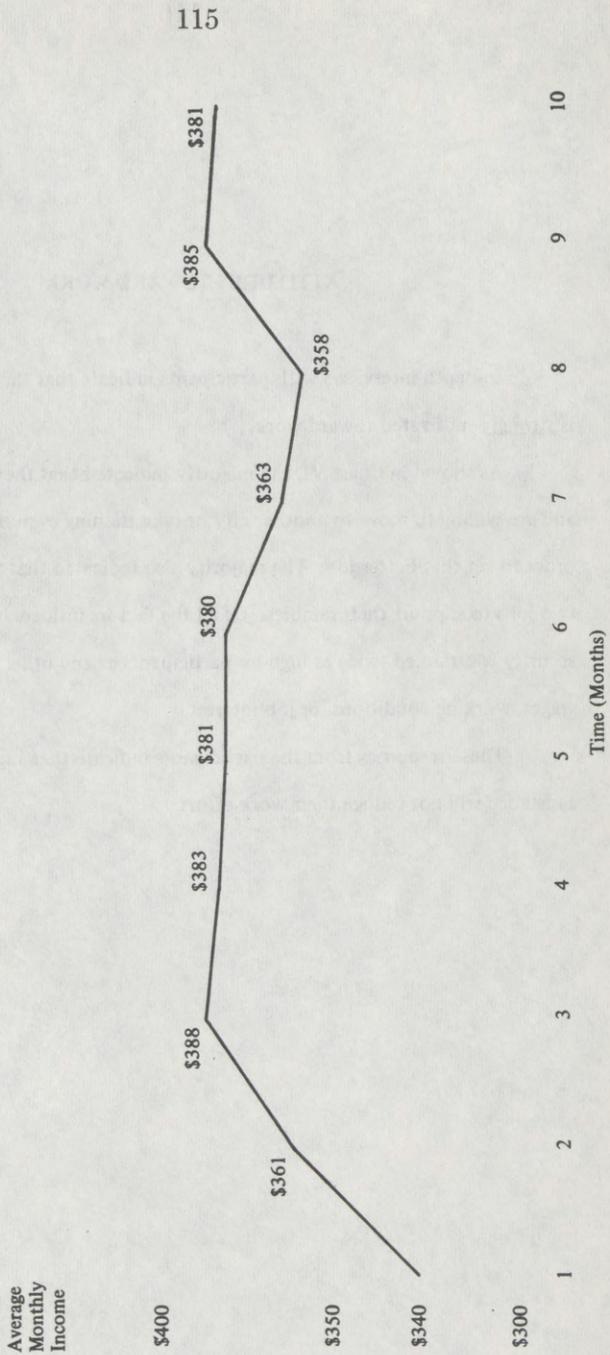
	<u>Control</u>	<u>Experimental</u>
Percent of families whose:		
Earnings increased	43%	53%
Earnings did not change	26%	18%
Earnings declined	31%	29%

### INCOME PATTERNS OF EXPERIMENTAL GROUP

The trend toward increased work effort is further apparent in Chart V, which shows a very slight rise in the average monthly income of the 364 test families.

The monthly income, which includes earnings as well as supplementary benefits, increased from an average of \$340 at the beginning of the experiment to \$381 during the tenth month, reaching a low of \$358 and a high of \$388.

CHART V  
INCOME PATTERNS OF EXPERIMENTAL GROUP



## ATTITUDES TOWARD WORK

In-depth interviews with participants indicate that the low-income individual is strongly motivated toward work.

As shown in Chart VI, the majority indicated that they aspire for a better job and are willing to move to another city or take training even if it meant a pay cut in order to get that better job. The majority also indicated that they are willing to work two jobs to support their families. Of all the factors influencing work choice, job security was ranked twice as high by participants as any other job factor, including wages, working conditions, or job interest.

These responses from the participants indicate that supplementary income assistance will not reduce their work effort.

## CHART VI

ATTITUDES TOWARDS WORK

Aspire for a better job	65 percent
Would move to another city for a good job	56 percent
Would take training with pay cut to get better job	55 percent
Would work two jobs	60 percent
Job stability is <u>twice</u> as important as any other aspect of job	

.LOW INCOME PEOPLE ARE STRONGLY WORK MOTIVATED.

### CHANGES IN BORROWING BEHAVIOR

This raises the question: How do beneficiaries' behavior patterns change as their incomes increase? The answer: They seem to borrow less and to purchase more durable goods.

Chart VII shows that the experimental group borrowed less while receiving supplementary assistance payments than did the control group which, of course, received no supplementary assistance.

Only 40 percent of those in the experimental group increased their borrowing, compared to 53 percent of those in the control group. Meanwhile, 24 percent of those in the experimental group actually borrowed less, as compared to only 18 percent of the control group.

This could indicate that those in the experimental group are paying back loans to a greater degree and buying items on time less than their control counterparts who are not receiving payments.

## CHART VII

CHANGES IN BORROWING BEHAVIOR

	<u>Control</u>	<u>Experimental</u>
Borrowing increased	53%	40%
No change in borrowing	29%	36%
Borrowing declined	18%	24%

### MAJOR CONSUMER PURCHASES

Chart VIII indicates that the supplementary assistance payments not only helped the experimental group to borrow less, but also allowed those families to make some major purchases.

Twice as many families in the experimental group purchased furniture as did families in the control group, while purchases of television sets and other major appliances also increased in the experimental group.

The data indicate that furniture dominated purchases among younger families, while major appliances were the most frequent choice of older families.

## CHART VIII

MAJOR CONSUMER PURCHASESPercent of families who purchased given items

<u>Purchases</u>	<u>Control</u>	<u>Experimental</u>
Furniture	4.8	9.6
TV	9.7	12.2
Other major appliances	6.2	8.0
Other	10.3	10.7

### FAMILY STABILITY

Another important question is whether an increase in income would decrease the divorce, separation, and desertion rate among families.

While the experiment was not designed to specifically address this question, data presented in Chart IX suggest that an increase of income of the levels examined in the experiment has little impact on family stability. The change in family composition in the New Jersey sample to date has been approximately the same in both the control and the experimental groups. Of the 364 families in the experimental group, only 54 changed in composition because of desertion, death, divorce, or separation. This evidence must be taken as extremely tentative since the causes of family instability clearly include more than income alone and the experiment has been underway for only a short time.

This finding of lack of change in family stability differs from information from the U.S. Bureau of Census shown in Chart X which reports that family stability increases significantly as income rises.

Clearly, we need further information on this question, information that may be provided during the remaining two years of the New Jersey experiment.

## CHART IX

**FAMILY STABILITY**

	<u>Control</u>	<u>Experimental</u>
Husband present at start of program	92%	94%
Husband not present at start of program	8%	6%
Husband present at end of program	86%	85%
Husband not present at end of program	14%	15%

## CHART X

FAMILY STABILITY BY INCOME LEVEL\*

<u>Family Income</u>	Proportion of Stable Marriages	
	<u>Nonwhite</u>	<u>White</u>
No income	39	58
\$ 1 to \$ 999	50	65
\$ 1,000 to \$ 2,999	56	74
\$ 3,000 to \$ 4,999	58	78
\$ 5,000 to \$ 6,999	63	81
\$ 7,000 to \$ 9,999	68	82
\$10,000 and over	69	85

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\* Stable families refer to marriages in which men have been married only once and wife is present.

Source: U.S. Population Census, 1960, Marital Status, Table 6

### ESTIMATED ADMINISTRATIVE COSTS

Estimated administrative costs of the proposed Family Assistance Program based on similar costs in the New Jersey experiment are reflected in Chart XI.

These costs are relatively low because the Family Assistance Program would be virtually self-administering. After an initial personal contact, approximately one-half of the beneficiaries can be expected to fill out and file their reporting forms with no additional help. An additional 30 to 40 percent can be expected to complete the necessary reporting following a second or third contact. The remainder will probably require regular supervision.

The estimated costs include the submission of monthly reports on family size, earnings, and other sources of income. The benefits could be adjusted each month with benefit payments made every two weeks.

The estimated total cost per family for this type of administration is \$72 to \$96 per year, exclusive of work training and day care costs. This figure compares to the estimated cost of \$200 to \$300 per family per year for the existing welfare system, also excluding the costs of training and services.

## CHART XI

ESTIMATED ADMINISTRATIVE COSTS

<u>Category</u>	<u>Annual Cost Per Family</u>
1. <u>Field Office Operations</u>	\$23.00 to \$29.00
General Inquiries from Recipients	
Assistance in Filing Income Report Forms	
Follow-up on Address Changes	
Reports to the Central Office	
2. <u>General Administration</u>	\$36.00 to \$48.00
Payment Calculations	
Check Writing and Mailing	
Audit	
Appeals Procedures	
General Supervision and Program Review	
3. <u>Supplies and Services</u>	\$13.00 to \$19.00
Forms and Clerical Supplies	
Postage	
Computer Time	
Office Rentals and Equipment	_____
TOTAL ANNUAL COST PER FAMILY	\$72.00 to \$96.00

### DESCRIPTION OF EXPERIMENT

These preliminary data are abstracted from one of two major experiments now being sponsored by the Office of Economic Opportunity in its effort to determine the effects of an income support system on work incentive.

These data are from the New Jersey urban experiment, which includes 1,359 families in Trenton, Passaic, Paterson, and Jersey City, New Jersey, and Scranton, Pennsylvania. All families in the urban experiment are headed by males between the ages of 20 and 58. Because knowledge of the effects of such support payments on other types of families is also important, the second experiment includes 835 rural families in Duplin County, North Carolina, and Pocahontas and Calhoun counties, Iowa. The rural experiment includes both male- and female-headed households and family heads who are older than 58. Both experiments are being directed by the University of Wisconsin Institute for Research on Poverty, which has subcontracted some of the work to MATHEMATICA, INC., a New Jersey research firm.

In both experiments, the income guarantee is scaled to reduce as other income rises, but to assure beneficiaries that the earning of income will always profit rather than penalize them. Two variables are applied to the income guarantee scale. The first variable increases the amount of income guarantee to 50, 75, 100, or 125 percent of the poverty line. For a family of four, this poverty line for the purposes of the experiments is \$3,300 per year. The second variable reduces supplementary payments as other income rises. This amount is expressed as the equivalent to 30, 50, or 70 percent of other income.

Although the primary thrust of the experiments is to determine the effects of the supplementary payments on work incentive, secondary data also are being collected. For example, the interviews with families are designed to determine the effects of the supplementary income on birth rates, borrowing behavior, consumer purchases, school performance and social behavior of children in the test families, amounts spent for medical and dental care, leisure time activities, and family separation.

Another important aspect being studied is the effect of the payments on family mobility: Will increased income permit families to move to take advantage of better work opportunities? Thus, families in the experiment are followed throughout the three-year test period, even if they leave the original test areas.

Chairman PROXMIRE. I must say, Mr. Gorham, that while you make an excellent case for enlarging our research capabilities, both in the executive and the legislative branches, you also provide an argument for reducing Government spending in a variety of programs whose benefits have not so far measured up to their costs. Why not just stop spending good money after bad in these programs, or at least in some of them? Wouldn't the taxpayer be better off with a healthy tax cut?

Mr. GORHAM. I think there are probably programs in the Government in which we are very little better off in having started the program than we were before the program was started. That is not exactly the same thing as ending a program. Once a program exists, it makes a place, and to withdraw it frequently will cause injury. So that the decision to withdraw a program which did not make a great deal of difference at the outset has to be based on what the postwithdrawal world would look like. In some programs it might be perfectly healthy to withdraw it, but I would look at it very cautiously.

Chairman PROXMIRE. Let me give you a specific example. I have been a staunch advocate of any kind of assistance for education. I think this is the best investment a nation can make, and it is a program that can show that we really believe in the American dream, to give an opportunity to our people, and put our money where our mouth is. But I wonder about the amount of money spent on title I of the Elementary and Secondary Education Act.

Hasn't this been a pretty big price to pay for the lack of preparation on the part of the Federal Government, and cannot the same be said for the other cases you summarize in your statement?

Mr. GORHAM. Is the question whether or not we are making a bad investment in title I?

Chairman PROXMIRE. Yes.

Mr. GORHAM. My personal judgment is that it was a disappointing investment.

Chairman PROXMIRE. What went wrong and what can we do about it?

Mr. GORHAM. I think in one way what was wrong was the presumption on the part of those who put the program forward that somehow if money is put out there, that money will be used wisely. And that presumption, I believe, has not been correct.

The money was used largely in old ways, the ways the money used to be used, and ways which had never been verified as effective. Title I money was for compensatory programs, yet in almost every case it became a substitute for local money. Spending was diffuse, not concentrated.

Chairman PROXMIRE. What happens if we stop that?

Mr. GORHAM. That is another question again.

Chairman PROXMIRE. That is right. That is why I asked it, Mr. Gorham.

Mr. GORHAM. If we pulled the money back some considerable hardship could take place in a number of school districts. If you are asking me what impact it would have on the education of disadvantaged youngsters, my personal view is that it would have very little impact on the education of disadvantaged youngsters because, generally speaking, it was not focused on them in the first place.

Chairman PROXMIRE. You are saying that the sensible decision may not be something politically possible but the acceptable decision would be to reduce it?

Mr. GORHAM. Possibly. I would want to look much more closely at the possible reactions of local school districts to having this money pulled back.

Chairman PROXMIRE. It would seem that either you are going to get an increase in local property tax, because one of the reasons for Federal aid to education was that the property tax had reached a level of virtual exhaustion, or you are going to get a degradation of the educational opportunity for these children, that is, you are not going to be able to pay the teachers' salaries, or you are going to have too many pupils per room, or you are not going to meet the cost, is that right?

Mr. GORHAM. I would distinguish between a degradation of opportunity for the youngsters and a reduction of the sources going into their education. They are not necessarily equivalents. What I mean to say is that you might not be able to provide quite the salary increases you would wish to or quite the student-teacher that you would wish to. But whether that would impact significantly on the real opportunities offered to the youngsters affected is in my opinion in doubt, at least in doubt.

Chairman PROXMIRE. Is there any study, any analysis that would disclose this?

Mr. GORHAM. Yes. There probably are many studies that have been done in the past year. Three years ago we conducted a study on title I in a large number of cities. My statements about the program are largely based on that study. If very significant improvements in the use of title I funds have been made since that study was made, I have not heard about them.

Chairman PROXMIRE. Will you submit that for the record?

Mr. GORHAM. The study is the property of the Department of Health, Education, and Welfare, but I am certain that I can acquire it, and their approval to submit it.

(The following information was subsequently supplied for the record by Mr. Gorham:)

SURVEY AND ANALYSES OF RESULTS FROM  
TITLE I FUNDING FOR COMPENSATORY EDUCATION\*

FINAL REPORT

67TMP-115

1 March 1968

Submitted To  
Project Officers  
Department Health, Education and Welfare  
Washington, D.C. 20211

TEMPO  
GENERAL ELECTRIC COMPANY  
WASHINGTON OPERATION

\*Only the preface, synopsis, and summary have been reproduced  
because of the length of the full report.

## PREFACE

This report summarizes the work done to date by General Electric, TEMPO on Contract No. HEW-05-67-55, A Survey and Preliminary Cost-Benefit Analysis in Elementary-Secondary Education, Phase I. The study, which began 21 April 1967, was conducted as a joint effort with the Department of Health, Education and Welfare (DHEW) and the Office of Education (OE). Although this report is submitted as a final report on the above contract, it should be viewed as a progress report on the overall study, and should be added to the body of information which was reported earlier.

Two interim progress reports preceded the present report:

67TMP-67 (submitted 27 June, revised 21 July 1967)

67TMP-89 (submitted 15 September 1967)

The June report describes data collection formats and discusses problems in data collection. The proposed analytical approach is presented in detail.

The September report summarizes the fourteen field trips conducted in the study and provides descriptive information on those compensatory education (CE) programs. The trip reports provide descriptions of the information and impressions obtained from visits to fourteen school districts.

The trip reports are reprinted as a separate appendix to this report.

## SYNOPSIS OF WORK

The first several weeks of the study were devoted to designing analytical approaches and planning a survey of CE programs in selected school districts. Models for testing the statistical significance of observed changes in selected pupil performance measures were developed and presented in 67TMP-67, the June progress report.

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Plans to obtain data on pupil performance and exposure to CE were expanded to include information on the characteristics of the pupils, their schools and their communities. The large variation in these later variables was judged as important for explaining observed changes in pupil performance between 1965-66 and 1966-67.

Following guidelines of the Office of Education (as contained in their financial and pupil accounting handbooks), special forms were designed to obtain data in a standardized fashion to conserve the time of school personnel. (The forms are displayed in 67TMP-67.)

The fourteen school districts included in the study were selected by DHEW but were not intended to be representative of all school districts pursuing compensatory education programs. Rather, for most of the districts selected, there was reason to believe that successful programs were in progress in at least some of the schools. One objective of the study was to investigate the characteristics of programs which held promise of favorable impact on the performance of deprived children.

The field trips were made by joint teams of DHEW, OE and TEMPO personnel and entailed 3-day to 2-week visits to each district. Undoubtedly more time would have been helpful in every case but the need to visit many locations in order to expand the sample sizes of schools and programs was considered more important. One negative effect of the intense travel schedule was the inability to summarize and analyze adequately the information and impressions after each trip.

Problems encountered in collecting information provide insight into the complexity of such a study and are, therefore, useful background information. Briefly stated, the more severe problems were:

- amount of detailed information required for making performance measures compatible is very great and the number of special conversion factors that are required prevents extensive use of automatic data processing;
- achievement scores came from different tests and came from tests which were administered at different points during the school year among and within the sample districts;
- much of the readily available data on CE were not in usable form for study because they did not give information for specific grades;

## PREFACE

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- it was difficult to distinguish between CE and regular school programs and between CE programs funded by federal and non-federal agencies;
- the large transfer of pupils into a sample school makes it difficult to identify the amount of CE to which pupils have been exposed.

Achievement data received from the school were reviewed for applicability in comparing 1965-66 with 1966-67 performance levels. Because of incompatibility and incompleteness of data, it was necessary to delete three of the fourteen school districts in the statistical analysis. The trip reports include information of fourteen school districts but the rest of the report is based on information from eleven school districts.

## SYNOPSIS OF THIS REPORT

This final report consists of four sections, and seven attached appendices. An appendix of trip reports, prepared for use within DHEW and OE, has been bound separately to maintain the school-district anonymity requested for this report.

Section 1 describes the original study objectives and the technical approach used in analyzing sample data. It gives a brief summary of the final selection of observations for statistical analysis.

Section 2 presents the results of an analysis in which changes in achievement test scores and the association of changes with the specific state variables are examined. The variation in achievement test scores among school districts is described and a summary of the procedures used in processing achievement data is presented.

Section 3 analyzes the correlation between changes in achievement and Title I expenditures measured at the district level. It also illustrates, for two sample school districts, procedures used and problems inherent in determining the type and level of CE at the grade level in specific schools. It provides insight into variations in the type, purpose, duration and intensity of CE programs, and in the type of students involved in them, and the relationship of these programs to regular education programs.

Section 4 presents observations, conclusions and recommendations based on the Phase I effort.

The attached appendices contain technical discussions as well as supporting material for the discussions in the main text.

## SUMMARY

This report analyzes data from a sample of 132 schools which received funds from Title I for compensatory education to aid educationally disadvantaged pupils. Most of the eleven school districts from which the schools were drawn were selected because there was reason to believe that successful compensatory education programs were in progress in at least some of the district schools. Conclusions are based on a comparison of achievement scores in 1966-67, after pupils were exposed to compensatory education from Title I funds, with achievement scores in 1965-66.

There appears to have been a slight decline in average pupil achievement level in the sample schools. For the entire sample the average grade equivalence score in 1966-67 was approximately one-half month lower than the corresponding grade equivalence score in 1965-66. The percentage of the pupils in the 1966-67 test results who also participated in programs funded by Title I is not known but is believed to be less than 50 percent.

On the other hand, there appears to have been a slight improvement in achievement of pupils who are at the lowest achievement levels in their respective grades. The average grade equivalence score of pupils at the lowest decile in the 1966-67 tests was approximately one-fourth month higher than the average grade equivalence score of corresponding pupils in the 1965-66 tests. Although the one-fourth month change is very small, it is statistically different from the observed negative changes in both the mean score and the score at the upper quartile.

There is considerable variation in changes in achievement among school districts. One district shows a statistically significant increase in the average score while two show significant declines. With respect to achievement at the lowest decile, none of the school districts shows significant decrease, but two districts show significant increases.

The very preliminary results suggest that amount of improvement is related to level of Title I expenditures. The districts which showed the largest improvement at the lowest decile are the districts which had the higher average Title I expenditures per pupil.

The two variables most closely related to changes in achievement are initial achievement level and percent Negro. Lower initial achievement levels in 1965-66 are associated with larger gains between 1965-66 and 1966-67. This suggests that the availability of Title I funds is probably helping pupils at the lowest achievement levels the most. Schools which had 40 to 60 percent Negro pupils showed the poorest response to compensatory education programs. Schools with 0 to 20 percent Negro pupils showed the best response.

Examinations of schools in two districts reveal extremely wide variations among schools and among grades within a school in expenditures for both regular school programs and compensatory education programs. In one of the districts there was a positive correlation between changes in achievement and total expenditures but in the other district no significant relationship could be detected.

The overall study provides considerable evidence that more specific studies are needed to properly evaluate the effects from Title I. In addition, more emphasis should be placed on getting participating schools to keep systematic records on pupil, school, and program characteristics. The records from many schools are not adequate for the types of analysis required for proper evaluation of compensatory education.

It is always possible that the positive changes which have been attributed to CE are due to sampling variation. However, it must be recognized that to judge statistical results as insignificant also involves risk. There can be a loss to society in failing to support a program that is actually successful but available data do not clearly indicate the success. TEMPO relates the above conclusions and the detailed discussions in the remainder of the report as an objective evaluation in light of available data. It must be kept in mind that Title I funded programs were still relatively new at the time of 1966-67 tests and it is not reasonable to expect large gains in achievement so soon.

Chairman PROXMIRE. You also made an intriguing comment about the Omnibus Crime Control and Safe Streets Act of 1968. What you say is "There are few authorities who have studied the matter who really believe that we know how to expend funds against crime effectively."

Can you elaborate on this comment? How little do we know about crime control?

Mr. GORHAM. I am literally saying in that statement exactly what has occurred. I have spoken with a number of authorities. I have talked with them about what we know about how to reduce crime. And it is very difficult to find one who has any confidence that any law enforcement measure which would probably be used by the law enforcement officials around the country today would lead to a reduction in crime.

Chairman PROXMIRE. Certainly in some areas, like the District of Columbia, there is confidence that if we put more money into narcotic control and treatment and rehabilitation and so forth that this would help, at least the chief of police has testified to that effect, and many other authorities here in the District. And this, I am sure, is true in some of the other big cities where they feel that much of the increase in crime is the increase in drug abuse and the necessity for the narcotics addict to feed his habit.

Mr. GORHAM. I believe there is no question in most people's mind that if we can reduce the need for people to steal in order to support narcotics addiction, crime can be reduced. No question at all. There are some promising new programs that we have all read about that might provide the key to breaking the link between addiction and theft.

Chairman PROXMIRE. Methadone has gotten some good recommendations in this respect where it has been tried.

Mr. GORHAM. That is right.

Chairman PROXMIRE. Isn't there also a correlation between the number of police officers that you have on active duty, on the beat, and so forth, and crime?

Mr. GORHAM. As far as I know, there have been only two studies made on that question. One was in New York City several years ago, where they saturated one of the precincts with cops, and they appear to have reduced on-the-street crime in that precinct. A second study, reported at the University of Chicago, indicated that an increase in police manpower substantially lowered street crime and had somewhat smaller effects on off-street crime.

Chairman PROXMIRE. But they had it in other parts of the city instead?

Mr. GORHAM. That is likely. The problem is that there were inadequate controls and the degree to which the other street crime moved to another neighborhood was not reported.

Chairman PROXMIRE. You have to do it in the entire area; that is presumed, that is what we are trying to do in the District with a terrific increase in police officers. I am Chairman of the District of Columbia Appropriations Subcommittee, and I am very conscious of the fact that we spend more money per person on police than any other city in the country, and have the highest crime rate.

We also spend more money per pupil on education than any other city except New York, and have the poorest showing in reading tests.

So I think that the conclusion that you have that money will not solve the problem, just the matter of throwing money at a problem and saying that is it—it is a lot more complicated.

Mr. GORHAM. On police, I might add that there may be very good reasons to increase the number of policemen which do not have to do with reduction in crime. It has to do with the psychic state of people. They may feel a lot better seeing more cops around. And that is a positive, real factor not to be ignored. Certainly one of the important costs of crime is the unease that people have in walking in the streets. And if there are policemen in the streets, that might reduce their unease.

Of course, it may be possible to reassure people without increasing the number of police and we are investigating this possibility by conducting an experiment with neighborhood policing. We are testing our innovation, which we call the beat commander system, in the city of Detroit. In the second phase of that study, which should begin early next year, we will conduct a controlled experiment to compare the beat commander system to the more customary police operations in other precincts. We will be measuring the effect on victimization rates, on the behavior of police as observed and reported by residents of the area, on attitudes toward police, and on fear of crime. I believe this will be the first controlled experiment testing the effectiveness of a proposed innovation in police operations.

Chairman PROXMIRE. In your statement you say that we do not have the capacity to explain the income implications of Federal programs. Can you explain what you mean by this and cite some examples for illustrative purposes?

Mr. GORHAM. Virtually every program we have involving benefits to individuals or communities takes from one group of citizens and gives to another based on the revenue structure of the society.

I can give any number of examples. Perhaps I should choose one from education. Our programs, which provide college dormitories for universities around the country, confer a benefit on all those individuals and groups who go to universities. They confer no benefit, or virtually no benefit, on those who do not. So there are income distributional implications of college dormitory programs. Spelling out those implications is a worthwhile exercise. It would surprise a great number of people who think that virtually all of our special social programs go to the poor and downtrodden in the society. In fact, many, many programs benefit largely the well to do.

Chairman PROXMIRE. How can this be done in relationship to the budgetary action by the Congress?

Mr. GORHAM. I think it could be done by creating a demand by the congressional branch upon the executive branch for the distributional implications of the programs that are underway or proposed. Who is going to benefit, and who is going to pay? Particularly it seems to me on new programs this could be—

Chairman PROXMIRE. Every time we get into debate, for example, we did get it very clearly in the debate on whether or not we ought to have a program of permitting educational expenditures to be deducted from personal incomes taxes by parents. And the argument there was that this would benefit the well-to-do parents, but only those, of course, who pay income taxes would get a benefit from it,

and the parents who were poor or whose incomes were low obviously would not benefit. Of course, you could still argue that you do not want to impoverish your middle class. And it is awfully difficult for people with modest incomes who pay income taxes to send their children to college and have the money to do it.

But at least we discussed it, and had the knowledge that this was a factor that if you are going to help the poor to go to college you have to have the scholarship program and the work study program, and so forth.

Mr. GORHAM. Those are obvious cases in which you would certainly want to know who benefits.

Chairman PROXMIRE. It is so rare that we get that kind of discussion and we ought to have it.

Mr. GORHAM. It is enormously important to all sorts of proposals which, at first glance, would not appear to be income redistributive but which really have profound and important redistribution effects. I do not know whether we will have a new towns policy or not. Many people are interested in it. If we had a new towns policy in which the residents of the new towns were largely middle and upper income people and we put a large amount of public resources, what builders call front money, in the new towns; that is a transfer worth addressing. We might wish to do it anyway but we ought to know the implications.

Chairman PROXMIRE. In this particular income distribution you have pointed out our lack of knowledge of the income distributional impact of most Government expenditure programs. I certainly agree that we must press very hard to improve our knowledge in this area. Perhaps we should require this analysis as a standard part of new legislative requests, although we have not had too much success so far in getting other supposedly required information, such as the 5-year budget estimates required by Public Law 801 and the environmental impact study required by the Environmental Policy Act, and yet we rarely get it, Mr. Train testified before this subcommittee. He says he has gotten very little or almost nothing, although it is the law.

However, Mr. Weidenbaum has reminded us this morning that direct expenditure programs are only the beginning. We also need to know the distributional impact of federally assisted credit programs and Federal tax aids. What capability does the Urban Institute have for analyzing these questions? Would such an analysis be technically possible?

Mr. GORHAM. I have not really thought deeply about that question, and I cannot answer it with confidence. The Urban Institute has good economists who have thought about the way in which transfers take place, and I am fairly confident that if any group could address this sort of question we could. It is a large subject and we have only begun to work on it. We have, for example, developed a model for estimating the income effects of a large number of tax and grant programs. We are improving the model to make it a more comprehensive and accurate evaluator of the combined redistributional impacts of Government programs.

Chairman PROXMIRE. I would like to return very briefly to your discussion on the manpower program. You say:

"What is clear now is that \* \* \* (we) \* \* \* must include programs to change the demand for labor and the structure of jobs." Could you

explain what you mean by this? It would seem much more logical to look first at the work which needs to be done, and to train our labor force to meet this demand. It almost sounds as if you are proposing "make work" or "leaf raking" jobs to conquer unemployment. Granted these may be a lot better than nothing, but surely the better alternative is to train people for really useful jobs?

Mr. GORHAM. The presumption of most of our manpower programs in this country has been that the labor force should adapt, should be made to match the jobs that are available. That is the presumption. And what this statement does is challenge that presumption as an exclusive approach. It says that indeed upgrading, training, placing, moving the labor force might all be a very positive, integral part of reaching full employment, or near full employment. But these may not be sufficient nor efficient. It may just turn out that in particular places under particular conditions no amount of training, however extended, no amount of placement effort, will find jobs for a particular group of men. If that is the case, and we still care about having them work, then some attention to the demand side of the market is necessary.

Chairman PROXMIRE. I understand that. But it just seems to me that when you look at something like housing, the whole implications of housing, we need 26 million more houses in the next 10 years, and we are far short of that. Instead of building 2.6 million this year we will probably build about 1.3 million. Housing not only provides jobs for the people who build the house, but of course all the people who supply that house, and all the people whose industries are fed by what goes into the house: lumber, concrete, and almost anything you can mention would be affected by this.

It seems to me that you can literally employ millions and millions of people for a long time to do this job, and still we would not perhaps do it adequately.

Mr. GORHAM. I was not suggesting the kinds of programs that could be developed on the demand side. In fact, probably the most sensible programs do work through the regular economy, to include increased requirements in the public sector, which is not a call for creating leaf-raking brigades. In both the private and public sectors some job restructuring may be possible. The best effects would be those in which by selective encouragement we did develop a pattern of jobs which met demand-side requirements but which were adapted to the existing supply of labor.

Chairman PROXMIRE. You say in your statement:

In a system of government such as ours, I feel it undesirable for the executive branch to have a monopoly of research capability. It seems to me that if legislators are ever to gain an advantage over their predecessors in coping with great policy issues, it will come through the establishment of a really scientific research organization serving the legislative branch.

Could you elaborate on this point? What kind of a "really scientific research organization" should we have?

Mr. GORHAM. I believe that there are many issues as to which, if I were a Congressman, I would wish to be able to call upon an analytical group to provide unbiased analysis. I think that it is fair for you to pose many of the questions that you asked today to the executive branch. And, in fact, the mechanism for getting information largely

is by posing such questions to the executive branch. It seems not at all inconsistent with our form of government or the separation of powers for the legislative branch to have its own voice.

Chairman PROXMIRE. Could this be in-house?

Mr. GORHAM. I think it could very well be in the Congress, or attached to the Congress. Of course—

Chairman PROXMIRE. Scientific GAO?

Mr. GORHAM. It could be that; yes.

Chairman PROXMIRE. What do we get out of the Urban Institute?

Mr. GORHAM. You can get its president to testify any time you want. And you can ask it questions and within the resources that are at its own command, if they cover the bill, you can get answers. You can provide support for it.

Chairman PROXMIRE. Of course, we would pay for it.

Mr. GORHAM. You could. We would not turn it down.

Chairman PROXMIRE. Would we have to pay for it?

Mr. GORHAM. It depends on the magnitude of the effort and whether we could perform the studies you asked for with our own resources. They all come from someplace. But most of our Government clients probably would be delighted to allow their funds to be used for modest levels of inquiry. If the demand became very large, of course, their purposes would be undermined, if we used our resources for that.

Chairman PROXMIRE. You point out that the central cities of our metropolitan areas are experiencing the most severe unemployment problems. Can you offer any explanation for this phenomenon? Do you know what the Federal Government is doing to combat it?

Mr. GORHAM. It is very difficult to give a short answer to that question. Many, many people have been concerned about—

Chairman PROXMIRE. That is my last question, so give a long answer.

Mr. GORHAM (continuing). Why the very high unemployment rates are in the central cities. One can cite a fairly large variety of reasons that can contribute to this high unemployment rate. The problem really is to isolate those which do not contribute or could contribute to unemployment and to learn which ones, in fact, are predominantly important and costs and the like tend to be high in central cities. This factor affects location and expansion decisions of firms. We also know that many of the unemployed central city residents tend to have lower degrees of education, tend to be in unskilled occupations, tend to be disproportionately young, tend to be unmarried—I am really giving you their statistics—tend to have weak associations with the primary labor market—and all these could contribute toward high turnover rates.

Chairman PROXMIRE. What is the Government doing about this?

Mr. GORHAM. I think a great number of manpower programs address themselves to the skill training—

Chairman PROXMIRE. Will that do the job? It seems to me that you would have a rising unemployment, especially unemployment in that area.

Mr. GORHAM. I doubt very much that skill training will do the whole job. The most effective training programs are training programs which link up with jobs, where the trainer has a job in mind and will place the trainee.

There is another role of training programs not to be lightly dismissed, namely, that while the person is in the training program he is in a job, so to speak. And I think a large number of our manpower and training programs have indeed been employment programs.

Chairman PROXMIRE. That has been the usual manpower training program we have had in this country.

Mr. GORHAM. Yes. I think what has occurred with many training programs, or many central manpower programs, is that aggregate demand policy has raised the level of aggregate unemployment. It is hard to do the whole job with manpower programs when overall unemployment rates are rising.

Chairman PROXMIRE. Even the administration says they expect unemployment to increase, at least for a few months, and then they hope it will ease off, but their prediction is that it will go higher.

I do have one other question. On the subject of programing-planning-budgeting the PPB, do you agree with Dr. Weidenbaum's view that we have had too much of it, we were too ambitious in moving it out of the Pentagon into the civilian agencies?

Mr. GORHAM. Let me tell you what I think he meant, and then I will tell you whether I agree with it. I think he meant that the PPB was started with an enormous flourish but indiscriminately. Every agency was told, thou shalt install PPB. And they didn't have the capability, they did not have the competence, they did not know what their problems were. The central direction was very weak because they did not have the staff in BOB to even guide the efforts. The amount of pressure was modest. Their ability even to read the material that was sent to them was very limited. There was virtually no feedback from the Bureau of the Budget to the agencies.

Chairman PROXMIRE. You are an ideal witness to answer this question. You were in the Pentagon, you saw that in the Pentagon. And then you were in HEW. And it seems to me you developed some of these PPB programs in HEW, didn't you?

Mr. GORHAM. Yes.

Chairman PROXMIRE. Now, didn't you feel that they contributed something, that they caused a breakthrough, if they were successful to some extent at least in getting a better understanding, even if they did not have the resources behind them to get the kind of results you would have liked?

Mr. GORHAM. Well, Mr. Chairman, you are very kind to ask me that question. I think we did contribute. I think the efforts at bringing analysis information data to bear on choices made a good deal of progress in HEW. It made it because the principal person who was chosen was at a high level in the organization, for one reason, and he was given resources. And so some significant beginnings were made toward installing a working system. Many other agencies did not have the encouragement from the Cabinet secretary, did not place the man in charge in a high position, and gave him no resources.

Chairman PROXMIRE. How is PPB doing in HEW now?

Mr. GORHAM. My impression is that it is running at a more modest level of activity than it did when I was there. But that is only an impression.

Chairman PROXMIRE. That is putting it very kindly. It is starving to death.

Well, thank you, very, very much, Mr. Gorham. You did a very helpful job. And you certainly are an ideal witness in these areas.

We will next convene on Thursday, June 4, in this room, at 10 a.m., when we will hear from Daniel B. Suits, professor of economics, University of California; Melville Ulmer, professor of economics, University of Maryland; Prof. Sar Levitan, professor of economics, George Washington University.

Robert Wood of the Harvard-MIT Joint Center for Urban Studies and former Secretary of HUD, has been rescheduled for Monday, June 15.

The subcommittee will stand in recess until Thursday, June 4, at 10 o'clock in the morning.

Thank you very much.

(Whereupon, at 12:15 p.m., the subcommittee recessed, to reconvene, at 10 a.m., on Thursday, June 4, 1970.)

## CHANGING NATIONAL PRIORITIES

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THURSDAY, JUNE 4, 1970

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMY IN GOVERNMENT  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The Subcommittee on Economy in Government met pursuant to recess, at 10 a.m., in room G-308, New Senate Office Building, Hon. William Proxmire (chairman of the subcommittee) presiding.

Present: Senator Proxmire.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, economist; and Douglas C. Frechtling, economist for the minority.

Chairman PROXMIRE. The subcommittee will come to order.

The current annual report of the Joint Economic Committee takes issue with the characterization by the Secretary of Labor of manpower policy as "a junior partner to fiscal and monetary policy." We stated in our report that the prospect of rising unemployment and the need to shift resources from defense to high-priority civilian uses made labor and manpower policies a particularly crucial element in economic policy, not merely a "junior partner."

The evidence becomes clearer daily that we may have already entered into a recession, although some may wish to call it a pause. The question is, how deep and how long will it run?

As joblessness rises and poverty and hardship intensify, it should be obvious that a program to combat these problems and to provide a decent standard of living for all persons is desperately needed and that it is the responsibility of the Federal Government to create and immediately implement such a program.

But the Federal cupboard appears to be almost empty. There is no program to fight unemployment. Indeed, the Government seems to be using unemployment as a weapon to fight other economic ills.

To discuss these questions, we have before us today three noted economists.

Sar Levitan, formerly with the W. E. Upjohn Institute for Employment Research, is now director of the Center for Manpower Policy Studies of the George Washington University in Washington, D.C., and is the author of "Poverty Work and Training Efforts: Goals and Reality;" "The Great Society's Poor Law;" and "Programs in Aid of the Poor for the 1970's."

Daniel B. Suits is professor of economics at Merrill College at the University of California at Santa Cruz. He formerly taught economics at the University of Michigan. He has acted as consultant to

the Secretary of the Treasury, the Council of Economic Advisers, and the U.S. Arms Control and Disarmament Agency.

Melville J. Ulmer is a professor of economics at the University of Maryland and has served as consultant to the Bureau of the Budget, the Departments of States, Commerce and Labor, the Interstate Commerce Commission, and the Organization of American States. He is the author of a text book, "Economics: Theory and Practices," and of "The Welfare State: U.S.A."

We will proceed with the opening remarks from left to right, Mr. Levitan, Mr. Suits, and Mr. Ulmer, in that order, and reserve the question and answer period for later.

Mr. Levitan, will you start off.

**STATEMENT OF SAR A. LEVITAN, DIRECTOR, CENTER FOR MAN-POWER POLICY STUDIES, GEORGE WASHINGTON UNIVERSITY, WASHINGTON, D.C.**

Mr. LEVITAN. Thank you, Mr. Chairman.

Your introductory comments and the broad and pervasive testimony supplied thus far in these hearings place me, Senator, in the role of a poor relation. For my assignment today is to focus on manpower programs accounting for an annual outlay of less than \$3 billion. Even if I threw in Federal expenditures for education as a close cousin for manpower, I would still be dealing with a Federal budget of \$7.5 billion, just enough to make a ripple in the \$200 billion plus annual Federal outlays.

But as you suggested, Mr. Chairman, in the light of rising unemployment, the Federal manpower policies and programs should be receiving an increasingly important status because they may be the only efforts that are available to provide for hundreds of thousands of victims of national policies to reduce inflation.

I would just like to make a few observations about the present status of manpower programs and their future direction in the short run.

1. The manpower programs which were initiated in the 1960's remain on the right track. Unlike many other efforts which were initiated to aid the poor but resulted in helping the rich, manpower programs continue to stress the needs of the unemployed, unskilled, and poor.

2. The administration of manpower programs leaves much to be desired. As a result of congressional overreactions to various needs, real or imagined, categorical programs have proliferated and these not only tend to reduce the flexibility of administration and the adaptability to changing economic conditions, but also impair the effectiveness of the programs to serve their intended clients.

3. A number of pending bills attempt to consolidate existing manpower programs and improve their administration. There is no need to discuss the details here, but the controlling criteria should be the decategorization of existing programs, the encouragement of local flexibility in designing programs, and the participation of community based organizations in the planning and administration of the manpower efforts.

4. The experience of the JOBS programs, which, by the way, was recently discussed in detail by the junior Senator from Wis-

consin, illustrates possibly better than any other effort the need to adapt manpower programs to labor market conditions. Aside from some irregularities which have shaken the faith in JOBS, rising unemployment has no doubt contributed to the lackluster record of JOBS. A program designed for a tight labor market cannot be effectively implemented under rising unemployment. It is becoming clear that JOBS is not living up to expectations. The \$420 million that the administration had originally allocated to the program for fiscal 1970 was reduced to \$300 million 5 months ago, and according to the latest notices, the funds earmarked for JOBS have been further reduced to \$175 million during the current fiscal year.

5. One feature of the administration's Manpower Training Act deserves special mention in connection with the focus of these hearings. The pending Manpower Training Act, provides for a trigger mechanism automatically increasing manpower funds when unemployment reaches 4.5 percent of the total labor force for 3 months.

The Joint Economic Committee has in the past suggested these kinds of mechanisms, and I welcome this provision in the Manpower Training Act. At the present level of appropriations, this would boost manpower funds by about \$155 million since not all manpower programs are covered by the trigger mechanism. Considering the needs, this is a very small amount.

Congress would do well to adopt the administration's proposal of automatically boosting the funds allocated to manpower programs by 10 percent when unemployment reaches 4.5 percent—this is now a matter of the past. But the plan should be extended by raising manpower funds 10 percent for each two-tenths percent increase in unemployment. This would mean that the funds allocated to manpower programs would rise automatically by 50 percent (about \$800 million at present level of appropriations) when unemployment reaches 5.3 percent, and the funds would double to over \$3 billion if unemployment rises to 6.3 percent, a range which we may experience before the end of this year. This provision, together with another proposal by the administration calling for an automatic extension of unemployment insurance when the number of insured unemployed reaches 4.5 percent (about equivalent to 5.7 percent of total unemployment) would provide a measure of automatic aid to the victims of monetary and fiscal policies.

6. The jobs deficit that we are now facing and which is likely to plague us into the next year suggests the need for more vigorous experimentation with public employment programs subsidized by the Federal Government and payment at prevailing wage rates. The present rise in unemployment is the product of policies to reduce inflationary pressures. Without raising here any questions about the wisdom of these policies, few would argue that the burden of the resulting unemployment should be placed upon those who can least afford it. Given the choice between outright income maintenance programs and the creation of useful jobs, we should give priority to the latter.

7. The current economic slack may offer vocational educators the opportunity to assume a greater role than they have played during recent years in delivering needed training to the unemployed and

preparing them for gainful employment when economic conditions improve. As long as loose labor markets continue, the pressures for immediate delivery of full-fledged employable persons will be diminished and the enrollees' choice to opt for jobs instead of training will also be reduced. Under the circumstances, more trainees are likely to complete a course of training offered under the manpower programs.

I am suggesting two major options: (1) increase public employment; and (2) strengthen institutional training programs.

8. During the past 25 years there has been an excessive emphasis on college and postgraduate degrees though this may not be a very popular thing for a college professor to say. I would certainly not argue against additional learning, but we have become excessively preoccupied with degrees rather than with a realistic appraisal of the educational achievements needed to perform a job. For instance, my own university still requires a mastery of French to receive a Ph. D. and to become a certified manpower expert, although I do not know a single economist who has read a French book in connection with his work on manpower programs. To use Professor S. M. Miller's apt phrase, we are in a "credentials trap." Educators have conned Congress and the public too long about the virtues of higher degrees.

While expenditures for higher education have mounted, we have invested little added resources in preschool facilities. We should assign higher priority to expanding preschool and day care facilities rather than to investing additional funds in higher education. I am not suggesting any cuts in the congressional appropriations for higher education, but if we are going to have any additional dollars, I would put them in educating children below age 6, and not in higher education.

9. Since inflation remains a major problem and outlays for manpower, education, and welfare are likely to increase—I think that Dr. Ulmer is going to recommend increased expenditures of \$10 billion or more—reduction of governmental expenditures has to be achieved in other areas. Proposed wage and price controls or some form of guideposts are not likely to stem inflationary pressures. Based on the experience during the Korean period, such controls, if they are imposed, would be a futile exercise and may have the reverse impact than what is hoped. The proposed controls may actually fan inflationary pressures rather than dampen them.

So the simplistic approach with respect to wages and prices is not going to work.

Thank you, Mr. Chairman.

Chairman PROXMIRE. Thank you, Mr. Levitan.

Mr. Suits is our next witness.

**STATEMENT OF DANIEL B. SUITS, PROFESSOR OF ECONOMICS,  
MERRILL COLLEGE, UNIVERSITY OF CALIFORNIA, SANTA CRUZ**

Mr. SUITS. The total productive capacity of the U.S. economy depends on the number of workers ready, willing, and able to work, on the hours they put in on the job, and on the average productivity of the man-hours worked. During the first quarter of 1970, for example, about 80 million men and women were at work in the United States. While some of these were only part-time workers, others worked overtime or

held down more than one job and on the average their hours of work roughly corresponded to a work year of fifty 40-hour weeks, or about 2,000 hours.

These workers were of widely differing caliber and were employed on jobs covering a wide range of productivity. On the average, however, output per man-hour on the job corresponded to goods and services worth about \$6 at current prices. Thus during the first quarter of 1970 these 80 million workers produced a total gross national product of  $80 \text{ million} \times 2,000 \times \$6$ , or \$960 billion at annual rates.

Although this \$960 billion gross national product consisted of a vast outpouring of individual products, it is more important as a measure of the overall productive potential of the economic system. It represents a generalized productive capacity that can be used to turn out whatever goods and services we might select, subject only to the limitation that the total output cannot exceed the capacity limit.

For example, when more canned goods are desired, more of the 80 million workers can be put on jobs in the food processing industry. But—unless there is a substantial body of unemployed labor to be drawn upon—workers added to the canning industry must be withdrawn from jobs in other industries.

Employment of workers on any given job automatically means that the same men and women cannot be employed on any other job at the same time, and the true economic cost of employing workers to produce any one thing is the sacrifice of products that they could have produced had they been otherwise employed. The economic cost of increased output of canned goods is the foregone production of bread, clothing, or other things that cannery workers could otherwise have turned out.

Nothing can be produced without the payment of its cost in full. The very fact that the can of beans is on the grocer's shelf is evidence that man-hours and materials have gone into its production that could have been used in other ways. The problem of priorities is the problem of assigning manpower and resources to jobs in such fashion that the benefits derived from their employment are at least as large as those that could have been obtained from the alternative goods and services that might have been provided instead.

As a case in point, U.S. defense expenditures, recorded at an annual rate of nearly \$79 billion during the first quarter of this year, represented over 8 percent of total GNP and embodied the services of nearly 10 million workers. These included the nearly 3.5 million men and women in the armed services, roughly 1.2 million civilian employees of the Department of Defense, and the full-time equivalent of roughly another 5 million workers in private industry engaged in the production of supplies, military hardware, and other items purchased by the Department of Defense.

All told, nearly 10 million workers, roughly one person out of every eight Americans engaged in production, was directly or indirectly working for the military sector of the U.S. economy.

Of total defense outlays, roughly \$25 billion went to continue the war in Vietnam. This involved the services of nearly 1,750,000 men and women, including an estimated 538,000 military in Vietnam, 233,000 in line or in training, 229,000 civilian defense employees and the man-hour equivalent of 750,000 workers in private firms supplying materials.

The proper evaluation of these outlays demands that the benefits gained be balanced against the alternatives sacrificed. To make one comparison, \$25 billion divided among the Nation's estimated 6 million poor families would average over \$4,000 per family—more than enough to bring every one above the estimated level of minimum subsistence.

The sacrifice of these same resources in Vietnam not only precludes their use in any other way, but adds daily to the toll of death and destruction, intensifying international tensions, and adding to the fear and distrust with which Americans are coming to be viewed by many in the rest of the world.

Aside from Vietnam, our current level of military outlays can be seriously questioned on two grounds. First, important questions have been raised about the prices paid for the services obtained, particularly in the matter of cost overruns on the one hand and inadequate performance of the final product on the other.

The grave concern about the record on this score has been ably expressed by a number of people, including members of this committee, and need not be repeated here. On a more basic level, however, we must deal with defense expenditures not in isolation but as part of a system intended to preserve our own peace and safety.

Surely, continuation of the present arms race is not conducive to this objective, but rather places the safety of the entire world in increasing jeopardy. Indeed, it is not too much to say that there is no longer any such thing as national defense in the older sense of the term, but that the only hope for peace and security lies in international agreement to terminate and reverse the growth of nuclear armaments.

As long as both the United States and the U.S.S.R. hold that the only acceptable defense position is to be a weapons gap in its own favor, there is no possible end to the resources each must pour into the proliferation of weapons and into the research and testing of increasingly sophisticated and correspondingly more expensive and more dangerous systems.

The most important present consideration for our strategic defense outlays should be their effect on the success of the SALT talks now in progress and, looking beyond, their contribution to a system of international cooperation in the systematic reduction of the destructive potential now maintained in the world.

In this regard, our decisions to proceed with the installation of ABM systems and to continue testing and begin deployment of MIRV weapons is, in my opinion, particularly unfortunate. Not only has their real effectiveness as part of the existing defense system been called into question, but their impact on the atmosphere in which the talks must go forward is counterproductive.

Beyond military outlays, there are a number of smaller programs that likewise yield questionable benefits. The benefits to be gained from the outlays for development of supersonic transport are questionable to begin with but when the project is considered as an aspect of the problem of environmental pollution and the problem of noise and as an element in the redesign of airports and facilities, many consider the development of supersonic aircraft for commercial transportation to be of negative benefit on balance.

On the other hand, America has many pressing needs for the use of resources. A partial list of areas of need would include the problem of poverty and income support, education, urban mass transit systems, medical care, environmental cleanup and pollution reduction, and law enforcement and municipal services. In assigning priorities to the use of resources in these areas, however, it is important to view them not in isolation but as a system of problems. For what is done about any one area has important consequences for the other.

For example, we find today an increasingly isolated minority of people with inadequate incomes, poorly trained for, or without access to productive employment. To bring these people into the mainstream of our society is a prime task that will demand imagination, research, and massive use of resources. But the problem is complex and involves a large number of elements.

First, and most urgent, an income support program is required that will provide an adequate standard of living for families with no other means of support while affording ample work incentives. The President's family assistance program as passed by the House, providing a minimum income of \$1,600 to a family of four with no other means of support, is a step in this direction. Although this is a marked advance over existing welfare programs, and although the addition of food stamps and family assistance would bring the total up to almost \$2,500, even this falls almost a third below the estimated \$3,600 minimum required for subsistence, and the program should be raised as rapidly as possible to that level. Because this would entail both greater support for each family, and would expand the number of families eligible, the cost of the expanded program would be roughly double the \$4.5 billion estimated for the present bill.

Family assistance is, however, only one aspect of an adequate poverty program. To be effective it must be accompanied by expanded access by the poor to quality education and job training. This implies not only expansion of Headstart and other preschool programs to reach every child who could be benefited, but would also involve upgrading the elementary and secondary education available to the poorer members of the community.

An important qualification must be made at this point, however, for the effectiveness of education involves a great deal more than merely the total quantity of resources devoted to it. There is, today, widespread disaffection with schools, and their performance, both from within the school system and outside. Students in schools both in poor urban areas and in affluent suburbs, and from grade school through the university, are increasingly vocal in their concern over their educational experience, and it is clear that a program that merely devoted more resources to the programs as they now operate would be unlikely to procure benefits commensurate with its cost.

An extensive program of research and experimentation to encourage the development of new approaches to education and to evaluate their effectiveness is much needed. We need to know more about what actually happens to children in the educational process, and how to alter it to improve the results. We must question not only methods and materials, but whether what we have been teaching is even necessary or appropriate for the lives students lead.

It would even be useful to ask whether we do not teach too much and whether a part of the formal curriculum could not be replaced by a systematic work-study program involving job experience for all students at a relatively early age.

I might interject here that this indicates yet another interrelationship with other programs, because before work experience can be incorporated in the educational program for the young, more jobs have to be supplied. Education depends on manpower programs and the level of employment.

A third important aspect of the problem of the poor is the difficulty of physical access to jobs. This problem is acute for people living in central cities with inadequate public transportation. Most of our recent investment in transportation has been devoted to expressways and to urban mass transit systems whose main effect has been to permit wealthier people to commute to work from the suburbs; little, if any of our efforts has been devoted to transportation systems that would permit poor people to get easily to and from a productive job.

The problem has been aggravated by the migration of industry out of the city away from the poor worker.

There are serious difficulties in providing this type of mass transit. For one thing, competition of the automobile has not only virtually replaced urban mass transit but has altered the typical configuration of cities. Under the necessity for all dwellers to have access to public transportation, cities of an earlier day tended to be "star shaped" as people tended to cluster along rays emanating from the hub of the city along transit lines.

The result was a population distribution easily served by street-car, bus, or subway line. With the advent of the automobile, however, the distribution of population was no longer constrained along these rays and cities evolved a more uniform spatial distribution of population.

The new configuration, however, is poorly adapted to the old forms of mass transit. For example, buslines can no longer follow a few main routes, but must wander over wide areas to serve the population. Again, new systems are needed before the problem can be usefully attacked, and this means extensive research and development of ideas.

We spent \$5 billion a year to find how to get a handful of men to the moon; a similar outlay to get millions of poor workers to work would pay immeasurably larger dividends.

A fourth aspect of the problem of the poor is housing, and decisions on the kind of housing to be provided and where it should be located are intimately associated with the problem of mass transit. Perhaps the provision of low-cost housing located near the job is a better solution to the worker's problem than efforts to transport him back and forth.

One possibility might be to provide Federal financing to firms to construct low-cost housing complexes adjacent to their factories, to be occupied by employees moved from the central cities.

The aspects of the problem of poverty also include medical care, municipal services, law enforcement, civil rights, population limitation, and a host of other elements. The objective here is not to attempt to list them all, but to indicate that a complex of problems of this sort cannot be treated as isolated or distinct.

They are interconnected and must be treated as a complete system. Moreover, their solutions will involve the massive use of resources that must be diverted from other purposes. For this reason, our most urgent priority is an end of the fighting in Vietnam and termination of the international arms race.

That concludes my statement, Mr. Chairman.

Chairman PROXMIRE. Thank you very much, Mr. Suits.

Our last witness is Professor Ulmer.

**STATEMENT OF MELVILLE ULMER, PROFESSOR OF ECONOMICS,  
UNIVERSITY OF MARYLAND**

Mr. ULMER. Thank you, Mr. Chairman.

It is perhaps ironic, in this era of a knowledge explosion, that our Nation is still using techniques for economic stabilization that were developed more than a generation ago. I am aware, of course, that we have had some minor technical innovations, and more than a few neologisms, or additions to jargon, such as "fiscal dividend" or "trade-off," but basically knowledge in this field, and the practical techniques we have available, are about where they were left by John Maynard Keynes, about where they were, in short, at the end of World War II.

Now I am not knocking the classic Keynesian measures, fiscal and monetary, that we and all other democratic countries have used during the past quarter of a century. Their towering contribution is that they have banished the fear of a great depression, once and for all. But that observation, important though it is, is essentially negative, because it emphasizes what we have avoided, not what we got.

We have never achieved a true foundation of economic stability, on the basis of which we could confront, calmly and constructively, the fundamental problems of poverty, pollution, inadequate health provisions, the care of our very old and our very young, the quality of life. Instead, we and all other democratic countries have been rocking endlessly back and forth between excessive unemployment and excessive inflation ever since the first significant postwar recession in 1949.

The present crisis is simply another link in that chain. And the fiscal and monetary tools we rely on merely move us from one point, on what some economists call the Phillips curve, to another, from one unpleasant combination of inflation and unemployment to another combination. In other words, given these policies, and these alone, we are entrapped by an inflation that never ceases, even when unemployment is steep as it is getting to be today, entrapped by an inflation that simply rises and falls in intensity like a stubborn fever.

Hence, I want to outline what I hope will be a more constructive approach to this problem of instability, and one which also deals with the two related problems of poverty and the care of our human resources. The program is aimed at providing full employment and stable prices at the same time, a situation which we have never been able to enjoy at any point in recent history, and which, it seems to me, must rank near the top of any list of national priorities. My plan recognizes, as our current policy does not, that inflation has several causes, and hence each of its three points is directed at a different aspect, or cause, of inflation.

One cause, that I think is readily documented in the data, has to do with the disparity between the structure of the demand for labor, and the structure of our labor supply. It is hardly news, especially to this committee, that modern technology has been demanding a higher level of skills, and is expected to continue so according to the manpower experts of the Labor Department.

Not so familiar is the fact that while the demand for labor has been altered, in favor of more skill, the corresponding change in the supply of labor has lagged. True, our average educational level is now much higher than ever before, yet in the Nation as a whole the shift in the composition of the labor supply toward greater skill has not kept up with the shift in demand. The relevant figures make this unmistakably clear.

Thus, in 1961, when the general unemployment rate was 7 percent, unemployment rates were 14 percent for unskilled workers and 10 percent for semiskilled workers. So, for those lacking training, education, or experience, the 1961 recession was a real depression. The other side of the coin is that in that year of overall unemployment the unemployment rate was only 2 percent for technical workers and professional employees, and less than 2 percent for business and public administrators. More detailed data show that from medical technicians and computer programmers to machinists and draftsmen, skilled personnel were in short supply. And the prices of these scarce services rise under these circumstances, bringing pressure on the price level. The consumer price index was, of course, moving up throughout the recession years from the late 1950's to the early 1960's, though moderately.

The accelerated rise in the price level came soon after, as the contrast just described grew more intense. By 1966, the overall unemployment rate had been pushed down to 4 percent, or a bit less. For the unskilled, however, jobs remained hard to get; 7 percent of them were out of work. In dramatic contrast in that year the unemployment rate in 1966 was down to an almost unbelievable 1 percent or less for technical workers, professional employees, and business and public administrators.

In general, skilled personnel had become extremely scarce, creating truly inflationary situations, even though the unskilled were still in surplus. As we might expect, in 1966, the Consumer Price Index rose sharply, reaching an annual rate of 4 percent by the end of the year, and gathering momentum for the even stronger inflation that developed later. Thus, the more we attempt to raise overall demand so that unemployment can be reduced, the more we exacerbate the disparity between demand and supply in the markets for scarce, skilled labor.

And then the more intense grows inflation, until we are forced to pull back, building up unemployment once again. The process is as self-perpetuating and reinforcing as getting drunk to cure a hangover, as we are finding out once again today. Plain common sense suggests that there must be a better way to stop inflation than to create unemployment and then try to compensate the idle with hand-outs.

In the first place, no administration would have the temerity, deliberately to create enough unemployment to stop inflation cold,

though it could be so through a tragic miscalculation. In any event, stopping inflation entirely would require an unemployment rate of at least 8 percent, or about 7 million idle workers, not to mention 15 to 20 percent for the unskilled, for Negroes and the inexperienced.

In the second place, mere handouts tend to perpetuate and extend, rather than cure, the so-called "culture" of poverty. What is needed is an attack on instability itself, so that those now in poverty can become useful, participating members of society.

To this end, I propose first of all integrating all Government activities associated with welfare, manpower training, and social security in a single coordinated agency. For convenience, I call the new agency the National Service Administration, or NASAD. While new, it would displace more than a few agencies and bureaus which now operate in these fields, often at cross purposes.

The first and foremost obligation of NASAD would be to channel all those now able to work and who are idle into jobs in private industry, in other branches or levels of government, or in NASAD itself. In other words, it would guarantee full employment, using its own resources as a final measure to do so.

All the activities of NASAD would be tax financed. Not only would its operation, therefore, be noninflationary, it would be positively anti-inflationary by increasing the supply of scarce skilled labor and by expanding the Nation's output. Above all, the operations of NASAD would relieve the Nation of one major, recurrent obligation; it would no longer be necessary, time and again, to raise overall demand to inflationary heights in order to reduce excessive unemployment.

Full employment would be assured perpetually with a national income, as we shall see, at a noninflationary level. Since NASAD itself would be employing surplus labor, it would function as a service agency for public works programs around the country, at all levels of government.

The starting point of the system is that anyone who wished to apply to government for financial aid in any form, including unemployment insurance, would be required to register with the National Service Administration. Obviously, they must register somewhere, so this requirement is no imposition. After suitable testing, the registrant would therefore be assigned to one, or in a few instances more than one, of the following four programs:

(1) Job Placement. NASAD would maintain a continuous, computerized inventory of the Nation's job opportunities as well as of the Nation's idle, all of whom would be registered with its comprehensive nationwide employment service. Employers would be required to report job openings with the government employment service, or with cooperating private employment agencies that were certified by the government. Where possible, business would be expected to give advance notice of layoffs as well as vacancies. Jobs would be offered to registrants in line with their qualifications, and where necessary to bring men and jobs together, NASAD would provide grants or loans to finance moving and housing.

(2) On-the-job training. Those men and women not properly placed in jobs through the employment service would be offered on-the-job training in industry, in State and local governments, and within the

National Service Administration itself. In industry and State and local governments, NASAD would subsidize the training by paying one-half the going wage during the training period. Those not placed in this way would receive on-the-job training, and basic education where needed, in NASAD's own programs, some of which would be conducted with established educational institutions. Insofar as feasible, registrants would work half-time and study half-time. The training program would be tied in closely with the job inventory of the placement service.

3. Public employment. Those people who could not be placed in regular jobs in industry or State or local governments, even after a suitable period of training and education, would be employed directly by NASAD, and organized into a variety of National Service Units. I am sure that it is unnecessary to recite, for this audience, the vast number of public needs that today are largely or wholly unsatisfied.

The National Service Units would work on these, from city beautification to anti-water-pollution projects. Some could provide services of use to NASAD's own internal operations. For example, under professional supervision, they could help to staff day nurseries so that working mothers could stay on the job. I can envisage assigning some NASAD workers to our understaffed hospitals and to our understaffed and often brutally mismanaged nursing homes for the aged.

4. Income supplements and guarantees. All registrants with NASAD whose family incomes remained below a fixed minimum would receive public assistance allowances in amounts sufficient to bring them up to that minimum. The fixed standard would be equivalent to that now established by the Social Security Administration for the measurement of poverty, with differentials for size of family and location. The recipients of public assistance would include:

(a) those needy who are unqualified for training or work because of physical or other handicaps and

(b) those whose earnings are insufficient to bring their total family incomes up to the poverty level.

Thus, no less than the widely advertised negative income tax plans or the more modest welfare plan sponsored by President Nixon, the program described here would guarantee a minimum income; but unlike them, it would not provide automatic allowances. The emphasis, instead, is on rehabilitation and job opportunities.

Permanent subsidies would go only to the aged and to those who were certified, because of some deficiency, as unable to work. Training, and/or guaranteed jobs, would be available for all others. It is an economical program because it would not provide handouts for anyone above the poverty line, and because it not only encourages work, but presents actual job opportunities for all who can utilize them.

More important, the National Service Administration, in company with the other two branches of my program to which we now come, would bring full employment without inflation. I shall deal with these very briefly.

Even in the presence of the National Service Administration, it would be quite possible for the economy to generate an excessive, inflationary rate of spending, either in the private sector, the public

sector, or both. The result would be the well known excess demand type of inflation. Similarly, it would be possible for the economy to suffer from a deficiency of demand, so that the number of unemployed applying for jobs with the National Service Administration would expand unduly. The objective of policy, of course, would be to avoid excesses as well as deficiencies in demand, and to aim the national income at the maximum noninflationary rate achievable.

Traditionally, in the so-called New Economics, tax changes and sometimes public expenditure changes have been used to control the national income. But in practice these have proved to be excessively rigid, or inflexible, and as for monetary policies, they have proved to be too uncertain.

In addition, some think the traditional fiscal policies for stabilization have been conducive, some think, to fiscal irresponsibility. So I propose a system of refundable taxes, or compulsory loans, that would be more flexible and foolproof. Briefly, the compulsory loans and their repayment would be invoked by Presidential order, within limits set by Congress, and would be operated in connection with a special stabilization trust fund, so that money paid into it would be sterilized. The loans would appear as positive, refundable taxes, and the repayments would appear as negative taxes, in our regular income tax returns.

Each loan would be repaid with interest at the end of 3 years, unless earlier redemption were ordered by the President. Hence, loans and repayments could be used to build up purchasing power, or reduce it, as required. The system could work with pushbutton speed, when necessary, and would not be nearly so disturbing to business and household planning as ordinary tax changes are.

The third and last plank of my program aims at stamping out the dying embers of inflationary psychology. It would consist of a National Income Board which would have industrial and occupational divisions around the country. The board would serve primarily as a watchdog or ombudsman for consumers, exercising informal controls, where necessary, on prices, wages, and other incomes.

It would investigate public complaints and also seek out inflationary practices inside as well as outside Government. Its tools for correction would be conference, negotiation, voluntary arbitration, and persuasion, backed where necessary by the pressure or nationwide publicity.

The function of the National Income Board would be critical mainly in the earlier stages following the introduction of my system, when the psychology of inflation still remained intense. At the present moment I think that a board of this kind could be highly useful in checking such inflationary price increases as we have already witnessed this year in steel, aluminum, copper, some types of machinery, cigarettes, and a variety of other products, or in checking inflationary increases in wages or other incomes such as we have had for printers, teamsters, physicians, or are likely to get later this year when a record number of union contracts are negotiated.

The greatest expense for the plan I have described would, of course, be for the public employment, manpower training, and welfare functions of the National Service Administration. After allowance for certain offsetting savings such as that of unemployment insurance, I estimate the net cost of these functions at anywhere from \$5 to \$10

billion annually, depending on exactly where we fix our goals for the unemployment rate and for price stability.

In comparison, I may note that during the decade from 1959 to 1969 we lost an average of from \$30 to \$40 billion in output per year through not maintaining full employment, and we can add to this some large, though incalculable, amount that we lost through our failure to stabilize prices.

Thank you for your attention.

Chairman PROXMIRE. Thank you, gentlemen, very much. These are most interesting statements, all of them.

Mr. Ulmer, while I think we can criticize what you have presented to us—people always do when you present any kind of constructive program—it is most helpful to have the detailed, very imaginative, and, I think, quite exciting proposals that you make here. We want to get into that in the questioning period. And I hope Mr. Levitan and Mr. Suits will join in and give us the benefit of their critical evaluation.

I would like to ask all of you gentlemen first, how serious will the unemployment problem become this year? Will you give us your forecasts?

First, Mr. Levitan. You said something about a 6.3-percent rate. I was not sure whether this was your expectation that it would go that high or it could go that high?

Mr. LEVITAN. I think we are going to face, before the end of the year, a range from 5.3 to 6.3 percent.

Chairman PROXMIRE. Mr. Suits?

Mr. SUITS. The rule of thumb that I like to use for unemployment rates is that for every 1 percentage point underutilization of our productive capacity we have about one-half of 1 percentage point added to the unemployment rate as we measure it. The difference, the slippage, so to speak, arises in shorter hours and retirement from the labor force, and other sources of disguised unemployment.

Chairman PROXMIRE. Hours are pretty short right now.

Mr. SUITS. Yes.

Chairman PROXMIRE. Historically, they are about as short as they have been for a long time.

Mr. SUITS. That is true. And this is one of the reasons that our unemployment rate is now as low as 4.8 percent. Part of the underutilization is taken up by shortening hours.

Now, given that our gross national product has not only failed to grow in the last two quarters but has actually declined, while our productive capacity continues to grow as we add more and more to our plant and equipment, and even supposing that there is some recovery of growth in the last half of this year, we can certainly not expect the growth of real output during 1970 to be anything like the amount that we are going to add to productive capacity.

I would guess that the maximum real growth we could expect, even with considerable recovery in the second half of the year, would be 2-percent growth in economy in the total output, with a standard growth in productive capacity, let us say, of 3 percent or 3½ percent.

That, by itself, should add about 1 percentage point to our unemployment rate.

Chairman PROXMIRE. That means that from now, from June 4, until the end of the year, you expect an annual rate of growth of around 2 percent?

Mr. SUITS. At the most, I would think.

Chairman PROXMIRE. I am not talking about the overall rate for the whole year; it would be less than that because we did not grow at all in the first 5 months. This would bring us how much unemployment?

Mr. SUITS. This ought to add 1 percentage point by itself.

Chairman PROXMIRE. From 4.8 percent?

Mr. SUITS. Up to 5.8 percent. However, the 4.8 percent is still, I think, a low figure because, if you recall what happened to the unemployment rate throughout 1969, it was very erratic. It began the year at around 3.3 percent. It rose slowly until early in the fall when it reached 4 percent, and then declined abruptly and oscillated.

It seems to me that this irregularity and highly erratic behavior of the unemployment rate last year was partly evidence of labor hoarding on the part of employers who were not satisfied that their declining output would be permanently lower than it had been and who were consequently holding workers on the payroll and not giving them very much to do.

It is indicative that the rate of manpower productivity, which had been growing regularly about 3 percent per year, during 1969 grew hardly perceptibly.

Now, if, then, our present unemployment rate contains still some holdover of this disguised unemployment, or hoarded labor force, we could expect some further addition to the unemployment rate as these workers are finally eased off the payrolls.

So that I would think that by the end of the year an unemployment rate of 6 percent, unless something quite substantial is done about it, would not be out of order.

Chairman PROXMIRE. Mr. Ulmer?

Mr. ULMER. We all learned from figures released this morning that business has been cutting back on its plans for gross capital expenditures, a very vital element in the composition of our future output and its level.

Chairman PROXMIRE. What do economists call that, the accelerator?

Mr. ULMER. It certainly does work with an accelerator and a multiplier effect as well.

In any event, it is a strategic element. And I think the danger in our situation is that these cutbacks may accumulate. They have a way of doing this. In downturns, we frequently find that the early estimates overstate the actual development. We get a bias the other way in upturns.

This may happen this time. And if it does the decline in the second half of the year may be in sharp contrast to the officially expected leveling off and plateau that Mr. McCracken has been talking about.

In that case, it is easy to envisage a 6-percent level of unemployment by the end of the year. I think indicative here is the fact that some of the forecasters within our Government have been talking rather openly about the possibility of a 5.5-percent unemployment rate at the end of the year. That was before the survey figures were released for business investment. It may be that they are upping their estimate of unemployment for the end of the year, but if they are not I certainly am. And I would think 6 percent is a very likely figure.

Chairman PROXMIRE. So that you are estimating, then, gentlemen, 400,000 to a million more unemployed. And is it a proper assumption that a disproportionate number of those would be minority groups? In the central city, we have as you know about 8½ percent unemployed black people. Is that now likely to accelerate and continue?

Mr. SUTTS. I think the rule of thumb is that the black unemployment rate is roughly double the average unemployment rate. So a 6 percent average unemployment rate means an average black unemployment rate of 12 percent.

In the central cities this can be increased by another 50 percent. And, of course, when one gets to black teenagers in the central cities the figures just boggle the mind.

Mr. ULMER. Mr. Chairman, I might mention that the latest figures that the BLS had on unemployment by type of skill, which I looked into before coming here, was that the rate for unskilled, about which I had some comments in my statement, was very close to 9 percent. I think the exact figure is 8.9 percent.

Chairman PROXMIRE. That is unskilled regardless of race?

Mr. ULMER. Right; these are black and white.

And I think that this figure could well skyrocket, as was just suggested, not only for blacks, but for unskilled in general—not that all blacks are unskilled, but there is a high proportion that are.

Mr. LEVITAN. I have some reservations regarding the analysis of Dr. Suits and Dr. Ulmer. We should not take for granted that black unemployment will necessarily remain double that of white. During the last 3 or 4 years, blacks not only improved their income but also their occupational mix. If you analyze the changes in the median family income for blacks and whites during the 1960's, from 1960 to 1969, you will find that the increase for blacks has been much larger than for whites. This increase is not only proportional. The absolute differential has also narrowed. This suggests that with the reduction of discrimination Negroes have received a much better chance; they have advanced at least as far as whites, and even more so. The impact of a short recession would depend upon the geographic areas and industries affected. For example, increasing layoffs in the aerospace industry is likely to proportionately affect more white unemployment than black.

Chairman PROXMIRE. They are still below, substantially below.

Mr. LEVITAN. Substantially below. But even in absolute terms you will find that blacks have advanced more than whites. Between 1960 and 1969 the annual wage of nonwhite craftsmen and operatives who were family heads rose by \$1,753 compared with \$1,677 for whites—these figures are adjusted for changes in the Consumer Price Index.

Now, it is very possible, of course, that in a recession—we all apparently agree that we are in a recession—the gains might be wiped out if the recession is prolonged and widespread.

Chairman PROXMIRE. That would tend to accelerate black unemployment, because their seniority is much less.

Mr. LEVITAN. But on the other hand, if they have gained seniority—we do not know enough about the extent of black seniority—they will retain the jobs in a recession. When we talk about automatic layoff of blacks, we may be talking about past events.

Chairman PROXMIRE. Certainly everything I have seen in Wisconsin and elsewhere indicates that blacks are still the last hired, and therefore, the first fired.

Mr. ULMER. I think, instead of mere speculation, some facts on this are relevant. While the unemployment rate overall was increasing by 1 percent from 1969 at its best to the present time, the unemployment rate for the unskilled was increasing by 2 percent.

Now, the unskilled are by no means exclusively Negro, but a disproportionate number are. So that the usual 2 to 1 relationship in unemployment rates has held right up to April of this year, despite Dr. Levitan's speculation that it has changed. And that was the latest figure available.

Chairman PROXMIRE. What is your judgment of current economic policies insofar as their influence on employment? What are we doing that we ought not to be doing, and what are we not doing that we ought to be doing?

Maybe Mr. Ulmer has already answered that as far as he is concerned—he has a very comprehensive program that he thinks we ought to engage in—although I can ask him the negative question.

Mr. LEVITAN. I would immediately, as I suggested before, put more funds in both unemployment insurance and manpower programs so that we could at least form a cushion for those who are laid off.

Chairman PROXMIRE. I would like to ask you about that. I understand why you put more funds into unemployment compensation, of course, because it does sustain demand. But when your aggregate unemployment is increasing and your aggregate demand is dropping, what good is manpower training? Don't you have an unfortunate situation for training people for jobs that are not there?

Mr. LEVITAN. This is only partially true. When we are talking about a 5 or 6 percent unemployment economy, we are also talking about the 94 or 95 percent employment economy. There are lots of industries which need additional workers. So even in a period of high unemployment—say 6 percent, certainly that is high unemployment—there are many employers who do need additional workers.

Chairman PROXMIRE. I would be more comfortable if we had job vacancy data so that we knew what jobs are not filled. The fact that you have 94 percent of the people at work does not help at all, because it does not help when a person now out of work takes a job which a person now working will lose. You don't improve the economic situation much, or ameliorate the woe of the unemployed.

Mr. LEVITAN. Again, Senator, I would argue first that a great deal can be done in a recession to help prepare persons for gainful employment when jobs become plentiful again and when labor markets become tight.

Second there are lots of vacancies in public employment during the period of high unemployment. And you can train the unemployed to fill these jobs.

So again even in a period of high unemployment, I would still say that it is better to have manpower training and keep people busy while training in an institutional setting or while performing useful jobs.

Chairman PROXMIRE. Isn't it a hard fact of life that we still have the overwhelming amount of manpower training done by private

employers when the labor market is tight, they get people who have been unskilled and they train them because they need them?

When you have a surfeited labor market, when you have a lack of demand, and you have people being laid off, your Government manpower training programs are good, constructive for the future, perhaps, but they are not very helpful in persuading the steel industry or building industry that are laying people off to then hire them.

Why should they hire them when business is bad and prospects are bad and unemployment is increasing and the outlook is not very good?

Mr. LEVITAN. As I stated before, unemployment is not evenly distributed and there are lots of areas, on a geographic as well as an industrial or occupational basis, that are growing in a 94-percent employment economy. And that is why you need flexibility in subsidizing private employers and in training workers for industries which continue to expand during a period of recession.

Chairman PROXMIRE. Are there things that we are doing that we should not be doing now, as far as economic policies are concerned, with respect to employment? Is there a monetary policy or fiscal policy that we should follow which we are not following?

I take it you have indicated what we should do. What we should do is to improve manpower training programs, we should increase them, we should increase public employment in areas where we have a great social need.

Dr. Suits?

Mr. SUITS. I should say I am inclined to agree with your analysis, Senator. It seems to me that there is no better medicine for employment or for upgrading the labor force than a very brisk demand for their services. We saw this quite recently in the eagerness of businessmen to undertake the JOBS program, for example, and often without requiring any public subsidies, to provide jobs for people who were hitherto unemployable. There were businessmen who made it their business, just in the interest of the society-at-large, to seek out employees from the central cities and put them on the job.

Now, when we turn right around and slow the economy down we are saying, essentially to the businessmen, this public spirit of yours is great, this is the way to do it, and this is the way that private enterprise works, it is just too bad we cannot keep your sales up so that you can keep these people on. So that we reverse the program that we encouraged and instituted. This has been the real tragedy of our approach to inflationary control.

Now, it is true, of course, that as the scarcity of labor increases, and this increases first in the highly skilled sectors as Professor Ulmer has pointed out, that labor costs begin to rise more rapidly than productivity and that prices rise in consequence. The tragedy has been in our attempt to control the rise in prices by slowing down the economy and, hence, defeating our own purpose as far as job training and employment is concerned.

This is a tragic seesaw on which we are caught. In an effort to improve the position of unemployment, we then find ourselves in a condition of rapidly rising prices and in an effort to calm down the price increase we find ourselves allowing unemployment to rise again.

Chairman PROXMIRE. How do we get out of it?

Mr. SUITS. There are two approaches to this problem. One, it seems to me, is the shortrun approach that, aggravating as it is and distressing as it is, direct control of wages and prices is not all that bad if this is the alternative to playing seesaw with your economy.

Chairman PROXMIRE. Do you feel that this is the time for that?

Mr. SUITS. Yes; I feel that given the alternative of either aggravating unemployment or aggravating inflation—in other words, dividing society even further.

Chairman PROXMIRE. Would you have mandatory wage and price controls, including an OPA setup that could administrate effectively, or would you have it, as Mr. Ulmer proposed, an expression on the part of the President that he would hope that wages would be held flat?

Mr. SUITS. As a minimum, an expression by the President that wages and prices should be kept within bounds, that some kind of guidepost be established, as a very minimum. I am skeptical, frankly, about the effectiveness of such a program. It has no teeth. It relies upon the good will of selected industries and selected labor organizations to lead the way. And this means, essentially, that somebody has to make the big sacrifice, somebody has to be the hero to give up gains that he would otherwise be able to make.

It means, for example, that one would have to ask the automobile workers not to press to catch up to their cost of living.

Chairman PROXMIRE. So you would prefer to have administered wage-price—

Mr. SUITS. I do not prefer it in any sense—

Chairman PROXMIRE. It is a choice of evils?

Mr. SUITS. That is right, as a choice of evils. I think we need a program that can be made effective and can be enforced in the economy. It is an agonizing choice, either way we make it. But considering the alternatives, this is the direction I would propose to go as a shortrun measure. Now, in the long run I agree with both Mr. Levitan and Mr. Ulmer that part of the difficulty that we experienced, part of the problem of our having such rapid inflation with still 3 percent or more of the labor force unemployed, is precisely that the unemployed segment is not highly skilled, is not the segment which can supply the needs for a highly technical modern industry, and that the training of such people and bringing them into the mainstream of employment will itself contribute greatly to mitigating the problem of inflation.

Mr. LEVITAN. I do not think that controls or an income policy would work in the short run for the simple reason that just establishing the mechanisms and organization of wage-price controls would take months, and possibly longer. And by that time, when the institutional arrangements are completed, as Dr. Suits suggested, there would be groups with a great deal of clout and whose wages or prices could not be frozen, and exceptions would have to be made which would make any freeze untenable.

Chairman PROXMIRE. You would have to suffer through this 5.3 to 6.3 percent-inflation that you predicted? Or how do you feel about that? Do you think inflation is likely to continue the rest of the year?

Mr. LEVITAN. Yes, we already have a built-in inflation for next year of 5 percent.

To return to your earlier question, there are certain places where we can cut expenditures. I do not think that Congress will do it, so I hesitated to respond. We can save a few billion dollars for example in agricultural expenditures. And we can save in other places. In terms of my priorities, I do not think the economy or the Nation would be hurt very much if we cut out about \$10 billion in expenditures in the right places. In other words, if we want to reduce inflationary pressures, we have to cut demand or raise taxes. If you anticipate continuing inflation for several years, only then would it be desirable to set up a mechanism which would establish wage and price controls.

Chairman PROXMIRE. Then you would accentuate the unemployment over the next few months, would you not—

Mr. LEVITAN. No, I refuse to be put in that position, Senator.

Chairman PROXMIRE (continuing). Unless you moderate monetary policy in some way, anticipating that this is going to have a dramatic effect on housing?

Mr. LEVITAN. On a selective basis that might be done and that is why I suggested that before we expand welfare and manpower expenditures I would like to save some \$10 billion in other expenditures. But under no circumstances would I place the unemployment burden on those who can least afford it. If the added welfare expenditures cannot be balanced by cuts elsewhere, then I would favor raising taxes. If we want to reduce inflation to 2 or 3 percent, and unemployment to 3 or 3½ percent, we are not going to achieve this goal with another incomes policy or price and wage control.

Chairman PROXMIRE. Could you gentlemen give us your views on the proposed family assistance plan? Do you think it will work, is it a possible alternative to the welfare system, is it more desirable than other proposals such as the negative income tax?

First, Mr. Ulmer?

Mr. ULMER. If I may, I would like to comment on what has been said about the general economic situation first. I realize that this is really what I was talking about, and I know that is why you did not ask me to again present my ideas. But I did have some thoughts about what was being said here.

As we all know, there is a rising chorus that is in support of an incomes policy, as it is called, by which is usually meant an informal, nonmandatory control over prices and wages, more or less like the third plank of my own program for stability.

Now, the very point of my statement was that this is not sufficient by itself, not by a long shot, in controlling inflation. And I think one of the dangers of the present situation is that with this rising chorus in support of an incomes policy, false hopes are being raised. People are getting the idea that, gosh, if we just appoint a commission or give some other agency of the Government power to do this, everything is going to be all right, and we can lower the interest rate and move ahead. But I think the fact is, from our own history, and from the history of Western Europe, we could be pretty sure that we would face an even sharper inflation than we have had in the past.

Chairman PROXMIRE. Have you read the Sheehan book on wage price guidelines? It is a very fine book, by Mr. Sheehan, writing for the Brookings Institution. And he made a very comprehensive study of incomes policy. And he agreed that under most circumstances it would

solve, as he put it, 2 to 10 percent of the problem—in other words, a very, very modest part of the problem.

On the other hand, an incomes policy now would seem to fit our problem like a glove that is well tailored would fit a hand. After all, you have a situation now in which you have apparently no excess demand. Almost everybody agrees to that, the administration agrees to that. We have on the other hand a cost-push-type inflation, specifically a wage-push-type inflation. And under these circumstances we might as well do what we can. It is true we want to do everything. But this 10 percent of the problem that might be solved this way is a great deal better than saying there is nothing we can do, and moving ahead into a situation in the short run which would result in 6-percent unemployment.

You have a long-term solution which I want to get into a few minutes.

Mr. ULMER. Mr. Chairman, I agree with you 100 percent. I just had an article published last week in the *New Republic* in which I took this very view. I did write an article on the case for an incomes policy. And I enthusiastically am in support of it. And I do agree that it would have maybe a 10-percent ameliorative effect.

What I was suggesting is that, because there has been an almost unanimous agreement that this is what we ought to do, that people are getting the idea that this is the end of our problems. And it is not. It is the first, modest, important but modest, step toward solving the problem of economic stability, which is fully consistent with what you are saying, that we need it now. It is a good first step to take. But we ought not to think that then we can rest on our laurels.

Chairman PROXMIRE. Let me ask you about the family assistance program. Will it work? Is it a possible alternative to the welfare system? Is it more desirable than the negative income tax, and so forth?

Mr. ULMER. You see, I have done so much thinking about this, and I came to so firm a conclusion about this, that it is awfully difficult for me to discuss that, except in the sense of the lesser of several types of evils that I think might be available at the moment. You see, I do think, as I have said here, that the emphasis ought to be given to rehabilitation. And that means manpower training and education of various kinds, and jobs.

And then I think, in addition to that, we ought to have the most generous kind of support, family support program, that we can afford, that would bring everyone else who was not there up at least to the poverty level.

That is a little different, very different from a negative income tax plan. And it is very different from the plan that President Nixon has just advocated. Even though I realize it is called the "work fare program," and it is supposed to give emphasis to employment, it cannot do that very well in a declining labor market, as you yourself were saying earlier. And it provides only a very modest expansion in our manpower training program at that.

Also in this plan there is a need for cutting down on the welfare that people get in some graduated way in line with the earnings that they acquire.

Now, this gets one into the position also—and it is very dramatic in the negative income plans—of providing benefits for people who are above, well above, often, the poverty level.

In some of the negative income tax plans of the Brookings Institution—perhaps you have seen them—they call for positive subsidies going to families with \$12,000 per year in income, which leaves quite a burden for those above that level who have to pay the whole tax bill.

You see, in what I have advocated here—where you do give people the opportunity to work, and then if it is ascertained that they cannot, then they get the full amount up to the poverty level—you do not have that problem of taxing the poor on their earnings, and you do not have the problem of paying out substantial sums to people who have incomes well above the poverty level.

Chairman PROXMIRE. So you feel the problem could better be solved by guaranteed jobs supplemented by something like this for those who are unable to work?

Mr. ULMER. Exactly right, yes. That is why I do not like to discuss it in isolation.

Chairman PROXMIRE. Dr. Suits?

Mr. SUITS. I am enthusiastically in support of a family assistance plan. Our existing welfare program could hardly be better calculated to be a divisive force in the community, as one that heaps indignities on the poor. And it very badly needs revision.

The idea of a minimum income program is by no means new. We had one in effect since the early thirties, for example, in the farm area. The interesting difference between our farm program and what is proposed in the family assistance plan is that the farm program has placed most of its support on the land-owning farmer, and has ignored completely the plight of the equally affected ex-farm laborer whom we now find populating our central cities.

I would propose that we treat the ex-farm laborer, if you like, in the same way that we treat the wealthy farmer—not of course, on the same scale, since agricultural subsidies can rise as high as a million dollars per farm, and I do not think this is necessarily the scale that we should adopt for our urban and welfare programs—but certainly something that would guarantee the family a minimum income compatible with the need of subsistence, say, at present prices, \$3,600 for a family of four.

Now, this should, of course, be so done as to prove maximum incentive for work effort. I believe that there are certain technical difficulties in the plan that is before the Senate at the present time in this regard. And those should be eliminated. But in addition I would suggest that the level of support implied in the existing plan as passed by the House is not adequate to meet these targets, and that it should be revised upward as quickly as possible.

Chairman PROXMIRE. By “as quickly as possible” I presume, if we follow your analysis, which is in the theme of these hearings, the changing priorities, you would move the resources that we now have in the military area and perhaps in some other areas out of that area and to some extent into this area?

Mr. SUITS. I certainly would; that the cost of a \$10 billion per year family assistance plan, as a ball park estimate of what this would amount to, can probably be readily paid for by a reduction in overruns

in the military budget, even without cutting into the actual Military Establishment.

It is certainly this order of comparison that we are talking about. Of course, it is less than 50 percent of the cost of the Indochina war for a year.

Mr. LEVITAN. I agree with the principles indicated by Mr. Suits—  
Chairman PROXMIRE. This is on the family assistance program?

Mr. LEVITAN. Yes. But I have some problems with the levels of payments. Mr. Suits would apparently raise the family assistance to about \$3,600. Mr. Ulmer would also go to \$3,500.

Mr. ULMER. \$3,600, I will buy \$3,600.

Mr. LEVITAN. Which means that you would raise by more than half the basic guaranteed income proposed by FAP.

Mr. Ulmer said that would cost \$5 to \$10 billion. I believe it would cost twice or three times as much.

Chairman PROXMIRE. You say it would cost three times as much, to the extent that Mr. Suits is able to get \$10 billion and add it to the \$4 billion that has already been allocated.

Mr. LEVITAN. If you add \$10 billion to the \$4 or \$5 billion proposed by the administration, you would still have to double the amount to achieve a guaranteed annual income of \$3,600 for a family of four.

But there are other important problems. It is not a question of either/or. If we guarantee an income of \$3,600 for a family of four and we want to assign priority to training and job creation over income maintenance, then the question is at what level of wages are we going to guarantee jobs? And then if there is a guaranteed job, what kind of discipline will you have in the marketplace? Are we going to coerce people to work or not?

These are the types of problems that we will be facing in the next few years.

Chairman PROXMIRE. Would you say that this requires more study? As I understand it, the New Jersey experiment indicated that there was no disincentive for work in a program that was tried with over a thousand families.

Mr. LEVITAN. The conclusions that have been publicized on the basis of the New Jersey experiment are premature and based on highly fragmentary experience. I also believe that the cases are highly selected and their applicability to a national program is questionable.

Chairman PROXMIRE. Selected on the basis of presumably giving us a scientific example.

Mr. LEVITAN. I don't want to belabor the doubtful lessons of the New Jersey experiment, but it does indicate the relationship or the interdependence of work and relief. If we want to guarantee an annual income of \$3,600 for a family of four, then we must raise the minimum hourly wage to at least \$2 an hour to make it equivalent on a full-time basis with the guaranteed income.

Chairman PROXMIRE. This is on the assumption that only one member of a family of four would be working?

Mr. LEVITAN. That is right and it is a fair assumption. Millions of people are now working for less than \$2 an hour. A guaranteed income of \$3,600 per year would require changing not only the minimum wage system, but also our system of remuneration for work. Though compassion would indicate that we adopt the levels of guar-

anteed income suggested by Drs. Suits and Ulmer, realism would dictate that we start at the lower level—possibly the proposal by the administration of \$1,600 plus food stamps, which makes it equivalent to some \$2,400. Certainly a great deal of experimentation is necessary before broad policies can be designed to deal with the interdependence of work and income, whether you call it negative income tax or work-fare.

The New Jersey experiment is not enough. And I would hesitate to guarantee \$3,600, which leaves me open to charges of being heartless. I would rather be on the safe side and guarantee a lower level and at the same time provide for various experimentations with work incentives as income supplements.

Chairman PROXMIRE. It seems to me, Mr. Suits and Mr. Ulmer, this argument that we have just gotten from Mr. Levitan, is going to have a lot of persuasiveness with the Congress, for many reasons. We have a very tight budget. It is a new program. Yesterday we had a very competent witness with a lot of experience in the HEW—he is now head of the Urban Institute—who said that we had failed in our title I Secondary Education Act money in providing real help for poor children. He also said that the medicare program was pretty much of a failure; it had been of assistance primarily to doctors.

He overstated the case, perhaps, and perhaps he did so deliberately. At any rate, all of this indicates that we should have these programs carefully thought through and analyzed first. We should start perhaps on the modest level even though that might be somewhat cruel, or quite cruel, to people who are receiving welfare. But there is a logic in this more cautious approach in terms of having a better program with greater support that would not be discredited as the years go on.

Mr. LEVITAN. There is another thing, Senator, which I think we ought to bear in mind. That is, when we talk about the total welfare dollar, I would not put it in one basket of income maintenance. It has become fashionable among economists in the last few years to say give the poor money. We have other traditional arrangements to combat poverty and we should not discard the experiment which started under the Great Society, namely, the antipoverty efforts. I'm referring to Headstart, Legal Aid, and related efforts.

You mentioned Mr. Gorham's testimony about medicare and spending billions of dollars, which helped doctors, or other people. The anti-poverty programs have experimented with medical delivery systems and these ought to be extended. As we always talk about priorities—and this is the name of the game at these hearings—we have to decide where we should allocate additional dollars. I would not put it all in income maintenance. Instead, I would sustain and extend many of the programs that I just mentioned plus some that date back to the New Deal days, and certainly some that date back to the poverty efforts of the sixties. If the Elementary and Secondary Education Act is not working, then it is up to Congress to improve its operation, and not give up so easily, because many of these programs have worked or are now working.

Chairman PROXMIRE. I did not mean to give up on the program, I am just saying that there are programs that may be started too big—perhaps not, but a very competent witness argues that they have been, on the basis of thorough analysis, and we ought to be more cautious if possible in the future.

Mr. LEVITAN. The danger is that in search of simplistic solutions, we may put excessive reliance on income maintenance. For example, if we raise the income maintenance for a family of four, a woman with three children, from \$2,000 to \$3,000, that would seem to be a very large increase. But the additional thousand dollars would not enable the mother to go out and buy a better delivery of health services or a better school for her children. It is the Government's business to improve these services and provide for their delivery.

Chairman PROXMIRE. Mr. Suits?

Mr. SUITS. I certainly would prefer a family assistance program started at a lower level than none at all. But personally I am quite a conservative man. And I have a very high opinion of money. If somebody wanted to help me, if I were in need, I would much prefer to receive an income than to receive the services that he thought would be best for me. It has been my experience that one rarely sees eye to eye with other people on the question of need. And I would prefer that my assistance take the form of providing me with what I really need, namely, an income.

Chairman PROXMIRE. Here is why work is so important. I think everybody can agree that when somebody earns something it is up to them how they expend it, no matter how badly.

Mr. SUITS. That is exactly true.

Chairman PROXMIRE. When you have a grant program, now, it is somewhat different. You feel a responsibility not only toward the mother but toward the children and in most of these cases most of these people do have children.

Mr. SUITS. That is true, Senator. But it only seems to come up when we talk about poor people. We do not talk about the farmers that way, because we do not see that he gets his medical care or college education for his kids, we see that he gets his rather handsome stipend, and that is it. We do not feel that way about the defense contractors. They present the bill, and here is the overrun. We are sorry, but we pay it.

Now, here are our poorest people. One-third of whom, incidentally, are unable to work at all. To the extent that poverty is simply complete inability to work, we are talking foolishly when we talk about job incentives or anything else.

Another third, for one reason or another—very frequently health or family problems, sometimes the inability of the poor to get a job—work less than a full year.

And the remaining third, of course, are employed already, often at wages too low to enable them to make a living.

It seems to me that a family assistance program which would provide a base to which family earnings could then add is what we really need. We are not talking about a family assistance program which would in any sense replace earnings, but merely a family assistance program that puts a floor under the family living standard which then could be added to by further earnings.

There are few people in the United States above the poverty level who would exchange their right to productive employment at the wages that they now earn for the right to idleness at a mere \$3,600 a year. You would not be prepared to do that, I would not be prepared to do that, and hardly anybody else would be prepared to do that.

Mr. LEVITAN. But millions of people are working in the United States at less than \$3,600. If I were one of them, I would rather take the \$3,600 that Senator Proxmire would hand me every year than work for it.

Mr. SUITS. But that is not the choice that you are faced with. We will put you under this program, and some portion of your earnings will add to the \$3,600.

Chairman PROXMIRE. You would only get the payment, whether it is \$3,600, or \$2,000, or \$1,600, provided you worked if you were able to work.

Mr. LEVITAN. We are saying then that we would have to have certain mechanisms that would provide income supplements, and that these supplements would establish a much closer interrelationship between work and income maintenance. And this is what we need.

Chairman PROXMIRE. Along that line I would like to ask you, Mr. Ulmer, your very comprehensive program would require people to accept employment if they are able to work? I gather it is your philosophy that people should be required to work if they are able if they are to receive any sort of public assistance? Do you feel any income maintenance program should have a "work test"?

Mr. ULMER. Let me explain that fully. I do explain it elsewhere, but in this brief presentation I could not quite explain it. I would hope that we would get most people who are able, fully able to work, to participate in our society. I think they will be happier and we will be happier that way.

Chairman PROXMIRE. I think Congress would be happier and the taxpayers would be happier. This is a revolutionary concept. It may be a very good concept, but it is something that it will be very hard for Members of the House and the Senate to sell. Maybe they can sell it to students, but it would be very hard to sell it to some constituent who works and works like the dickens and gets a relatively modest income, unless you have a work requirement attached to it. It is just not practically possible, it seemed to me.

Mr. ULMER. I did not quite finish what I wanted to say about this. I was saying that I would hope that most people would be glad to accept job opportunities when they were there. I really believe that they would. But suppose we have an individual who simply, despite the fact that all the tests indicate he could do it, simply refuses to work, but still comes to the Government for financial assistance. Well, then, I would give him assistance, but I would not give him as much as I would give those who cooperate with the Government regulations. Those who cooperate with the Government regulations would get the full, generous \$3,600 for a family of four. Those who did not would get—

Chairman PROXMIRE. Then you would not have a work requirement. You would simply have a minimum income?

Mr. ULMER. I am not going back to a penal system here.

Chairman PROXMIRE. Not a penal system.

Mr. ULMER. Or workhouse system, I should say. I did not have that in mind. I do not think that is practical, moral or anything else. So I certainly would like to clear that up.

But I would like to clear something else up again. When estimates are made of costs in this connection—incidentally, I go along with you

about starting this in a modest way, I did not mean we would take it whole hog, you have to experiment with any kind of a social innovation—but when estimates are made of the cost of a program such as mine, not so much weight is given to the fact that this is a rather fundamental change in the way we have been doing things.

Now, this program of mine would offer jobs, would get jobs for everyone somehow within the government or outside it. And I think this would greatly reduce our welfare rolls.

Now, I realize that normally in our welfare rolls we have a lot of mother-headed households. But I would suggest on a biological premise that behind every one of those mother-headed households is a male, and he is usually hiding in the background, and the welfare people never see him, and we have learned recently that even our census takers do not see him. Now, if these unemployed males had jobs, I think that in a great many cases those families would be off welfare. That is a speculation, but it is at least as good as the contrary speculation which says that it would not be changed at all.

Chairman PROXMIRE. If you cannot find them—and in many cases these fellows are pretty slippery—would the mothers be encouraged to work if we provide day care for the children?

Mr. ULMER. On that elusive male, Senator, I was suggesting that the male was elusive because he was unemployed and he did not want to deprive his family of relief payments, but if he got his job he would show his face and even carry it high. That is the contrast that I was suggesting.

Chairman PROXMIRE. Would you encourage mothers to work if they wanted to do so?

Mr. ULMER. Very much so. I think in very many cases their children would be better off if they worked.

Chairman PROXMIRE. Is it possible to devise a comprehensive job training and income maintenance program which treats men and women equally?

Mr. ULMER. Men and women equally? I would hope so.

Chairman PROXMIRE. In your new administrative organization, the National Service Administration, one of the functions would be to guarantee jobs to everyone able to work. I gather you would support a program of guaranteed public employment whether or not this new agency is set up. It would be possible to move in this direction within our existing departmental organization would it not?

Mr. ULMER. You say we could move within our existing organization?

Chairman PROXMIRE. Yes.

Mr. ULMER. Well, you see, one of the things—

Chairman PROXMIRE. Senator Ribicoff, for instance, who is a member of this committee, and who is a very highly thought of Senator, has indicated that he is somewhat reluctant about the guaranteed income, that he is very much in favor of guaranteed work. And I think this reflects a common view, not only in Congress, but particularly in the working public.

Mr. ULMER. I am happy to hear that.

Chairman PROXMIRE. Do you say it would be possible without the kind of comprehensive program that you have set forth? I am not

saying that the way you set it forth is not the way to do it; maybe it is. I am just wondering if we could move ahead?

Mr. ULMER. Of course, we could move ahead as we stand now in many of the directions that I would advocate. But, Senator, I think coordination is so very important. If we take, for example, the matter of manpower training, we ought to have that tied to a real job, computerized job-information system. And we have not done this. I realize that we are moving in this direction now, but very modestly. I think we ought certainly to combine the two matters of job placement, job information—three matters—and manpower training. And so I would like to move in the direction of coordination. But experimentally—perhaps that is not so important, especially if we wanted to develop public work or public employment—I should say, we could certainly do it with the present setup in a variety of ways and should.

Chairman PROXMIER. Mr. Levitan, you stress the value of manpower programs as a solution to poverty and unemployment. You would expand these programs greatly when unemployment rises.

You stress the value of manpower programs in changing the skill composition of the labor force, thus easing labor bottlenecks and reducing inflation. For this purpose, don't we particularly need manpower programs when labor markets are tight and unemployment is low?

Can the same programs serve both these purposes? Do we need more manpower training when unemployment is low or when it is high? Do we need different types of training programs under different conditions?

Mr. LEVITAN. I think we need to adapt the manpower programs to fit the changing economic conditions. In a tight labor market we reply more on private employers. We offer them special inducements to hire workers whom they might otherwise reject because of discrimination, or because the workers are not as well qualified. This is what we have been doing under JOBS.

During a slack period, I think the emphasis should be much more on providing various forms of public employment. For instance, Operation Mainstream is a very good program in a slack labor market. As practiced during the past 5 years, it created jobs in rural areas where jobs were scarce and involved little capital investment. And this can be expanded during periods of recession. There are many jobs in public employment that can be filled in a recession.

Chairman PROXMIER. Let me read for you from our Joint Economic Committee Annual Report in which we said:

Since we believe that the manpower training programs should at all times be adequate to fill legitimate needs, we see no need for any automatic expansion tied to an arbitrary statistical indicator, such as some particular level of the unemployment rate. At any time when unemployment can be reduced and economic efficiency improved through job training, the programs should be expanded.

Mr. Levitan, do I take it that you do not agree with that statement?

Mr. LEVITAN. I thought I did; it depends upon the available manpower programs. We need a great deal of flexibility. That is why I favor decategorization of the manpower programs, whether under the Manpower Training Act or one of the related pending bills. Given greater flexibility, I think that in a tight labor market, inducements can

be offered to employers, private or public, to train people or prepare them for jobs that are available. During the period of a recession, you have the luxury of giving more basic education and longer training periods which would prepare trainees for jobs once the recession is over. Whether you need more funds during a period of recession than in a period of tight labor market is debatable and depends upon program priorities. But you would certainly have a different emphasis and different types of programs during difficult phases of the business cycle.

Chairman PROXMIRE. You are one of the country's outstanding experts on manpower training programs. And you imply that we should expand these programs. How fast is it possible to expand the programs, given the absolute limits and the supply of skilled personnel to staff the program?

Mr. LEVITAN. Well, it depends, Senator, for what you would expand them. Right now, as many people are being forced out of employment, and if their unemployment insurance should expire, then I would place emphasis on job creation and make provisions for income maintenance, and I would not be overly concerned about the training content of the jobs. Given present conditions, I would bolster manpower programs by no more than half a billion dollars on an annual basis—

Chairman PROXMIRE. You feel that is about as much as we can do, given the staffing?

Mr. LEVITAN. Right. If unemployment increases, and if it remains at a high level for any length of time, we would need additional funds for job creation regardless of what the training content is.

Chairman PROXMIRE. Mr. Ulmer, you have recently published an article in the *New Republic* which spells out your concept of a National Incomes Board in some detail. It would be a substantial bureaucracy, with regional offices around the country. Now, I am very much in sympathy with the goals that would be set for this Incomes Board. It would offer voluntary guidance as to the appropriate noninflationary pattern of price and income changes. It would work to eliminate inefficiencies both in the private and the public sectors of the economy. These are objectives the Joint Economic Committee has been advocating vigorously for a long time.

My question is: Why do you feel an independent Incomes Board would be the best method for achieving this? We have, unfortunately a host of examples of regulatory agencies that do not regulate. And this Board would only have the authority to negotiate and to seek publicity. Would the press give it publicity? The Lobbyists Registration Act was supposed to work through publicity. It is another ineffectual example of this approach.

Mr. ULMER. I agree that a look at some of our regulatory agencies is a very depressing experience. One of the reasons that I have more hope for this organization is that it would have a rather extensive membership from the standpoint of representation. I would certainly want to have members of the general public—consumers—on each of those Boards. Incidentally, you did mention a substantial bureaucracy. I think I have made it clear, certainly in the article, and I would like to do it here, that I did not have in mind an OPA. I do have in mind an organization that would look for trouble spots, not try to keep its eye on every price and wage in the economy. So it would not have to be that big.

Chairman PROXMIRE. How many members would these have?

Mr. ULMER. It would depend on what the Board was doing. But I would think three consumer members, three Government members, three—

Chairman PROXMIRE. You say you would have these around the country in different parts?

Mr. ULMER. Yes.

Chairman PROXMIRE. One in all the major cities in the country?

Mr. ULMER. I would certainly have one in every State, and then I would have perhaps smaller representatives within different parts of the States, such as big cities.

Chairman PROXMIRE. In California you might have three or four, and in New York you would have more than one?

Mr. ULMER. Yes, I think so.

Chairman PROXMIRE. If a voluntary approach is going to work at all, doesn't it have to have the full force of the presidential office behind it? This is what the Joint Economic Committee has advocated. The President should set guidelines. Mr. Reuss and I have introduced bills to accomplish this.

I just wonder if a voluntary approach which would not have presidential support in specific terms could accomplish very much. There is some question as to whether even that would work. Mr. Levitan challenges that. And he may be right.

Mr. ULMER. I would certainly support the kind of proposal that you and Congressman Reuss have made. And I do think there is room for different approaches to this problem. And really we will never know the answer as to which is the better way until we try them all, which we will never do. So we do have to make decisions on imperfect information. But I expected, of course, that the Board I was setting up would have presidential support, it would be part of the executive department, and he would lend his prestige. But the difficulty with depending upon the President, Senator, I think is that he is just one man, and this Council of Economic Advisers is just a small group of men, and under that system—

Chairman PROXMIRE. He is the man, though, he is just one man, but he has the power, we realize that more every day in Congress, not only in foreign policy but in domestic policy too.

Mr. ULMER. Yes, but what we had under jawboning was the selection of the most conspicuous industries, the most conspicuous unions, and the arm-twisting in those particular sectors.

Chairman PROXMIRE. It worked. He rolled back steel prices, he rolled back copper prices, he rolled back aluminum prices, he held back wage settlements in the steel and automobile industries.

Mr. ULMER. Just because it worked I would be for it. But I think another more embrasive organization could do even better. When you say it worked we are taking Mr. Okun's figures that in certain few selected industries the Government, the President, held the price increase down to 1.8 percent, I think, whereas under present circumstances it has gone up 6 percent. I think those are the figures.

Chairman PROXMIRE. Here is what bothers me. How can you expect to get any real publicity, real force, real public pressure if you do not have the President behind you? If you have a local board you set up—and I can imagine how the unions might react to it, and the cor-

porations would really get some amusement out of it, they really would not feel that these local fellows knew what they were talking about, they would not have the real prestige that only the President of the United States has—wouldn't it be disregarded as interference, and wouldn't newspapers and TV and radio stations just play it down and not report it at all?

Mr. ULMER. We would have to have a system for having these local boards come back to the National Board in Washington, and the National Board going back to the President as necessary. When you have recalcitrant unions or corporations or what, then it may be necessary. Now, perhaps after this was done four or five times you would not find such obstinacy in corporations or some unions. But I agree with you, you would have to have as a final resort the power and influence of the President. I would just like to extend that, however, and give him more eyes and arms than he now has.

Chairman PROXMIRE. Has anything like the National Service Administration been put into effect in other countries? And if so, can you tell us how it has worked and what the results have been in some of those countries? It is an imaginative, innovative idea, and I think we ought to give it every consideration.

Mr. ULMER. If you take the small country of Holland—I am very familiar with Holland—they do not have a complicated system like this, because the country is so small. You can tell from The Hague or Amsterdam what is happening everywhere else in the country; it is a short trip.

But even so they do have a system which is very much like the one I described in general, and in a way it works. When large corporations, now that they are used to the system in Holland, when large corporations plan to have a substantial price increase, they ordinarily go to the Government first and get its informal approval.

Now, it is not a matter of law, it is not mandatory, but that is the way it works, because they have been accustomed to working hand-in-hand with the Government, and they are all conscious of the fact that there is a real inflationary problem there. The unions also check in with the Government before making their demands.

Chairman PROXMIRE. They have incomes policy, but you are proposing something more comprehensive and more substantial. For example, at the end of your statement, you price out the public employment, manpower training, and welfare functions of the National Service Administration at from \$5 to \$10 billion.

Mr. ULMER. Yes.

Chairman PROXMIRE. It seems to me that the programs that would be combined under the new agency are spending far in excess of that amount. Isn't your estimate a rather conservative one, or how do you account for the difference?

Mr. ULMER. Where did you think the big expenditure was coming from, which segment? You see—I am sorry, guess I didn't get your question, Senator.

Chairman PROXMIRE. I say, you price out the public employment, manpower training, and welfare functions of the National Service Administration at from \$5 to \$10 billion. But it seems to me that the programs that would be combined under the new agency are spending far in excess of that amount. Isn't your estimate a rather conservative one, or how do you account for the difference?

Mr. ULMER. As I say, this estimate depends on how far we want to go at the beginning.

Chairman PROXMIRE. I was referring to your statement where you said, you propose integrating all Government activities associated with welfare, manpower training, other antipoverty measures, social security, and unemployment insurance in a single coordinated agency.

Mr. ULMER. Yes, sir. If we took, let us say, 1 percent of the labor force, that would be about 8 million or so individuals—what is the figure?

Mr. LEVITAN. 800,000.

Mr. ULMER. 800,000.

And let us say the cost of training or subsidizing these individuals is \$5,000 a person—and that is rather high, it is more than we are paying today, isn't it, Mr. Levitan?

Mr. LEVITAN. It is a fair amount. You want to pay the prevailing wage, not less.

Mr. ULMER. Just take that \$5,000, which would enable—certainly be a minimum wage plus an overhead cost—\$5,000 times 800,000 workers would come to \$5 billion.

Now, double that to make it 2 percent. That is \$8 billion. Appreciate the fact that we are reducing unemployment insurance when we do this. We are now paying \$4 billion per annum at this rate currently for unemployment insurance. We might be reducing this by \$3 billion, giving us a net expense of \$5 billion.

I am just suggesting the order of the magnitude of the figures involved here. I do not think that when we consider this as net expenses that the figure of \$10 billion is an unreasonable figure.

Now, \$5 billion is a figure that would hold for, let us say, an experimental start on this, but not the program in toto.

Mr. LEVITAN. But you see, Mr. Ulmer, there is a very real problem in this. When you say that you will include 1.6 million people in this kind of a program, and if you are going to guarantee, say, a \$2 an hour wage, then presumably all the millions in the country who make less than two dollars an hour will want to join this program. Under a guaranteed employment, as you suggest, you would have to provide for millions of people, or you would have to change the whole wage structure in the country.

Chairman PROXMIRE. In addition, you would have a highly inflationary situation, because as you have pointed out, Mr. Levitan, those who are now earning a dollar and a half or a dollar twenty-five, or whatever—and if you are not under Interstate Commerce you can earn less than that, and many millions of people do—as those wages automatically go up, your wage costs would go up and your prices would have to go up in many other industries.

Mr. ULMER. Yes, except I would not accept your premise on what the Federal Government would be paying. On its own jobs it would be paying a minimum wage for the unskilled, and a going wage for others so that only some of those people who are below a minimum wage could have any possible advantage in seeking NASAD employment. And I do not think there are so many breadwinners in this category who are getting wages below the minimum.

Mr. LEVITAN. I do not have the figures now, but 2 years ago in the Labor Department figures, there were 10 million persons in the United States who were making less than \$1.60 an hour.

Mr. ULMER. Many of these are no doubt members of multi-job families. But more important, this organization is not operating on that kind of, as I see it, that kind of economically suicidal basis, because I think the picture you just drew is kind of suicidal.

Chairman PROXMIRE. It would be true, Mr. Ulmer, that a large number of these people would be housewives working part time and not supporting the family, supplementing their income. And teenagers would be working part time in school. And there are others in this category who may or may not fall into your guaranteed wage category. I take it you would guarantee a job to everybody who needed a job to support themselves and their families. Perhaps you would not necessarily guarantee a job to those who simply wanted it to supplement their earnings—they are going to get it, and this would help the economy, but you would not guarantee that—or would you?

Mr. ULMER. Senator, the organization as I saw it would operate this way. When an individual came to it for aid it would find out what the individual could do. Now, if an individual came to it for aid because he was earning less than the National Service Administration was paying, why the National Services Administration would say, why of course we will take care of you. Keep your job, and we will pay the difference between your job, what you and perhaps others in your family are earning, and that poverty level minimum that the Government is designing to bring every family up to.

Chairman PROXMIRE. Obviously with that kind of an approach you have a problem at times with increasing aggregate demand rather sharply. I am not sure I understand your proposed system of refunding annual taxes or compulsory loans as a way of balancing out so that you will always have a situation where you minimize your inflation, and you have your unemployment also minimized.

Mr. ULMER. I would like to come to that. But, Senator, did you understand what I had in mind here? The National Service Administration really would not be inflating wages.

Chairman PROXMIRE. I understand. In other words, if somebody were working in a department store in Madison, Wis., and making a dollar an hour, they would get another dollar an hour from National Service Organization, perhaps, or 80 cents, they would not get the full payment from them, they would just get a supplement?

Mr. ULMER. That is correct—a supplement, as required, to bring the family up to the poverty level margin.

Now, on the refundable tax idea, the Congress would have to appropriate a sum that the fund would start out with, and then with this device our fiscal policies for stabilization could operate much more flexibly, and without interfering with business and household planning so much.

We sometimes find it necessary to raise taxes, not because we have to finance public services, but because we have to dampen demand. Instead of doing that we would impose a refundable tax. This operates, as I think I have described, as a refundable—as a compulsory loan in effect, because the individual taxpayer would receive this money back with interest at least in three years and maybe earlier.

Similarly, when the Government wanted to expand purchasing power and found it necessary to do that, it would order loan redemptions before the 3 years were up at any time.

So there would be payments into and out of this fund in line with the stabilization needs of the economy. And accordingly—

Chairman PROXMIRE. This kind of thing is really new, isn't it? Has this been tried in any country? You spoke about Holland and with an income policy, but has any country ever had anything like this?

Mr. ULMER. Not as a stabilization device. In England and Canada they did use a program such as this in part, in very modest part, to pay for the expenses of World War II. So that they did impose refundable taxes that were supposed to be refunded, and were.

Chairman PROXMIRE. I am talking about the whole comprehensive program that you have suggested.

Mr. ULMER. Absolutely not. There is nothing exactly like that anywhere. There are parts of this program scattered about.

Chairman PROXMIRE. Do you have ideas as to how this could be put into effect, without making a total national program, on a pilot basis?

Mr. ULMER. Yes. I think you have supported a bill for informal price control. I think that we definitely need some action such as that at this time. And this is important to take care of cost-push inflation, and so on. This is perhaps the simplest thing from an administrative point of view to do. For the refundable tax idea, yes, I think we could move in on this in a modest way, so that part of the next tax increase might be refundable.

And we could set up a stabilization trust fund to serve as a pilot for this program once it was in effect. Similarly with public employment. As you were earlier remarking, we would move in on this with our present facilities, and without establishing a new organization that would do this on a grand scale as in my plan; we could do it on a much more experimental and modest scale now.

Chairman PROXMIRE. I just have a couple more questions I would like to ask you, Mr. Suits. We touched on this before, but I would like to ask you expressly.

I understand that SEC-Commerce just released today the new projections by business for plant and equipment spending in 1970. These new estimates show that businessmen now expect to spend this year about 7.8 percent more than in 1969. Last March they projected fixed capital spending for 1970 at a level more than 10 percent higher than in 1969. Does this scaling down of capital spending mean more unemployment? Further proof that we are in a recession? Or, as the administration will probably say, proof that its "game plan" to combat inflation is proceeding on schedule?

Mr. SUITS. Or perhaps all three. It is perfectly clear that scaling down investment expenditures is going to further cool off the economy, that cooling off the economy means increased unemployment, that increased unemployment as nearly as I understand it seems to be fulfilling the administration's "game plan," so that perhaps all three of these are correct. Personally, as I said earlier, it seems to me that we should stop playing see-saw with the economy in this way and address ourselves directly to the problem of maintaining a high level of employment and then directly stabilizing prices.

To the extent that a decline in plant and equipment spending is going to mean not only lower jobs today, but will mean a lower

growth in potential output of our economy for tomorrow, it is going to be a poor development, a bad development.

Chairman PROXMIRE. At the same time we have had a long and enormous expansion in business and investment plant equipment. In 1964 it went up about 15 or 16 percent. The same thing in 1965. In 1966, it stayed at that high level in 1967, and it took off again in 1968, and so forth. And so it is an increase on top of a very, very high level, and at a time when we have substantial unused capacity. People say they do not like those statistics, but we are perfectly happy and willing to improve those statistics if we can and impress them on it, and say, well, I guess they are the best we have. Does it make sense for business to continue to add to idle plant when they are operating at less than 80 percent of capacity?

Mr. SUITS. Of course not, except that 80 percent operating rate or any operating rate is not evenly distributed over the economy, and there are certainly areas where we very drastically need modernization.

Chairman PROXMIRE. A few areas like utilities, it is hard to think of many others that need the kind of expansion that they seem to be getting, for example, in automobiles and steel and other areas.

Mr. SUITS. I suspect, however, that business firms rarely invest in new plant and equipment, except where they feel that it will be profitable in the long run. And from that point of view, the need must be there.

Now, it is, of course, true that our own current policy has been contributing to a maldistribution or misallocation of our investable funds. For example, the rising rate of investment in plant and equipment has obviously been partly at the expense of a declining rate of increase in housing, as a matter of fact, a declining absolute output of housing at a time when we have announced a housing target of two and a half million housing units a year.

Chairman PROXMIRE. With the worst housing shortage in years.

Mr. SUITS. We have a target of over two and a half million houses a year.

Chairman PROXMIRE. I am not sure that this is going to be realized, if we begin to cut back in our capital spending. There is now growing unemployment in the construction trade. That is one skilled area where you have it.

Mr. SUITS. That is right. But if we translate a slowing down in investment expenditures in plant and equipment into an easier money policy and lower interest rates, there will be more credit available for mortgages, and the housing industry—

Chairman PROXMIRE. Doesn't this suggest that we could have a pretty serious recession problem in the next few years, inasmuch as we have built up this enormous plant, we may possibly have over-expanded our capital plant, and we could have a capital goods recess? This has been such an important accelerator, as you gentlemen pointed out earlier, in our economy historically, if we cannot expect much stimulation in that area, wouldn't it seem that we might have some serious recessionary problems because of that?

Mr. SUITS. I would prefer to put it the other way around, that is, to the degree that we have satisfied our need for capital, it will release men and women for other occupations, for house-building, for one

thing, to look at one of our crying needs. We have at the present time in the United States somewhat fewer than 85 medical schools, I believe, 82 or 83.

Chairman PROXMIRE. These things do not happen automatically, they only happen if we get our monetary policy under control and make our funds available in these areas.

Mr. SUITS. That is right.

Chairman PROXMIRE. In the housing area, as long as you have mortgages at 9 percent you are not going to build houses.

Mr. SUITS. That is right. We can release resources, but if you do not make any provision for those resources, they will simply remain unemployed. And to that extent we will have a very serious longrun recession problem. It would be a tragic mistake for us to do that. And I think it is politically unfeasible. I think it is politically unthinkable that this would develop, when the power to redirect these released resources into more fruitful employment is certainly ours.

Chairman PROXMIRE. Do you see any sign of that happening, redirecting our resources?

Mr. SUITS. I am afraid I do not.

Chairman PROXMIRE. That is what concerns me very much at this time.

Mr. SUITS. Yes, indeed. We have some small indication. For example, the family assistance program is a redirection of resources to put them at the disposal of poorer members of the community. And the prospective tax reductions which have already been legislated for 1971 and 1972 will put some of these resources in the hands of the taxpayer. If we ease our monetary policy—and there is evidence that this is now being done—we will release some of these resources for use in the construction industry. And then of course we have a number of programs that have already been congressionally approved which are operating at rates on appropriations that are below the intended operating rate. There is about \$6 or \$7 billion of those which could be funded in the future. So, I think that there is no lack of place to put the resources that we find at our disposal.

The problem rather is on the other foot, to get the resources mobilized out of the existing uses.

Chairman PROXMIRE. Gentlemen, thank you very, very much. This has been a most helpful panel. And we deeply appreciate the excellent job that all of you have done.

Tomorrow we will reconvene in this room to hear three distinguished experts on military spending policy at 10 o'clock in the morning.

(Whereupon, at 12:19 p.m., the subcommittee recessed, to reconvene the following morning, at 10 a.m., Friday, June 5, 1970.)

## CHANGING NATIONAL PRIORITIES

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FRIDAY, JUNE 5, 1970

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMY IN GOVERNMENT  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The Subcommittee on Economy in Government met, pursuant to recess, at 10 a.m., in room G-308, New Senate Office Building, Hon. William Proxmire (chairman of the subcommittee) presiding.

Present: Senators Proxmire and Percy; and Representative Brown.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, economist; and Douglas C. Frechtling, economist for the minority.

Chairman PROXMIRE. The subcommittee will come to order.

Today we shift the emphasis of the hearings on "Changing National Priorities" from the civilian to the military side of the budget. Civilian and military spending, of course, are not unrelated. All Federal programs are funded from the same ultimate source—the taxpayer. Federal funds used for one purpose are no longer available for another. If there is one unhappy lesson all of us have learned in the past several years, it is that the Nation cannot have all the guns and butter it wants. The question is, where do we draw the line and how far can analysis take us in our search for balance between civilian and military expenditures.

There is only one legitimate purpose for a military establishment: the common defense. This purpose is set out in the Constitution and the power of providing for the national defense is placed in the Congress by that document. It is therefore proper and necessary for Congress to take a strong interest in all questions concerning our national security. That interest should never be merely academic or moot, for the power to provide for the national defense includes the responsibility to make national defense policy.

This subcommittee, however, does not make decisions, about civilian or military budgets. Our purpose is to study the economic impact of both kinds of Federal spending and, more specifically, to investigate whether it is possible to achieve economy in government. To do this we have attempted to employ economic analysis and other tools of national thought. The military side of the budget should be as susceptible of analysis as any other—but is it?

We have three most distinguished defense analysts before us this morning, each of whom has performed valuable service in positions of high responsibility with the Federal Government.

Dr. William W. Kaufmann has been a consultant to the Department of Defense, the Rand Corp., the Hudson Institute, and the Institute for Defense Analyses. He was a member of the Air Force Science Advisory Board from 1961 to 1963, and in 1967 was given the Distinguished Public Service Award by the Department of Defense.

Dr. George W. Rathjens was on the staff of the Weapons Systems Evaluation Group in the Department of Defense, from 1953 to 1958; was a Special Assistant to President Eisenhower for Science and Technology, from 1959 to 1960; was Deputy Assistant Director of the U.S. Arms Control and Disarmament Agency, from 1962 to 1964; and was the Director of the Weapons Systems Evaluation Division at the Institute for Defense Analyses in 1965.

Dr. Timothy W. Stanley was a member of the White House staff from 1957 to 1959 and has served in various capacities on the staffs of the last six Secretaries of Defense. In the summer of 1969, he returned from Europe where he served for over 4 years at the United States Mission to NATO, as the Assistant to the Secretary of Defense for NATO force planning and Defense Adviser to the United States mission. He held the personal rank of Minister and was awarded the Defense Department's Distinguished Civilian Service Medal.

We will proceed from left to right and then have a question and answer period.

Dr. Kaufmann, you go right ahead.

**STATEMENT OF WILLIAM W. KAUFMANN, PROFESSOR OF POLITICAL SCIENCE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, PAST CONSULTANT TO THE DEPARTMENT OF DEFENSE, THE RAND CORP., THE HUDSON INSTITUTE, AND THE INSTITUTE FOR DEFENSE ANALYSES, AND PAST MEMBER OF THE AIR FORCE SCIENCE ADVISORY BOARD**

Mr. KAUFMANN. Mr. Chairman, it is an honor to participate a second time in these hearings and to join the distinguished company of my friends and colleagues, Professors Rathjens and Stanley.

My prepared statement summarizes the results of the work that a group of us have been doing at the Brookings Institution on current and future defense budgets. The work itself has leaned heavily on the hearings conducted a year ago by this subcommittee.

Our results have already been reported to you by Professor Schultze. To repeat them, they are first of all—

Chairman PROXMIRE. I might just interrupt to say that this is a substantial prepared statement, a fine prepared statement. And without objection the entire prepared statement, including the appendix, will be printed in full in the record.

And I presume that you will be able to abbreviate it and highlight it.

Mr. KAUFMANN. Yes, sir.

**DEFENSE BUDGET FOR FISCAL YEAR 1971**

To repeat these results, they are: First of all, the defense budget for fiscal year 1971, according to our estimates, contains about \$11

billion for the war in Southeast Asia, on the order of \$18 billion for the strategic nuclear forces, and around \$44 billion for the baseline general purposes forces.

We estimate that of the \$44 billion for the general purposes forces about \$19 billion are allocated to the fulfillment of our NATO commitments, over \$16 billion go to preparations for an Asian contingency, about \$1.3 billion to the capabilities for a minor contingency, and around \$7.3 billion to our strategic reserve, and research and development for the general purposes forces.

#### POSTWAR SPENDING

We also estimate that, assuming an almost complete U.S. disengagement from Southeast Asia by the end of fiscal year 1972, that it should be possible to contemplate postwar defense budgets again in 1971 dollars ranging from a low of about \$45 billion to a high of \$77 billion. By 1975, as Professor Schultze has indicated to you, the low defense budget would permit a fiscal dividend of about \$44 billion. The high budget would mean discretionary resources of only around \$6 billion.

#### DEFENSE ANALYSIS

I will be happy to discuss these defense budgets with you in more detail. Here, however, I would like to add only that, while there certainly will be disagreements with both our methodology and our findings, I would like to think that we have demonstrated over the past year the following:

First, the defense budget is not an impenetrable mystery.

Second, it need not be regarded as an uncontrollable, in the same sense as social security or medicare.

Third, we can get an analytical handle on the major forces and programs in the budget for the purposes of debate and change. Neither unthinking decreases nor unquestioning increases need to be the order of the day. Systematic and informed choices we believe are possible.

To the extent that our work supports these conclusions it owes a great deal to the President's foreign policy statement, Secretary Laird's defense posture statement, and, above all, the hearings of the Congress. Indeed, in large measure because of the initiatives taken by this subcommittee, I believe that we are making important progress toward a more systematic discussion of defense spending and other national priorities.

#### ADDITIONAL KNOWLEDGE NEEDED

I hasten to add, however, that, while I recognize the continuing need for security in defense matters, there remain a number of ways in which we can improve our understanding and analysis of defense issues. For example, in order to continue improving our analysis we still need the following kinds of data and information:

First, a good deal more discussion of how we should translate foreign policy interests, commitments and objectives into the specifics of missiles, divisions, air wings and naval vessels.

Second, more detailed and better organized cost data about weapons systems and mission-oriented programs, including more detailed selected acquisition reports, which I hope Senator Stennis will continue to issue.

Third, a concerted effort to relate the very large overhead costs of the defense establishment to specific combat and combat-support forces so that we can obtain a better idea of how changes in the latter will affect the former.

Fourth, as much data as security permits on weapons systems reliability and effectiveness, particularly as we move to the acquisition of such expensive and technologically demanding weapons systems as Safeguard, ULMS, Cheyenne, the F-14, and the F-15.

#### OPPORTUNITY COSTS OF DEFENSE

Finally, to move out of my own field, we also need descriptions of specific domestic programs, along with their targets, estimated long-term costs, and expected effectiveness. We need them so that we can obtain a better appreciation of the opportunity costs that we incur as we increase or decrease the margin of our defense expenditures.

That concludes my summary statement, Mr. Chairman. Thank you for your consideration.

Chairman PROXMIRE. Thank you very much, Mr. Kaufmann.

Your prepared statement will be placed in the record at this point. (The prepared statement of Mr. Kaufmann follows:)

#### PREPARED STATEMENT OF WILLIAM W. KAUFMANN

##### I. INTRODUCTION

When we talk about defense policy and national priorities, we usually mean changing the allocation of our resources among a wide range of public and private activities rather than completely abolishing some of those activities. In present circumstances, we tend to mean giving greater emphasis to domestic programs than we have done in the past. That, in turn, implies that we must increase taxes, take resources away from other programs, simply rely on increased revenues from a growing economy for new initiatives, or take some combination of these steps.

Increased taxation does not look like a plausible option in the present mood of the nation. In fact, we appear to be going in the opposite direction with the tax reform bill of 1969 and the expiration of the surcharge. We are left, therefore, with the growth of federal revenues (as a function of expanding GNP) and a reallocation of those revenues as the principal means by which we can change our current priorities. The defense budget, always a matter of keen interest, becomes the object of particular scrutiny in that context. Few people regard it as an uncontrollable in the same sense as Social Security or Medicare, and many consider it excessively large for the international objectives that they think we should have in mind.

What is more, it can easily be demonstrated that the size of the discretionary resources (or the fiscal dividend, if you prefer) available to the President for domestic programs is highly sensitive to the level of defense spending. During the past year, for example, the Brookings Institution has looked at a number of different defense budgets within the context of expected federal revenues and other anticipated outlays, and—assuming an end to the war in Indochina—has found it quite plausible to conceive of defense budgets and discretionary resources in the following range by FY 1975:

[In billions of dollars]

Defense budgets in fiscal year 1975 <sup>1</sup>		Discretionary resources in fiscal year 1975
In 1971 prices	In 1975 prices	In 1975 prices
77	92	6
62	75	23
48	58	40
45	54	44

<sup>1</sup> Assuming a complete U.S. withdrawal from Southeast Asia.

It is easy enough, of course, to invent defense budgets which differ substantially from the one we have now. But how do we test their respective merits and choose among them? And once having chosen, how do we make our preference politically acceptable?

## II. POLITICS AND PLANNING

There is a tendency, in trying to provide answers, to mix up the two questions, and to give simplistic and extreme answers to them. At one extreme, for example, the defense budget is described as the product of negotiations and bargains among interest groups whose objectives and programs are almost exclusively determined by their organizational affiliations. At the other extreme, the budget is seen as resulting from a highly orderly process in which objective analysis by disinterested public servants plays the dominant role. As usual, the truth seems to lie somewhere between these extremes.

A careful description of the existing political process would probably show that organizational interests and bargains are indeed important contributors to the budgetary outcome. At the same time, it would be hard to deny that a rather primitive art called force planning exists; it would be equally difficult to assert that the art has played no part in budgetary choices. What tends to be at issue, usually, is not whether systematic analysis exists and should play a major role in determining budgetary outcomes, but whether it now does or can do so in the future.

Here, because of limitations in time and space, my discussion will focus on the intellectual basis for choosing from among the many defense options available to us. How our choices can be driven through the jungle of the political system, or how that system can be made more receptive to systematic analysis and choice, must await another occasion.

## III. CURRENT DEFENSE BUDGETS AND VIETNAM

In order to start our discussion somewhere, let us consider defense outlays for FY 1970 and FY 1971 as they relate to the war in Southeast Asia, to our strategic nuclear forces, and to our general purpose forces. This breakdown gives us the following figures (in billions of current dollars):

[In billions of dollars]

Type of outlay	Fiscal year 1970	Fiscal year 1971
War in Southeast Asia.....	17	11
Strategic nuclear forces.....	17	18
General-purpose forces.....	43	44
Total.....	77	73

This particular display of defense expenditures serves several purposes. It defines three major categories where we can exercise choice. It tells us what we are spending in these categories. And it provides a basis for measuring and comparing various types of change.

The costs of the war in Southeast Asia are incremental costs: that is, outlays over and above what we have been spending for our peacetime establishment and its activities. These outlays reflect a decline from the peak incremental cost of about \$23 billion (rather than \$29-to-30 billion), which occurred during FY 1968.

The outlays for the strategic nuclear forces and general purpose forces (or limited war forces, if you prefer) constitute the costs of our baseline force: that is, what we have regarded during roughly the past decade as necessary in peacetime for the maintenance of U.S. interests and commitments. These baseline expenditures amount to about \$60 billion in FY 1970 and \$62 billion in FY 1971. They would translate to around \$50 billion in 1965 dollars, or what we were spending on our defense establishment prior to the major expansion of our involvement in Southeast Asia.

The baseline force, in current prices, absorbs 78 per cent of our defense outlays. The cost of the war, on the other hand, represents 22 per cent of the total, and, at least until recently, its share has been declining. In principle, we can alter the rate at which we withdraw from Southeast Asia. This would affect the speed with which we recover the remaining costs of the war. But despite the overarching importance of the conflict to American society, we have to recognize that there is a very definite limit to the amount of resources that its termination will yield, and that the total "dividend" will be more than absorbed by impending tax cuts and the growth in the costs of the so-called uncontrollable domestic programs. It is estimated that the tax reform bill alone will result in a loss of Federal revenues of \$8 billion by FY 1975. Social Security costs, on the other hand, are likely to increase by \$12 billion over the next five years. Thus, if we want to consider really major new initiatives on the domestic front, it appears that we must look for resources primarily in economic growth and the baseline defense budget.

#### IV. ANALYSES OF THE BASELINE DEFENSE BUDGET

Efforts to come to grips with the baseline defense budget can best be made by means of macrostrategic and microstrategic analysis, although the distinction between the two types is somewhat artificial, particularly when it comes to the strategic nuclear forces. The macrostrategic approach involves the formulation of objectives, measures of effectiveness, and aggregate force levels based on capabilities already in the inventory. The microstrategic approach deals with the fine-tuning of force size and composition by means of weapon system comparisons. The results of these comparisons purport to express the least-cost method of achieving prescribed levels of effectiveness. In the process, the analysis may also consider the marginal effects of increases and decreases in force levels. Obviously, one type of analysis can very quickly lead into the other type.

#### V. THE STRATEGIC NUCLEAR FORCES

Macrostrategic analysis provides many of the critical assumptions that underlie the current baseline force. For example, the baseline budget for our strategic nuclear capabilities is very much a function of the following assumptions:

1. Our strategic offensive forces, in a second strike, should be capable of inflicting a level of assured destruction on the Soviet Union defined as 20-to-25 per cent of the population and at least 50 per cent of Soviet industry.
2. We should maintain a modest capability to follow options other than assured destruction, including the ability to limit damage to the United States, should strategic deterrence somehow fail. Such a capability should take the form of anti-bomber defenses, a thin area-wide ABM defense, some offensive forces capable of destroying fixed hard targets, and a cheap civil defense program.
3. We should operate three separate forces—land-based missiles, sea-based missiles, and bombers—each capable, by itself, of inflicting the requisite level of assured destruction: all of this as insurance against the possibility that one or even two of these forces might collapse and fail to respond after a Soviet first strike.

The current baseline strategic nuclear forces are rather widely considered to be conservatively designed because of these and other assumptions. An even more conservative posture might involve raising the level of assured destruction and placing much heavier emphasis on damage-limiting capabilities such as a major deployment of counterforce missiles, fast mop-up bombers, the ABM, and large-scale civil defense. A posture of this character, including extensive modernization programs for bombers, missiles, and anti-bomber defenses, could raise the total budget for the strategic nuclear forces from about \$18 billion in FY 1971 to something on the order of \$24 billion a year. It might also induce Soviet reactions of such magnitude that they would nullify the additional security that we had expected to gain.

Even without SALT, but more probably with it, we might adopt another major variant of the current strategic posture. This variant would give us a less conservative capability. For example, we might reduce the level of assured destruction that we require to 10-to-15 per cent (which would still mean more than 20 million fatalities in the space of 24 hours). We might also give up our now-modest efforts to retain a counterforce damage-limiting capability. And we could reduce the attempt to maintain all three of our deterrent forces in a highly survivable condition. This posture would permit us to phase out some of our current offensive and defensive forces as well as cancel or reduce expenditures on newer systems that we are now developing or deploying. The resulting budget for the strategic nuclear forces, associated capabilities, R&D, and support might fall from \$18 billion to \$14 billion a year.

#### VI. THE GENERAL PURPOSES FORCES

The costs of the general purpose forces are comparably sensitive to changes in a series of macrostrategic assumptions. Thus, the current baseline forces and the budget for them, are sensitive to changes in the following premises:

1. The Soviet Union and China are basically hostile and ambitious powers who might act separately but more or less simultaneously to satisfy their ambitions at the expense of our interests.
2. We must therefore be able, in conjunction with our allies, simultaneously to meet conventional attacks in Europe and Asia, and deal with a minor contingency elsewhere.
3. We must have on hand the active forces and the strategic mobility necessary to deploy rapidly to threatened regions and to establish forward defenses sufficient to meet the early phases of an attack.
4. We must also maintain the forces, equipment, and supplies necessary to reinforce our deployed forces and sustain them in combat along protected lines of communication for as long as 3-to-6 months.

Simply to give one example of the impact of these assumptions, consider the costs, in 1971 dollars, of preparing to deal simultaneously with two major contingencies and one minor contingency. These costs are approximately as follows:

<i>Contingency</i>	<i>Annual cost in billions of 1971 dollars</i>
NATO Europe-----	\$20.9
Asia (Korea or Southeast Asia)-----	17.3
Western Hemisphere (minor)-----	1.3
Strategic reserve-----	4.5
Total-----	44.0

To the extent that these figures have merit, a fairly literal interpretation of the President's Guam doctrine could result in decreasing the costs of the Asian contingency from \$17.3 billion to about \$7.3 billion. In other words, a change in the assumptions about the contingencies alone could reduce the costs of the general purpose forces from \$44 billion to \$34 billion a year (in 1971 prices).

The current baseline forces are frequently characterized as underdesigned for the three prototype contingencies. A much more conservative design could result in the addition of active land forces, tactical air wings, and attack carriers, along with increased numbers of the next generation of more expensive weapon systems. Such changes might raise the budget for the baseline general purpose forces from \$44 billion to \$54 billion a year in 1971 prices.

#### VII. COST-EFFECTIVENESS

In the past, it has been possible to vary defense costs similarly, if less dramatically, as a function of microstrategic analysis. Now, however, the impact of microstrategic choices is proving to be larger in scale as weapon systems become increasingly complex technologically, and as their procurement and operation and maintenance costs climb. The conventional wisdom has it that weapon system choices should be governed by technological advance. Not only must we buy the newest and most sophisticated systems; we must also replace the older systems on a one-for-one basis, quite apart from such factors as the capabilities of potential adversaries, increases in costs, and supposed increases in unit effectiveness.

Frequently, however, it turns out that for a budget of, let us say, a billion dollars, it makes more sense from the standpoint of effectiveness to buy 1,000

units of relatively old-fashioned system A, costing a million dollars apiece, rather than 500 units of system B, costing \$2 million apiece. Of course, there are those who would say, if that is the case, spend \$2 billion and buy 1,000 units of system B. But for \$2 billion we could buy 2,000 units of system A, which still might leave us better off. Indeed, system B—however glamorous and sophisticated—would have to be at least twice as effective as system A before it would be worth buying as a substitute. More often than not, however, we fail to achieve such advances in effectiveness as we move from one system to the next. In any event, it is frequently the case that quality is not an adequate substitute for quantity where weapon systems are concerned. As a consequence, we may prefer large numbers of relatively simple, reliable systems to much smaller numbers of their technologically advanced successors which promise a great deal but are so often unable to deliver on the promise for some time to come because they start off being low in reliability, only marginally better in other significant parameters of effectiveness, or both.

Many systems under development, or actually in the procurement process, are at issue on precisely these grounds. The following table lists a number of such weapon systems for the general purpose forces, along with the New Obligational Authority (NOA) requested for FY 1971, their currently estimated procurement costs, and an estimate of their annual operating costs:

[Costs in billions of current dollars]

Weapon system	Fiscal year 1971 new obligational authority	Estimated procurement costs	Estimated annual operating costs
SAM-D air defense.....	\$0.09	\$3.4	\$0.5
MBT-70 tanks.....	.08	2.0	.3
TOW antitank missiles.....	.10	1.0	.1
F-15 aircraft.....	.40	7.7	1.1
F-111 aircraft.....	.50	.5	.1
F-14 aircraft.....	.80	8.3	1.2
Phoenix missiles.....	.10	1.5	.2
S-3 aircraft.....	.30	3.2	.4
SSN-688 attack submarines.....	.50	4.5	.6
DLGN-38 frigates.....	.20	4.9	.7
CVAN-70 attack carrier.....	.15	.6	.1
DD-963 destroyers.....	.50	4.2	.6
Total.....	3.72	41.8	5.9

Let us assume rather arbitrarily that the procurement costs of these systems will be spread evenly over a 10-year period, and that we will incur their total annual operating costs for only three of the ten years. The resulting average annual systems costs might then come to around \$6 billion for the 12 systems listed. Thus, even if we were to substitute for them new systems about half as expensive to procure and operate, we might still be able to save, on the average, about \$3 billion a year during this ten-year period. Alternatively, for the currently estimated totals, we could have twice as many of the cheaper systems.

### VIII. SOME DEFENSE OPTIONS

With these kinds of macrostrategic and microstrategic calculations at hand, it becomes possible to construct a variety of defense budgets, each with a particular rationale and justification. Thus, we could continue to maintain the pre-Vietnam baseline force as one option. This would mean a fairly conservative posture for the strategic nuclear forces and the general purpose forces and a good deal of latitude for their modernization in the face of obsolescing systems and evolving threats. Such a posture would cost about \$62 billion in 1971 prices and \$75 billion in 1975 prices, assuming a U.S. withdrawal from Vietnam. Around \$23 billion in discretionary resources would become available by FY 1975 as a result of defense spending at a level that was considered necessary between 1961 and 1965.

Another option would be to strive for a major counterforce damage-limiting capability in our strategic nuclear forces (despite the strong probability of Soviet countermeasures), along with general purpose forces designed to give us increased confidence of being able to cope simultaneously with major European and Asian conflicts. This would combine the strategic package of \$24 billion with the general purpose forces package of \$53 billion for a total budget of \$77 billion

in 1971 prices, and \$92 billion in 1975 prices, again assuming a full U.S. withdrawal from Southeast Asia. Defense outlays at this level would result in discretionary resources of about \$6 billion. That is, with estimated revenues, we would not be able fully to fund existing and currently proposed domestic programs, much less embark on major new initiatives.

Still a third option would involve the adoption of a less flexible and higher-risk posture with respect to both the strategic nuclear and the general purpose forces. As indicated earlier, the strategic forces would be designed for the assured destruction mission only, planning would be done less conservatively than is now the case, and the required levels of damage to the Soviet Union would be lowered. The general purpose forces would no longer be programmed for two major contingencies simultaneously and a substantial portion of the capabilities oriented toward Asia would be demobilized. The resulting strategic and general purpose packages would cost about \$14 billion and \$34 billion respectively, for a total of \$48 billion (without Vietnam) in 1971 prices and around \$58 billion in 1975 prices. This budget, which would be \$17 billion below the pre-Vietnam baseline budget (in 1975 prices), would enable the President to dispose of discretionary resources on the order of \$40 billion by FY 1975.

If, in addition, we became less mesmerized by the latest defense technology and exercised greater discipline at the microstrategic level than we now do, we might bring this low budget down by another \$3 billion or more without any loss of combat effectiveness. This would mean a post-Vietnam budget of \$45 billion in 1971 prices and about \$54 billion in 1975 prices. The resulting fiscal dividend by 1975 would amount to \$44 billion, a figure which would come rather close to satisfying most domestic demands for resources as they are currently formulated.

#### IX. RISK, INSURANCE, AND CHOICE

Other more or less conservative and flexible defense postures could obviously be generated. It seems reasonable to argue, however, that post-Vietnam budgets in the range of \$45-to-\$77 billion (in 1971 prices) would be compatible with a major role for the United States in world affairs. Even at the low end of the range, moreover, significant resources would remain available to counter qualitative and quantitative changes in potential threats. Presumably our choice would not be determined by such slogans as whether we were seeking to become isolationists or world policemen, since neither budget would seriously accord with either policy. Rather, we would probably want to be concerned with the specific definition of our interests, the degree of confidence we want to have in maintaining those interests against various possible threats, how our military posture might interact with that of allies and potential enemies, and what domestic opportunities we would forego as we moved toward higher and more conservative defense budgets.

The choice of an insurance policy, in defense as in other areas, is always difficult. But reasonably well-tailored policies can be designed to suit the wishes and resources of the national customer. There are, admittedly, a number of insurance salesmen on the premises who have their own special views about preferred companies and appropriate premiums. No doubt their pressures strongly affect the final choice. Still and all, before the choices are made, it usually proves more desirable to have some understanding of the product and what we want than simply to enter the marketplace as an ill-informed purchaser of the competitors' wares. Consumer reports can be useful in defense as they are elsewhere.

#### APPENDIX

##### I. INCREMENTAL COSTS OF THE WAR IN VIETNAM

TABLE 1.—ESTIMATED PEAK INCREMENTAL COST OF THE WAR IN VIETNAM

Type of expenditure:	Billions of current dollars <sup>1</sup>
800,000 military personnel at \$12,000 per man per year.....	9.6
250,000 civilian personnel at \$10,000 per man per year.....	2.5
Ground, air, and naval ordnance.....	5.2
500 aircraft at \$3,000,000 per aircraft (average).....	1.5
Replacement of U.S. and ARVN land force equipment and supplies.....	1.3
Other procurement.....	1.0
Construction.....	1.0
Transportation, petroleum, oil, and lubricants.....	1.0
Total.....	23.0

<sup>1</sup> Details do not add to total because of rounding.

TABLE 2.—ESTIMATED MANPOWER REQUIREMENTS AND INCREMENTAL COSTS OF THE WAR IN VIETNAM, FISCAL YEAR 1968-72<sup>1</sup>

Item	[Cost items in millions of current dollars]				
	1968	1969	1970	1971	1972
Military personnel:					
In Vietnam.....	536,100	538,200	380,000	200,000	50,000
In line of communications and training.....	263,900	233,447	180,714	120,714	20,000
Civilian personnel.....	250,000	227,771	167,794	111,894	10,000
Total personnel.....	1,050,000	999,418	728,508	432,608	80,000
Cost of military personnel:					
In Vietnam <sup>2</sup> .....	\$17,477	\$17,545	\$12,388	\$6,520	\$1,630
In line of communications and training <sup>3</sup> .....	3,167	2,801	2,169	1,445	240
Cost of civilian personnel <sup>4</sup> .....	2,500	2,278	1,678	1,119	100
Total cost.....	23,144	22,624	16,235	9,088	1,970

<sup>1</sup> The manpower data in this table are end-of-year figures, and the costs developed from them represent annual rates of outlay at yearend.

<sup>2</sup> \$32,600 per man per year, based on an average annual rate of \$12,000 per man for pay and allowances, and average annual combat costs per man of \$20,600.

<sup>3</sup> \$12,000 per man per year.

<sup>4</sup> \$10,000 per man per year.

TABLE 3.—EXPENDITURE LEVELS FOR ILLUSTRATIVE VIETNAM DISENGAGEMENT PROGRAM, FISCAL YEARS 1969-75<sup>1</sup>

Item	1969	1970	1971	1972	1973	1974	1975
Military personnel (thousands of men).....	538	380	200	50	0	0	0
Incremental outlays (billions of dollars).....	23	17	11	3	± 1.5	± 1	± 1

<sup>1</sup> These are purely illustrative estimates; however, through 1971, they are roughly consistent with the budget projections of total armed forces strength. All figures are as of the end of the fiscal year to which they relate.

<sup>2</sup> It is assumed that military assistance at a rate of \$1,000,000,000 a year will be allocated to Southeast Asia after the withdrawal of U.S. forces.

TABLE 4.—DEPARTMENT OF DEFENSE ESTIMATES OF THE INCREMENTAL COSTS OF THE WAR IN VIETNAM

[In millions of dollars]

Budget category	Fiscal year 1969	Fiscal year 1970
Military personnel.....	\$5,666	\$5,375
Operation and maintenance.....	6,488	5,438
Procurement.....	8,757	6,283
R.D.T. & E.....	139	112
Military construction.....	494	220
Total.....	21,544	17,428

TABLE 5.—DEPARTMENT OF DEFENSE ESTIMATES OF THE COSTS OF THE WAR IN VIETNAM, BY MILITARY SERVICE

[Dollar amounts in billions of current dollars]

	Fiscal year—						Percent change in non-SEA costs over fiscal year 1965	
	1965		1969		1970		Fiscal year 1969	Fiscal year 1970
	SEA <sup>1</sup>	Other	SEA	Other	SEA	Other		
Army.....	\$11.6	\$11.5	\$13.6	\$9.8	\$14.6	+17	+26	
Navy.....	13.2	4.4	18.1	3.4	18.9	+37	+43	
Air Force.....	18.1	5.6	20.3	4.2	20.5	+12	+13	
Defensewide.....	4.2	5.3	5.6					
Total.....	47.1	21.5	57.3	17.4	59.6	+22	+27	

<sup>1</sup> SEA stands for Southeast Asia.

## II. COSTS OF THE STRATEGIC NUCLEAR FORCES

TABLE 1.—ESTIMATED COST OF THE BASELINE STRATEGIC NUCLEAR FORCES, BY MAJOR PROGRAM, IN FISCAL YEAR 1971

[In billions of current dollars]

Program	Total <sup>1</sup>	Strategic forces
Strategic forces	\$7.9	\$7.9
General-purpose forces	24.7	
Intelligence and communications	5.2	2.6
Airlift and sealift	1.5	
National Guard and Reserve forces	2.5	
Research and development	5.4	2.2
Central supply and maintenance	8.4	1.9
Training, medical, and other personnel activities	12.6	3.0
Administration and associated activities	1.5	.4
Support of other nations	3.2	
Total obligational authority	72.9	18.0

<sup>1</sup> Total includes the cost of the war in Vietnam, estimated at \$11,000,000,000 for fiscal year 1971.

TABLE 2.—ESTIMATED COST OF THE STRATEGIC NUCLEAR FORCES BY MAJOR SYSTEM

[In billions of current dollars]

System	Fiscal year 1971 <sup>1</sup>
Minuteman and Titan	3.1
Polaris/Poseidon	2.6
Heavy bombers	3.5
Air Force air defense system	3.0
Army air defense system	.4
Antiballistic missile defense	1.8
Intelligence and communications	3.5
Civil defense	.1
Total	18.0

<sup>1</sup> System costs reflect not only direct program costs, but also R. & D. and indirect support costs.

## III. COSTS OF THE BASELINE GENERAL PURPOSE FORCES

TABLE 1.—ESTIMATED COST OF THE BASELINE GENERAL PURPOSE FORCES BY PROGRAM, FISCAL YEAR 1971

[In billions of current dollars]

Program	Total <sup>1</sup>	Baseline general purpose forces <sup>2</sup>
Strategic forces	\$7.9	
General purpose forces	24.7	\$20.5
Intelligence and communications	5.2	2.6
Airlift and sealift	1.5	1.2
National Guard and Reserve Forces	2.5	2.0
Research and development	5.4	3.2
Central supply and maintenance	8.4	5.1
Training, medical, and other personnel activities	12.6	7.7
Administration and associated activities	1.5	1.0
Support of other nations	3.2	.7
Total obligational authority	72.9	44.0

<sup>1</sup> Total includes the cost of the war in Vietnam, estimated at \$11,000,000,000 for fiscal year 1971.<sup>2</sup> Baseline figures do not include the cost of the war in Vietnam.

TABLE 2.—ESTIMATED COST OF THE BASELINE GENERAL-PURPOSE FORCES, BY MAJOR SYSTEM, FISCAL YEAR 1971

[In billions of current dollars]

	Cost <sup>1</sup>
System:	
Army divisions.....	13.6
Marine division/wings.....	4.0
Guard and Reserve forces.....	3.2
Navy air wings.....	7.2
Air Force air wings.....	8.4
Antisubmarine and anti-aircraft warfare at sea (ASW and AAW).....	3.8
Amphibious, fire support, and mine warfare forces.....	1.1
Airlift and sealift.....	2.0
Military assistance.....	.7
<b>Total.....</b>	<b>44.0</b>

<sup>1</sup> System costs reflect not only direct program costs, but also R. & D. and indirect support costs.TABLE 3.—PROGRAMED ALLOCATION OF THE BASELINE GENERAL-PURPOSE FORCES, BY GEOGRAPHIC CONTINGENCY, AS OF FISCAL YEAR 1970<sup>1</sup>

Type of system	Europe	Asia	Western Hemisphere	Strategic Reserve	Total
Active Army divisions.....	7	6	1	2½	16½
Active Marine division/wings.....	1	2	—	—	3
Guard and Reserve forces.....	7	—	—	2	9
Navy air wings <sup>2</sup> .....	4	6	1	4	15
Air Force air wings.....	16	7	—	—	23
ASW and AAW forces <sup>3</sup> (percent).....	50	50	—	—	100
Amphibious and other forces (percent).....	33	67	—	—	100
Airlift and sealift forces (percent).....	50	50	—	—	100
Military assistance (percent).....	30	70	—	—	100

<sup>1</sup> The baseline forces do not include those forces added especially for the war in Vietnam.<sup>2</sup> All attack carriers on station (2 in the Atlantic and 3 in the Pacific) and their immediate backup carriers (2 in the Atlantic and 3 in the Pacific) are allocated to Europe and Asia.<sup>3</sup> Excluding the escorts for the attack carriers.TABLE 4.—ALLOCATION OF THE BASELINE GENERAL-PURPOSE FORCES COSTS, BY GEOGRAPHIC CONTINGENCY, FISCAL YEAR 1971<sup>1</sup>

[In billions of 1971 dollars]

Type of system	Europe	Asia	Western Hemisphere	Strategic Reserve	Total
Active Army divisions.....	5.8	5.1	0.8	1.9	13.6
Active Marine division/wings.....	1.4	2.6	—	—	4.0
Guard and Reserve forces.....	2.5	—	—	.7	3.2
Navy air wings.....	1.9	2.9	.5	1.9	7.2
Air Force air wings.....	5.8	2.6	—	—	8.4
ASW and AAW forces.....	1.9	1.9	—	—	3.8
Amphibious and other forces.....	.4	.7	—	—	1.1
Airlift and sealift forces.....	1.0	1.0	—	—	2.0
Military assistance.....	.2	.5	—	—	.7
<b>Total.....</b>	<b>20.9</b>	<b>17.3</b>	<b>1.3</b>	<b>4.5</b>	<b>44.0</b>

<sup>1</sup> Excluding the incremental costs of the war in Vietnam.

## IV. DEFENSE OPTIONS

TABLE 1.—DEFENSE BUDGET OPTIONS BY MAJOR SYSTEMS (EXCLUDING VIETNAM COSTS)

[In billions of fiscal year 1971 dollars]

	Baseline option	Conservative option	Medium-risk option	Medium-risk option streamlined
<b>Strategic Nuclear Forces:</b>				
Minuteman and Titan.....	3.1	3.1	2.3	2.3
Polaris/Poseidon.....	2.6	3.6	2.6	2.6
Heavy bombers.....	3.5	4.9	2.9	2.9
Air Force air defense.....	3.0	4.1	2.4	2.4
Army air defense.....	.4	.4	.3	.3
Antiballistic missile defense.....	1.8	3.8	.5	.5
Intelligence and communications.....	3.5	3.5	3.0	3.0
Civil defense.....	.1	.6		
Subtotal.....	18.0	24.0	14.0	14.0
<b>General Purpose Forces:</b>				
Active Army divisions.....	13.6	17.7	8.7	8.0
Marine division/wings.....	4.0	5.4	4.0	4.0
Guard and Reserve Forces.....	3.2	3.2	3.2	3.2
Navy tactical air wings.....	7.2	8.7	4.2	3.2
Air Force tactical air wings.....	8.4	10.4	7.3	6.6
ASW and AAW Forces.....	3.8	3.8	3.3	2.7
Amphibious and other forces.....	1.1	1.1	.6	.6
Airlift and sealift.....	2.0	2.0	2.0	2.0
Military assistance.....	.7	.7	.7	.7
Subtotal.....	44.0	53.0	34.0	31.0
Grand total.....	62.0	77.0	48.0	45.0

Chairman PROXMIRE. Dr. Rathjens, we shall be glad to hear from you now, sir.

**STATEMENT OF GEORGE W. RATHJENS, PROFESSOR OF POLITICAL SCIENCE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, FORMER MEMBER OF THE WEAPONS SYSTEMS EVALUATION GROUP IN THE DEPARTMENT OF DEFENSE, FORMER MEMBER OF THE STAFF OF THE SPECIAL ASSISTANT TO PRESIDENT EISENHOWER FOR SCIENCE AND TECHNOLOGY, FORMER DEPUTY ASSISTANT DIRECTOR OF THE U.S. ARMS CONTROL AND DISARMAMENT AGENCY, AND FORMER DIRECTOR OF THE WEAPONS SYSTEMS EVALUATION DIVISION AT THE INSTITUTE FOR DEFENSE ANALYSES**

Mr. RATHJENS. Mr. Chairman, it is a privilege to appear before you today in connection with your hearings on changing national priorities. I can claim no special expertise except possibly with respect to Defense Department programs and more particularly the strategic systems programs. Therefore in my prepared statement I will focus on them.

While the defense budget as a whole may continue to decline with withdrawal from Southeast Asia, large increases are in prospect in the strategic budget. For that reason the strategic programs should be of great concern to your subcommittee.

We now have underway, or under consideration, a number of very expensive programs. You see I have listed several of these here, with a total estimated cost of \$50 billion.

The last cost, that for ULMS, is my own minimum guess about a program that is not yet well defined. The other figures are based on various Defense Department estimates.

If past experience is any guide at all, they will almost all turn out to be much too low. This is especially likely to be true of Safeguard which Secretary Laird now concedes will have to be expanded well beyond phase II, on which the \$11 billion figure is based, if it is to be significantly effective in defending Minuteman against the kind of evolving Soviet threat that he projects.

In addition to the aforementioned programs, there are others that are more in the gleam-in-the-eye category; for example, SABMIS (the Navy's ABM system), a new Air Force ICBM, and a scheme for movable or mobile basing of Air Force ICBM's.

Once new systems are developed and procured, they must, of course, be maintained and operated, and this will require large expenditures in addition to those included above, particularly for systems such as bombers. When all the costs are considered, it will be apparent that we could well be spending by 1975 \$25 to \$30 billion per year on strategic systems.

If we should decide at some point to build a large-scale nationwide ABM system to try to protect our industry and population against a Soviet missile attack the costs would be still larger, certainly at least an additional \$50 billion over the next decade.

At the other extreme there would seem to be opportunity for drastic reductions in strategic forces. That is, of course, one of the hopes, albeit a distant one, of the strategic arms limitation talks (SALT) now underway.

We can now deliver over 4,000 strategic warheads against the Soviet Union. Based on extremely conservative estimates, 400 would destroy 30 percent of the Soviet population and three-quarters of its industrial capacity. The Soviet Union has a similar overkill capability with respect to the United States. It is clear from these figures that it is entirely feasible to consider mutual reductions in strategic forces by at least a factor of 10 without there being any need for settlement of political differences between the superpowers.

The deterrent capability inherent in the strategic force of each would be for all practical purposes just as effective as at present. Moreover, each superpower could well afford to reduce its strategic offensive forces by at least a factor of 10 before it would have to be concerned about its forces possibly being inadequate to cope with China or other emerging nuclear powers.

Chairman PROXMIRE. May I interrupt to ask, what do you mean by a factor of 10, Dr. Rathjens?

Mr. RATHJENS. Well, I think we can cut down 10 times.

Chairman PROXMIRE. To 10 percent as large as it is now?

Mr. RATHJENS. Ten percent as large as it is now, yes.

Thus, expenditures for strategic forces for the mid-1970 period could range anywhere from a high of perhaps \$30 billion, or even more, per year to as low as perhaps \$7 or \$8 billion.

The low projection I believe could be realized only if the SALT negotiations were highly successful, if then.

The high projection would seem likely if SALT fails, but even in the event of such failure, I would hope that some of the programs I have listed would not go forward.

Safeguard is perhaps the best example. Discussion of its technical deficiencies is perhaps not appropriate here, but the argument against it as a defense for our Minuteman can be summarized with the observation that on cost effectiveness grounds it is almost certainly the least effective response to a possible growing Soviet threat that we have ever seriously considered.

In recognition of this, administration spokesmen this year have been reduced to justifying Safeguard defense of Minuteman on the grounds that it makes sense, not in its own right but as an add-on to anti-Chinese ABM deployment.

I might add here that the case for deploying Safeguard as an anti-Chinese defense is also an extremely weak one on technical, political, and economic grounds.

Whether or not Safeguard is ever built, it is probably realistic to expect that by the mid-1970's multiple independently targetable re-entry vehicle (MIRV) programs will have gone forward in both the United States and the Soviet Union. With that, for reasons I will get into shortly, the present silo-based ICBM systems may be perceived to be obsolete as reliable components of strategic deterrent forces. For the United States, that will mean a major restructuring of our strategic forces. This could involve much greater emphasis on mobility (for example, ULMS and perhaps the B-1); superhardening and active defense of ICBM's with components designed specifically for that purpose, in contrast to those of Safeguard; or both.

Even if Safeguard deployment is stopped, we seem destined to have to live with strategic force budgets much larger than the present \$18 billion level unless further MIRV development, and deployment, can also be stopped.

Both ABM and MIRV illustrate well our basic problem in approaching the design of our strategic forces; that is the difficulty in dealing with uncertainty about the future, and our propensity to base force posture decisions on what we have come to call worst case analyses.

One is very likely not to know the purpose for which one's adversary is deploying such systems nor how effective they may be. That being the case, one will naturally, in prudence, assume the worst. The arms race with which we are now confronted has its basis in such assumptions.

Chairman PROXMIRE. May I interrupt to say that your entire prepared statement will be printed in the record.

Mr. RATHJENS. Thank you, I appreciate that.

Because of ambiguities about whether the Soviet Union was going ahead with a large ABM system and about possible performance, we have gone ahead with our Minuteman III and Poseidon MIRV programs, and ostensibly because of uncertainty about the Soviet multiple warhead programs, the administration is determined to go ahead with the defense of our Minuteman force with the Safeguard system.

It is clear that we have grossly overreacted in both cases. This has occurred because we impute to our adversaries technical capabilities and risk taking proclivities which would seem absurd in our own society, and because we simply have not thought very carefully about the adversary reactions that might be induced by our decisions. Doubtless there are similar decisionmaking problems in the Soviet Union.

Now, it is not surprising that those who are very close to various high-technology programs on both sides will see in them great advantages, and will tend to overlook probable adversary reactions. But clearly it is the responsibility of the political leadership in both countries to recognize not only the utility of such systems but the reactions which may be induced by their deployment.

I would hope that as we consider our approach to the strategic arms limitation talks we will not get carried away with "worst case" analyses to the point where agreements that would be in our overall interests will be precluded. I must say that I am much concerned by recent exaggerations of the Soviet threat by Secretary Laird and his colleagues, and by their proclivity to carry "worst case" analysis to extremes.

If such views prevail on either side, I very much fear that not only will we be confronted with the failure of the SALT negotiations and a vastly increased budget for strategic forces, but also with a further erosion of confidence, particularly on the part of our young people, in our ability to make our system function in ways that can lead to rational decisions.

I have focused as much as I have on "worst case" analysis because I believe it is at the heart of the problem in ordering national priorities. We use "worst case" analysis when we look at the problems of defense posture, particularly in strategic areas, but rarely, if ever, when we look at the other threats to our society.

The result is that we run risks because of the degradation to our environment, because of alienation of our young people, and because of continued failure to deal adequately with the problems of the poor and disadvantaged, both here and abroad, that are far greater than those implicit in the remote possibility that the Soviet Union could develop capabilities to destroy virtually all of our strategic forces simultaneously, and that they would then do so.

Aside from the enormous waste in resources there may be other even more serious costs in pursuing some of the new programs. While not perhaps immediately the concern of this committee, I would feel remiss were I not to at least mention some of them. Both the U.S. MIRV and ABM programs provide examples.

The President has indicated he wants a nationwide anti-Chinese ABM system because, on his assumption that it could provide a "virtually infallible" defense, we could have a more credible Asian policy. The implication is that we might take actions in Asia that we would not take without Safeguard, which could possibly lead to a Chinese nuclear attack against us.

Thus, to my mind the Safeguard deployment as a defense against a possible Chinese attack is a prescription not only for an unending round of expenditures in an effort to keep ahead of an evolving Chinese missile capability, but also for possible disaster since there is no technical basis for believing that Safeguard could provide the kind of impenetrable defense that the President has suggested, and on which he would propose that policy be based.

I have suggested earlier that unconstrained Soviet MIRV development and deployment would very likely induce a major restructuring of our strategic forces. The Soviet Union might similarly respond to our MIRV programs. However, there is another response which is

from our point of view, and from that of all mankind, a more worrisome one. I refer to the possibility that the Soviet Union might adopt a "launch-on-warning" doctrine for its ICBM's.

There are a number of reasons why the Russians are far more likely to adopt such a doctrine than would we if we perceived our ICBM's to be threatened. First, they are less likely to rely heavily on their missile launching submarine force for deterrence because of its smaller size, because there is less experience with it and less of a naval tradition, and because U.S. antisubmarine warfare capabilities are probably superior to those of the U.S.S.R.

Second, the Russians are less likely to rely heavily on their bombers because of historical precedent and the relatively small numbers.

Third, the United States can better afford to restructure its strategic forces as a response to increased vulnerability of ICBM's. A launch-on-warning doctrine is cheap and easily implemented, but superhardening, active defense, mobile land-based systems, new bombers, or increased emphasis on sea-based systems, the responses which are being considered by the United States, are very costly.

It would indeed seem foolish if by going ahead with our MIRV programs as a hedge against a nonexistent Soviet ABM capability we induced the Soviet Union to adopt policies for control of its strategic forces which would make our security, and theirs, dependent on their radars and computers never giving false alarms about an attack against them. How ironic this would be when we recognize how many billions we have spent so that options other than "launch-on-warning" would be available in our case.

You will recognize that I have identified two unfortunate consequences that may flow from unwise decisions in the strategic arms area: the possibility that we may induce very costly escalations in the arms race that add nothing to our security; and the possibility that we may increase the risk of nuclear war in crisis situations.

While the first consequence is perhaps more directly of concern than the second to this Subcommittee on Economy in Government, I hope you will bear both kinds of consequences in mind as you continue your important effort to bring about a more rational ordering of our national priorities.

Thank you.

Chairman PROXMIRE. Thank you, Dr. Rathjens.

(The prepared statement of Mr. Rathjens follows:)

#### PREPARED STATEMENT OF GEORGE W. RATHJENS

Mr. Chairman and Members of the Subcommittee: It is a privilege to appear before you today in connection with your hearings on changing national priorities. I can claim no special expertise except possibly with respect to Defense Department programs and more particularly the strategic systems programs. Therefore in my prepared remarks I will focus on them.

While the budget for fiscal 1971 calls for only about eight billion dollars explicitly for strategic systems, the true cost when one includes appropriate costs for research and development, intelligence and communications, anti-submarine warfare, personnel, etc. is probably over twice that. The recent Brookings Study<sup>1</sup> suggests \$18 billion, a figure I find entirely reasonable, out of a total defense budget of around \$73 billion.

<sup>1</sup> Charles L. Schultze with Edward K. Hamilton and Allen Schick, *Setting National Priorities: The 1971 Budget*, Washington, D.C.: The Brookings Institution, 1970.

While the defense budget as a whole may continue to decline with withdrawal from South East Asia, large increases are in prospect in the strategic budget. For that reason the strategic programs should be of great concern to your subcommittee.

We now have underway, or under consideration, a number of very expensive programs:

	(In billions)
Minuteman III.....	\$5
Poseidon.....	6
B 1 Bomber.....	10
SRAM (Short Range Attack Missile).....	1
SCAD (Subsonic Cruise Armed Decoy).....	1
Safeguard ABM System.....	11
Minuteman superhardening.....	6
ULMS (Underwater long-range missile system).....	8
<b>Total</b> .....	<b>50</b>

The last cost is my own minimum guess about a program that is not yet well-defined. The other figures are based on various Defense Department estimates. If past experience is any guide at all, they will almost all turn out to be much too low. This is especially likely to be true of Safeguard which Secretary Laird now concedes will have to be expanded well beyond Phase II, on which the \$11 billion figure is based, if it is to be significantly effective in defending Minuteman against the kind of evolving Soviet threat that he projects. In addition to the aforementioned programs, there are others that are more in the gleam-in-the-eye category: e.g. SABMIS (the Navy's ABM system), a new Air Force ICBM, and a scheme for movable or mobile basing of Air Force ICBM's. Once new systems are developed and procured, they must of course be maintained and operated, and this will require large expenditures in addition to those included above, particularly for systems such as bombers. When all the costs are considered, it will be apparent that we could well be spending by 1975 \$25 to 30 billion per year on strategic systems. If we should decide at some point to build a large-scale nationwide ABM system to try to protect our industry and population against a Soviet missile attack the costs would be still larger, certainly at least an *additional* 50 billion over the next decade.

At the other extreme there would seem to be opportunity for drastic reductions in strategic forces. That is of course one of the hopes, albeit a distant one, of the strategic arms limitation talks (SALT) now underway.

We can now deliver over 4000 strategic warheads against the Soviet Union. Based on *extremely* conservative estimates, 400 would destroy 30% of the Soviet population and  $\frac{3}{4}$  of its industrial capacity. The Soviet Union has a similar over-kill capability with respect to the United States. It is clear from these figures that it is entirely feasible to consider mutual reductions in strategic forces by at least a factor of ten without their being any need for settlement of political differences between the superpowers. The deterrent capability inherent in the strategic force of each would be for all practical purposes just as effective as at present. Moreover, each superpower could well afford to reduce its strategic offensive forces by at least a factor of ten before it would have to be concerned about its forces possibly being inadequate to cope with China or other emerging nuclear powers.

Thus, expenditures for strategic forces for the mid-70 period could range anywhere from a high of perhaps 30, or even more, billions of dollars per year to as low as perhaps seven or eight billion.

The low projection I believe could be realized only if the SALT negotiations were highly successful, if then.

The high projection would seem likely if SALT fails, but even in the event of such failure, I would hope that some of the programs I have listed would not go forward. Safeguard is perhaps the best example. Discussion of its technical deficiencies is perhaps not appropriate here, but the argument against it as a defense for our Minuteman can be summarized with the observation that on cost-effectiveness grounds it is almost certainly the least effective response to a possible growing Soviet threat that we have ever seriously considered. In recognition of this, Administration spokesmen this year have been reduced to justifying Safeguard defense of Minuteman on the grounds that it makes sense, not in its own right but, as an *add-on* to an anti-Chinese ABM deployment.

Whether or not Safeguard is ever built, it is probably realistic to expect that by the mid-1970's multiple independently targetable reentry vehicle programs will have gone forward in both the United States and the Soviet Union. With that, for reasons I will get into shortly, the present silo-based ICBM systems may be perceived to be obsolete as reliable components of strategic deterrent forces. For the United States, that will mean a major restructuring of our strategic forces. This could involve much greater emphasis on mobility (for example, ULMS and perhaps the B-1); superhardening and active defense of ICBM's with components designed specifically for that purpose, in contrast to those of Safeguard; or both.

Even if Safeguard deployment is stopped, we seem destined to have to live with strategic force budgets much larger than the present \$18 billion level unless further MIRV development, and deployment, can also be stopped.

Both ABM and MIRV illustrate well our basic problem in approaching the design of our strategic forces; that is the difficulty in dealing with uncertainty about the future, and our propensity to base force posture decisions on what we have come to call "worst case" analyses.

ABM and MIRV systems are very different in one respect. From an engineering point of view, the MIRV concept seems highly attractive and the development programs have, according to all accounts, been highly successful. The effectiveness of ABM systems, on the other hand, is likely to be highly unpredictable, and even if one gives such systems the benefit of every doubt, it is likely that they can be rather easily offset by improvements in the offensive capabilities.

In other respects, though, the two developments are similar. In each case there is likely to be considerable uncertainty about effectiveness: in the case of the ABM simply because of uncertainty about adverse capabilities and tactics and because there are so many things that can go wrong; and in the case of MIRV's because one may not know how many warheads the adversary has on each missile nor how accurate they are. Moreover, with respect to both MIRV's and ABM there are likely to be ambiguities as to the purpose of deployment. In the case of MIRV's, it will not be clear whether they are being deployed as penetration aids to facilitate penetration of possible adversary ABM defenses, for use as counterforce weapons so that one can more effectively destroy the adversary's missile forces by preemptive attack, or for both purposes. In the case of ABM systems, they may be deployed to defend retaliatory capabilities—a stabilizing move; they may be used to defend population against a retaliatory strike by the adversary—a prospect which would likely stimulate a build-up in adversary strategic offensive strength; or they may be deployed for still other purposes such as a defense against lesser powers or to cope with accidentally launched missiles.

Thus, both ABM and MIRV systems lend themselves to a remarkable degree to what we have come to characterize as "worst case" analyses. One is very likely not to know the purpose for which one's adversary is deploying such systems nor how effective they may be. That being the case, one will naturally, in prudence, assume the worst. In such assumptions were the seeds of the arms race with which we are now confronted. Because of ambiguities about whether the Soviet Union was going ahead with a large ABM system and about possible performance, we have gone ahead with our Minuteman III and Poseidon MIRV programs, and ostensibly because of uncertainty about the Soviet multiple warhead programs, the Administration is determined to go ahead with the defense of our Minuteman force with the Safeguard system. It is clear that we have grossly over-reacted in both cases. This has occurred because we impute to our adversaries technical capabilities and risk taking proclivities which would seem absurd in our own society, and because we simply have not thought very carefully about the adversary reactions that might be induced by our decisions. Doubtless there are similar decision making problems in the Soviet Union.

Now, it is not surprising that those who are very close to various high-technology programs on both sides will see in them great advantages, and will tend to overlook probable adversary reactions. But clearly it is the responsibility of the political leadership in both countries to recognize not only the utility of such systems but the reactions which may be induced by their deployment. I would hope that as we consider our approach to the strategic arms limitation talks we will not get carried away with "worst case" analyses to the point where agreements that would be in our overall interests will be precluded. I must say that I am much concerned by recent exaggerations of the Soviet threat by Secretary Laird and his colleagues, and by their proclivity to carry "worst case" analysis

to extremes. If such views prevail on either side, I very much fear that not only will we be confronted with the failure of the SALT negotiations and a vastly increased budget for strategic forces, but also with a further erosion of confidence, particularly on the part of our young people, in our ability to make our system function in ways that can lead to rational decisions.

I have focused as much as I have on "worst case" analysis because I believe it is at the heart of the problem in ordering national priorities. We use "worst case" analysis when we look at the problems of defense posture, particularly in strategic areas, but rarely, if ever, when we look at the other threats to our society. The result is that we run risks because of the degradation to our environment, because of alienation of our young people, and because of continued failure to deal adequately with the problems of the poor and disadvantaged, both here and abroad, that are far greater than those implicit in the remote possibility that the Soviet Union could develop capabilities to destroy virtually *all* of our strategic forces simultaneously, and that they would then do so.

Aside from the enormous waste in resources there may be other even more serious costs in pursuing some of the new programs. While not perhaps immediately the concern of this committee, I would feel remiss were I not to at least mention some of them. Both the U.S. MIRV and ABM programs provide examples.

The President has indicated he wants a nationwide anti-Chinese ABM system because, on his assumption that it could provide a "virtually infallible" defense, we could have a more credible Asian policy. The implication is that we might take actions in Asia, that we would not take without Safeguard, which could possibly lead to a Chinese nuclear attack against us. Thus, to my mind the Safeguard deployment as a defense against a possible Chinese attack is a prescription not only for an unending round of expenditures in an effort to keep ahead of an evolving Chinese missile capability, but also for possible disaster since there is no technical basis for believing that Safeguard could provide the kind of impenetrable defense that the President has suggested, and on which he would propose that policy be based.

I have suggested earlier that unconstrained Soviet MIRV development and deployment would very likely induce a major restructuring of our strategic forces. The Soviet Union might similarly respond to our MIRV programs. However, there is another response which is from our point of view, and from that of all mankind, a more worrisome one. I refer to the possibility that the Soviet Union might adopt a "launch-on-warning" doctrine for its ICBM's. There are a number of reasons why the Russians are far more likely to adopt such a doctrine than would we if we perceived our ICBM's to be threatened. First, they are less likely to rely heavily on their missile launching submarine force for deterrence because of its smaller size, because there is less experience with it and less of a naval tradition, and because U.S. anti-submarine warfare capabilities are probably superior to those of the USSR. Second, the Russians are less likely to rely heavily on their bombers because of historical precedent and the relatively small numbers. Third, the U.S. can better afford to restructure its strategic forces as a response to increased vulnerability of ICBM's. A launch-on-warning doctrine is cheap and easily implemented, but superhardening, active defense, mobile land-based systems, new bombers, or increased emphasis on sea-based systems, the responses which are being considered by the United States, are very costly.

It could indeed be tragic, if by going ahead with our MIRV programs as a hedge against a non-existent Soviet ABM capability we induced the Soviet Union to adopt policies for control of its strategic forces which would make *our* security and theirs dependent on *their* radars and computers never giving false alarms about an attack against them. How ironic this would be when we recognize how many billions we have spent so that options other than "launch-on-warning" would be available in our case.

You will recognize that I have identified two tragic consequences that may flow from unwise decisions in the strategic arms area: the possibility that we may induce very costly escalations in the arms race that add nothing to our security; and the possibility that we may increase the risk of nuclear war in crisis situations. While the first consequence is perhaps more directly of concern than the second to this Subcommittee on Economy in Government, I hope you will bear both kinds of consequences in mind as you continue your important effort to bring about a more rational ordering of our national priorities.

Chairman PROXMIRE. Our last witness is Dr. Stanley.

I notice you have a very substantial prepared statement. And without objection the entire prepared statement will be printed in full in the record, and you may highlight it or summarize it any way you wish.

**STATEMENT OF TIMOTHY W. STANLEY, VISITING PROFESSOR OF INTERNATIONAL RELATIONS, THE JOHNS HOPKINS SCHOOL OF ADVANCED INTERNATIONAL STUDIES, FORMER MEMBER OF THE WHITE HOUSE STAFF, AND PAST ASSISTANT TO THE SECRETARY OF DEFENSE FOR NATO FORCE PLANNING AND DEFENSE ADVISER OF THE U.S. MISSION TO NATO**

Mr. STANLEY. Thank you, Mr. Chairman. I will indeed be brief and just touch on the major points in my prepared statement.

Both my colleagues today and other witnesses before this committee have presumably provided, or will provide, enough statistical data to keep you and your staff fully occupied. So I thought that I would use a more qualitative approach and perhaps try to offer a slightly different perspective on how to get a handle on the problem of general purpose forces.

I think there is an interesting contrast to be made between the defense sector and the domestic sectors of our economy: in the defense area, at least, I have a feeling that we know more or less what we do know; and perhaps more importantly, we know what we do not know. There is a policy framework of seeking to maintain international stability which tends to put upper and lower limits on the amount which can reasonably be spent for defense. I simply am not enough of an expert in the economic field to know whether that is also true there. But the impression one gets is that this is not the case, that we do not even know the relevance of what we do not know; and it is not clear that we have a national set of priorities against which to measure specific programs.

In my prepared statement, therefore, I make the suggestion that to have intelligent medium-term planning, we need to have a clearer vision of the future, or perhaps alternative futures, a couple of decades ahead. And one way to get that might be to form a new kind of national commission which would involve both the executive and legislative branches, Federal, State, and local officials, the leaders of the intellectual professions in this country, the universities and the research institutions, which might be able to synthesize the projections of the future, as we now are beginning to make them, pull them together, and make them much more widely available to the public.

It might greatly facilitate the process of developing some long-range national goals against which the work of this and other committees of Congress would be more useful. That suggestion is outside the area on which you asked me to testify, Mr. Chairman, so I will just leave it there and get back to the defense questions.

In my prepared statement I do take some issue with the notion that there is a "free dividend" which can be obtained from the defense sector. For one thing, I am not sure that the total resources of the country, as measured, for example, by gross national product, are really a fixed quantity which exists independently of the relative effort in various sectors.

Secondly, I do not think that there is a common denominator of measurement by which one can compare a unit of military value with a unit, say, of social value, even if one were able to define such units.

And thirdly, whatever our objectives may be, or come to be, in the domestic area, they obviously have to be achieved in a world environment. Now that world environment is changing rapidly also. But one prerequisite of international security is stability in the political-military balance of deterrence, which is more than just strategic forces, for it includes the spectrum of the total military capability of the major powers, and indeed the reciprocal images of that capability.

We have learned, or I hope we have learned, that too high a level of defense efforts can be destabilizing by arousing fears and hence competitive escalation in the arms programs of other countries. And by the same token, I would argue that too low a level can also upset the balance by stimulating temptations and effecting the confidence and attitudes of other nations.

The Brookings study which Dr. Kaufmann alluded to, and of which he was a principal author, lists a range of American defense postures. I would reject the low extreme, which gave rise to some press comment in the last day or so when Dr. Schultze indicated that this low, low posture might generate a saving of up to, as I recall, \$17 billion.

According to the study, this would involve reductions in the general purpose forces of something like six Army divisions, six carriers, three wings of tactical aircraft, and not proceeding with various modernization programs for the general purpose forces, and holding our strategic forces to a minimum.

To do all of these things I think would give the United States such a low posture and a low capability that it would run very high risks in the present world. And I would say the same thing in the reverse about the very high posture, heavy modernization, heavy emphasis on strategic forces, and damage limitation.

So I think that in just common sense political terms there is a range which might extend from, let us say, \$60 to \$80 billion in constant prices. Within that range—since one is obviously not going to avoid doing all of the things that the military are recommending, nor is one going to accept all their recommendations—the real range of choice is probably much narrower. And I would somewhat arbitrarily place it in the \$68 to \$76 billion range, or about 5 percent one way or the other of the projected 1971 defense budget of \$71.8 billion.

I note, however, that this figure amounts to a percentage of gross national product of about 7 percent. And in the international political context, there is some relevance to the fact that, for example, Britain, France, and Germany are going to average over 5 percent of their gross national product for defense. Russia and China spend about 9 to 10 percent, according to the best estimate. Israel, which is currently under almost a stage of siege, must have a percentage between 15 and 20 percent. And if we can hold the defense budget within this range and our resumption in growth continues, then the U.S. percentage might well drop to about 6 percent.

But again I think the percentage of GNP ranges between 6 and 7 percent; and optimistically speaking, if we are successful in disengaging from Vietnam, I feel that the dollar costs also are in this range of about 5 percent or perhaps at most up to 10 percent on either side of the 1971 figure.

I have expressed some skepticism in my prepared statement about the utility of the approach of the 1, 1½, 2, 3, or however many contingencies that you want. It is true that some military planning is done on this basis; and it is perhaps a useful analytical tool. But one can plan as easily on a contingency of three 5-division wars, or five 3-division wars, or one 15-division war, without really affecting one's force requirement at all. This is because a true "requirements" approach, as explained in my prepared statement, for each contingency would generate larger forces for them than political-economic constraints would permit. So the inevitable scaling down to meet reality undercuts the "contingency" approach. And I feel that the breakdown, as in Dr. Kaufmann's statement, and the Brookings study, is a little bit artificial, in that it simply takes the forces we have and relates them arbitrarily to specific geographic areas.

My point is this, that a country of the size and with the responsibilities of the United States is going to have a certain level of general purpose forces, however we arrive at that figure. We want to be able to augment them in a crisis by reserve programs and we want to be able to move them. Some should probably be in Europe, and some should be in the Far East, and some should be at home. But the "mix" of our deployment, it seems to me, ought to depend fully as much on logistic factors and mobility and on the international political context as on an arbitrary identification with specific contingencies—which almost never happens in practice the way a planner's scenario calls for.

Thank you.

Chairman PROXMIRE. Thank you, Dr. Stanley.

Your prepared statement will be placed in the record at this point. (The prepared statement of Mr. Stanley follows:)

#### PREPARED STATEMENT OF TIMOTHY W. STANLEY

Mr. Chairman: I appreciate the opportunity to testify at your hearings on "Changing National Priorities" because I believe that you are asking important and relevant questions which go to the heart of the basic function of government. But, as I will explain in a moment, I am rather pessimistic about the availability of practical answers. If I understand the Subcommittee's purposes correctly, they involve both the substance and methodology of future decisions affecting resource allocations within the national defense sector and within the area of the general welfare.

#### I

Although I realize that my two colleagues and I have been asked to discuss the national defense part of the problem today, and I will make some general observations on that as a preliminary to the discussion, I hope you will permit me to make a comment or two on the other or "domestic" part of the problem of national priorities. For I regard it as far more difficult—although this may be merely because I know much less about it—than the area of national security.

We are aware that the world is changing rapidly, that new perceptions of "security" and new forms of international conflict—and of conflict resolution—will modify the international system as we now know it before the end of this century. But while we are waiting for these changes and as we recover from the disillusionments attending our Asian involvement, there is an underlying requirement of international security. It involves stability in the political-military balance of deterrence. We have learned that too high a level of defense can be de-stabilizing by arousing fears in others, and too low a level can have the same effect by arousing temptations, or miscalculations and by affecting confidence and attitudes of other countries. While there are important and difficult decisions to be made affecting particular weapons systems, the overall level of U.S. defense spending is constrained within fairly narrow political limits in present circumstances. That is, I cannot find good arguments which would change

this range beyond, say, 10 to 15% plus or minus, of the 71.8 billion requested for Fiscal Year 1971. I'd like to come back to this point again; but here I am contrasting this rather limited range with the virtually unlimited spectrum of demands in the domestic sector. There, too, the criteria for measuring effectiveness are much harder to design than in defense—although I am not as persuaded as some of my colleagues with the validity of effectiveness comparisons even in the military sphere; for the unknowns, incommensurables, and variables often exceed the measurable knowns.

It is, as I say, hard enough to define a unit of military value; it is presumably even harder to define a unit of social value. And it is surely impossible to find a measurable common denominator between the two, for one would be comparing not merely oranges and apples but things as diverse in their basic function as art and automobiles.

Last year, Mr. Chairman, your committee called for "a determination of the dollars costs required to attain primary social goals." I do not believe this can be done, not because of deficiencies in the science of costing, not because of difficulties in measuring effectiveness, but because there is no agreement on what these social goals are, at least in any meaningful long-term sense!

That is why I was pleased to note that in announcing these hearings the Chairman referred to "the urgency for a continuing comprehensive study of national priorities . . ." I believe that America can and should act in the short term to alleviate, if not eliminate, what people regard as intolerable conditions, wherever this is possible. But to act, even on intelligent hypotheses, for the medium term, we must have some clearer idea than I at least have about the longer term—say the year 2000. By then America's population will approximate 300 million and life as we know it today may have been altered dramatically by ecological and environmental imperatives as well as by social and political change.

A large part of today's sense of crisis is in our minds. In coming back to America recently after more than four years in Europe, I have been struck with the contrast between what my own senses tell me about our situation (which is not all to the good, to be sure, but in many respects better than when I left) and what other people tell me. I do not want to take time to go into possible explanations for this self-reinforcing national psychosis; but I believe that a part of it is an unconscious concern with this longer-term uncertainty. People may instinctively sense that we have not begun to ask—let alone answer—the fundamental questions.

One might combine these questions as follows:

How do you organize, control, and motivate man in a mass society—one where affluence compounds the population explosion and contributes to the ravages of the environment—given a decline in all three of the traditional disciplines that have held societies together, namely, economic scarcity, ideology, and the need for group loyalty vis-a-vis an external threat?

To be sure, ideologies persist; poverty is all too far from being banished; and the world is still too dangerous to permit complete abandonment of the discipline of patriotism. But by the end of this century, given a projection of present trends, all three may be considerably less meaningful as motivating factors than they are today.

In asking such age-old philosophical questions about the relations between man and society in an area of technological revolution, we are really asking about what, for lack of a better word, might be termed "life-styles." I emphasize the plural since it is perfectly clear that if we are to retain enough diversity to permit some degree of individual choice, then there must be many different and perhaps entirely new life-styles.

For example; the uneconomic and vanishing "family farm" may prove to be worth subsidizing and retaining as ecologically preferable to the fertilizer-intensive "factory farm" which is replacing it and as a viable life-style in sociological terms. But, within a few more decades, whatever land-use options there may have been in this regard may well have been eliminated by urban sprawl. Or, the planning that is now underway on rapid means of intercity transit may prove as self-defeating as have some of our newest freeways—if, for example, they become "magalopolis" versions of the present conditions on the New York subway at rush hour! We may have to meet the coming transportation crisis by redesigning our economic and social framework and maximizing modern communications so as to sharply reduce travel.

To hypothesize about viable life-styles two decades from now, one needs to know what percentages of the American people are likely to be—and should be—

engaged in services, in production, in the arts, education and in research. Futurologists are beginning to make projections; but what will motivate people if by then their incomes are very indirectly tied to work? What about the institution of the family? of the "community", however defined, which is so central to our political institutions? What do we know or can we predict about the human dimension, now that genes, and perhaps life itself, can be synthesized?

What about the economic system: can qualitative demand and services substitute for the affluence based upon wasteful consumption and quantitative demand? And if we succeed in reaching a stable population, can an economy the size of ours, which has depended upon continuous growth in its base, adjust to a Swedish or British model? Today serious thought is being given to the problems of pollution and how to allocate the economic costs of repairing damage to the environment. But except for stop-gap remedies, I find it hard to see how this can be tackled without a long-range blueprint.

It would be presumptuous in the extreme for me to suggest answers; but I can suggest a procedure for forward planning which would enable the various decision-making units of our society, public and private, to make better informed judgments about resource allocations. For without at least working assumptions, if not answers, to these fundamental long-range questions of societal engineering, it is hard to see how we define meaningful social goals in the nearer term, let alone develop realistic programs of education, urban development, and environmental controls to meet them.

What we need is a concerted national attack to develop a vision—or several visions—of the future. This would call for a "National Commission on America Two Thousand," going far beyond any such commission yet created, and given massive governmental support at the level of billions of dollars. It would have to co-opt leaders of all the learned professions, from art and architecture, to biogenetics, business, engineering and the law, to sociology, political science, and zoology. It would have to be bipartisan, and draw on labor as well as business, students—who after all will dominate the future society—as well as professors, and utilize as many of our diverse forms of organization as possible, from churches to minority group forums. And it would have to be a project for an entire decade.

One would hope that out of the welter of statistics and assumptions would come some alternative projections from which theoretical models of what I have called future life-styles in the broadest sense could be constructed. And after appropriate cross examination and ventilation through wide-scale participation—and indeed through the political process itself—there might come a number of experimental approaches and pilot projects. And, with luck and good leadership, there should emerge some really relevant guidelines to national priorities. Only when we have some idea of *where* we want to go do the questions of *how* do we get there and with *what* resources become relevant.

Despite the difficulties and drawbacks—and I can think of several even as I propose the idea—a national effort of this scope would bear dividends quite apart from the primary purpose of defining tangible future goals to assist contemporary planning. For in and of itself the enterprise might dramatically raise public morale by showing that there *is* a future worth planning for and one which technology has given us the means of shaping! America's young people—including many of those now alienated—should be willing to enlist in this project enthusiastically; they need to be given the challenge of trying to answer the questions they themselves have raised—albeit indirectly and often on the wrong (or at least merely transitory) subjects. Widespread divergencies would and should develop; but there would also be cohesive effects from making the effort as a nation. And what might be politically unthinkable today can often be legitimized by thinking hypothetically about it in the planning context of two decades hence. At the very least, the visibility of the effort would create greater and more constructive public participation in national choices.

Well, Mr. Chairman, I am conscious of having strayed rather far from the specific area in which you invited me to testify—and into one where I have no expert background to justify my comments. I apologize for the excursion; but I did not want to make my rather skeptical opening remarks about the prospects of doing what your subcommittee hopes to do without at least offering a possible alternative. Many individuals and groups are now starting to work on "forecasting", and even on a rethinking of the old dilemmas which involve man and society. I am merely suggesting that these efforts should be greatly expanded, organized coherently, and supported on the national level with all the energy that we can impart. This does not call for a national master-plan of some kind nor

for a preemption of private and governmental processes and decisions. It does call for a new synthesis of informational inputs to those decisions on a longer term basis. Without such an approach, I am afraid that the necessary short-term answers to the questions which your committee is raising will provide only a marginal chance of "muddling through" at best. And at worst, they may take us in precisely the opposite direction from the one which, twenty years from now, we might well wish we had chosen, had we as a nation really stopped to think about it.

Mr. Chairman, let me now turn specifically to the area of national defense. I gather that my two colleagues are going to discuss, respectively, the overall defense budget and the composition of our strategic nuclear forces, so that I should concentrate on what we call "general purpose forces."

In getting to that particular part of the discussion, however, I think that it is necessary to look first at the basic problems of allocating resources for defense. I have seen some five different approaches, singly and in combination, tried over the years and it may be worth a moment to enumerate them:

First, there is the "pure requirements" approach, that of estimating the forces required to meet specific "threats" within the context of a given mission. This approach results in the "force tabs," so-called, to the JSOP, or Joint Strategic Objectives Plan, which is the JCS estimate of the forces optimally desired to meet all contingencies. It is unconstrained by resource considerations, and the forces called for usually exceed by a wide margin those we are likely to have. For example, I recall that President Eisenhower once asked for such a "blue sky" budget submission to see what it would look like. It came to about \$110 billion, about double the amount actually decided on—and that was in the mid-fifties!

That experience, in fact, may have influenced President Eisenhower to adopt the second approach, which was to assign a specific budgetary ceiling to defense—one arrived at through economic and fiscal determinants rather than by military considerations—and tell the Defense Department, in effect, to buy the best defense it could for that amount.

The third approach, which I term "rationalist," was that of Secretary McNamara. As he said, "I'm here to originate and stimulate new ideas and programs, not just to referee arguments and harmonize interests. Using deliberate analysis to force alternative programs to the surface, and then making explicit choices among them is fundamental."

This method involved asking critical questions about priorities and missions, and to apply cost-effectiveness, or systems analysis, to the selection of specific alternatives. In the context of the Kennedy Administration's strategic reappraisal, this resulted in higher defense budgets and greater emphasis on conventional and counter-guerrilla forces. The approach was long on quantitative analyses, and sometimes short, perhaps, on political judgments. But I think Secretary McNamara's approach came the closest to an objective grappling with the basic issues and choices. The problem with quantitative analysis, however, is that it is by nature a form of micro-analysis; and by assigning costs to the penny or effectiveness criteria to the ton-per-mile or rounds-per-minute, there was a tendency to lose sight of the "macro" or larger context. One could, for example, accept the systems-analysis view that theoretically Posture A was a more cost-effective one for the U.S. to support in regard to Greek and Turkish forces than Posture B. But this lost some relevance when it became clear that, at one point, both countries were designing forces for possible use against each other over Cyprus, rather than against the external "threat" as perceived by the Pentagon! I am not anti-rationalist, and I admire many of Secretary McNamara's achievements. My point is merely that the unknowns and variables are often more significant in the real world than the most careful quantification of the knowns.

The fourth approach might be called "adjustments from a base"; and, of course, having a five-year force structure and financial plan against which "program change proposals" could be considered was the essence of the new defense planning system. This approach is illustrated in the defense chapter of The Brookings Institution's study on "Setting National Priorities" by Charles Schultze and associates. I do not want to say too much about this, because one of my co-witnesses today was a principal author of the defense section. But this study refers to the "base-line" force—essentially our pre-Vietnam general purpose forces. This is a useful benchmark, and not a bad device for avoiding the thickets of unsolved—and perhaps unsolvable—issues while having a quantifiable "base" from which to consider the effects of adjustments.

The fifth and last approach might be called that of the "zero budget," in which one assumes that we have no forces at all; and hence we are going to create them only where clear priorities involving national survival can be established, e.g., nuclear deterrence. This is much favored by the "peace research" school of thought; and it does have some analytical utility. But in the real world, choices are not so presented, because we *do* have substantial forces, and technology provides its own dynamic. So, obviously, do the actions of other states—and the unpredictability of international events themselves.

Some combination of these five approaches is involved, consciously or unconsciously, in each Administration's method of choosing how to allocate public resources for national defense. One wants to take account of "requirements"—but within certain fiscal limits: one wants to ask penetrating questions and examine alternatives—and to ask if we did not already have it, would we create it? And one is drawn by pragmatism to the adjustments from a base—simply to have some "given."

As an experiment, I asked my graduate students early this spring to assume that the range of plus or minus 5% from \$72 billion for FY 1971 involved merely technical questions, and to draw up policy-oriented defense budgets for the United States above and below that range. It was significant, I think, that even with that injunction, the range of their recommendations was relatively narrow—roughly from sixty to eighty billion. Below sixty, there appeared to be clear political "signals" of American retrenchment which could be de-stabilizing internationally. And above eighty, it was hard to find effective uses for the money which would not be provocative.

By coincidence, this is almost the precise range in the aforementioned Brookings study (Table 2-5) which goes from \$59 billion for 1971 to \$79 billion—except for one very high modernization and strategic counterforce budget costing \$88 billion, which I would reject as being politically de-stabilizing.

So the real choices for future defense budgets in constant prices, assuming a phase-down in Vietnam (as the 1971 budget does) and no major crises elsewhere, are probably in an even narrower range of, let us say, \$68 to \$76 billion. About half of this difference concerns choices in the area of strategic nuclear forces, for example, new systems such as Safeguard. The other half lies in the area of general purpose forces, about equally divided between force level choices—let us say plus or minus one or two Army divisions, carrier task forces, and tactical air wings—and weapons systems choices, e.g., the Main Battle Tank, the F-14 and F-15, new attack carriers, and so on.

The choices within this range are complex, highly technical, and important from the point of view of the national defense. But in larger terms, they do not seem to me of great policy significance nor of critical importance from the standpoint of total national resources. Nor are they easily summarized for meaningful Congressional and public debates.

Let me add a word here about the Congressional role, as one who has seen it from both a scholarly and an Executive Branch viewpoint. The real significance of Congressional reviews, it seems to me, occurs *within* the Executive Branch itself! That is, the prospect of having to confront an independent—and sometimes politically hostile—review requires the Executive to do its homework, to articulate its assumptions behind policy decisions, and to anticipate the national mood reflected in Congress.

This may not be a fully satisfying role, but it is an absolutely essential one—along with its companion, namely, policing the inefficiencies which invariably creep into any large bureaucratic enterprise—as the Chairman hardly needs to be told!

With respect to general purpose forces, it is possible to look at the overall balance between functions and at specific trade-offs or ratios. I am not a believer in the approach of one, two, or two-and-a-half contingency force planning; for I find the concept to be of limited utility. We can plan on one fifteen-division war or three five-division wars without affecting forces! The fact is that in today's world, a country in the position of the United States is going to maintain forces at a certain level and wants to be able to deploy them in a certain pattern, and to mobilize others if needed. One can arrive at that level through any or all of the five approaches that I outlined previously; and, as already noted, that level is probably not going to vary by more than one or two major units from the pre-Vietnam base line. Nor am I persuaded by the allocation, as in the Brookings study, of certain forces to Europe, Asia, and "other." If we are going to have from 13-16 active Army divisions, some ought to be stationed in Europe, some in the Far East, and some at home. The precise mix should be determined by logisti-

cal and political considerations rather than by necessarily arbitrary assumptions about contingencies in one or another part of the world.

I think, however, that it is worth asking questions about the balance between services, especially where, as with air power, their roles overlap; about the "teeth-to-tail" ratio in combat units; about the mix of ready and reserve forces, and of forward deployed and strategic reserve forces—and the mobility of the latter; and there are worthwhile questions about quality versus quantity in new weapons systems. I have no doubt that the Army needs modern high-technology tanks. But is the best use of limited resources to buy the proposed MBT at the numbers and costs envisaged (which would have constituted one-half the total cost of a typical European-type division set of equipment) in comparison to other alternatives?

I believe that Congress can and should—and indeed does—ask such questions. But I do not see any present scope for vast savings in our military general purpose forces—which are declining anyway as the war in Indochina, hopefully, phases down—which could be used for social purposes. If we know what we want to do on a long-term basis in the domestic area—and as indicated at the beginning of my statement, I am not sure that we do—then the funding should be treated on its own merits and not as some sort of "free" bonus from the defense sector.

One hears with increasing frequency these days an assumption which I would question. This tends to treat national resources as a finite amount which must be divided among claimants along certain lines. The federal budget of some \$200 billion is not an inherently fixed amount. Rather it is the net result of a series of judgments and estimates about the range of probable expenditures, the anticipated revenues, and the inflationary effects of a deficit or surplus. The primary yardstick for resources is that of Gross National Product—and this is, of course, a variable too. Economists argue, for example, that the Korean War, in effect, cost nothing, because of the increase in Gross National Product generated by the additional investment in certain sectors of the economy over and above the normally projected growth. It seems logical that this so-called multiplier effect operates in reverse; that if, for example, we were to drastically reduce the defense budget in the hope of having a "dividend" for social purposes, we might well reduce the Gross National Product by a substantial degree. Obviously, over time, a comparable investment in educational, housing, and urban projects would also generate an increase in the private sector which might compensate for the decline; so I am merely making the point that shifts must be gradual, and that it may be a conceptual error to treat resources as an absolute quantity which is independent of shifts in priority among the activities which make up the Gross National Product.

In conclusion, Mr. Chairman, I believe it is necessary to ask questions, as your committee is doing, about national priorities, even though comparisons between economic sectors are difficult at best, and clear answers are hard to come by. The challenge, it seems to me, is to hold defense spending down to the range indicated, to resist the inherent tendency of acceleration in costs and sophistication, and to try to insure that the choices made within that range are neither wasteful of resources nor counterproductive in terms of international political stability. Thank you.

#### BIOGRAPHICAL SKETCH

Timothy W. Stanley is visiting Professor of International Relations at The Johns Hopkins University School of Advanced International Studies and Research Associate at The Washington Center of Foreign Policy Research.

Dr. Stanley returned last summer from Europe where he served for over four years at the United States Mission to NATO, as the Assistant to the Secretary of Defense for NATO Force Planning and Defense Advisor to the United States Mission with the personal rank of Minister, and where he was awarded the Defense Department's Distinguished Civilian Service Medal. In previous government posts, he was a member of the White House Staff from 1957 to 1959 and has served in various capacities on the staffs of the last six Secretaries of Defense. A graduate of Yale and a veteran of two tours of duty in the Army, Professor Stanley holds both an LL.B. and a Ph.D. from Harvard; he is the author of *American Defense and National Security* and *NATO in Transition* and has published numerous articles on foreign and defense policy subjects. His monograph, "A Conference on European Security?—Problems, Prospects and Pitfalls" will be published by the Atlantic Council of the United States in March, and he is coauthor of a forthcoming book, *Detente Diplomacy: United States and European Security in the 1970's*.

He is a member of the Connecticut Bar, the Council on Foreign Relations, the Institute for Strategic Studies, the American Academy of Political and Social Science, and the American Political Science Association. He has taught at Harvard, George Washington, and The Johns Hopkins Universities.

Chairman PROXMIRE. Thank all of you gentlemen for excellent presentations, which are most helpful. It is especially interesting to get a different view from the one we have been hearing lately.

First, I would like to start off with Dr. Kaufmann. There does seem to be a division, Dr. Kaufmann, on the question of whether it is possible to substantially reduce the general purpose forces. As I understand it, you assert that a \$10 billion reduction is possible, and perhaps you are saying that it would be desirable, given the scaling down of the contingency planning from 2½ to 1½ wars.

A few days ago Charles Schultze expressed that opinion too. Dr. Stanley apparently disagrees, as we have just heard. Can we get some comment on that?

First, Dr. Kaufmann?

Mr. KAUFMANN. I agree with Dr. Stanley that the breakdown of the forces in terms of specific allocations, either to Europe or to Asia or to the third minor contingency, is bound to be artificial, and no one is bound by those particular allocations. Nonetheless, the planning has been done on that basis, and the force is very much a function of a view that we should be prepared simultaneously to deal with two major contingencies and one minor contingency.

I think this is a major foreign policy issue which is extremely difficult for someone like myself to resolve other than in a highly personal way. All I can say there, sir, is that as I read the President's foreign policy message, and where he says that the plan is to reduce the general purpose forces so that they are capable of what he refers to as one and a half contingencies, by my reading of this, then, it should be possible, particularly given the assumption that we will be following a low profile at some time in the future in Asia, to reduce on the order of \$10 billion from that contingency.

Chairman PROXMIRE. Do you agree with Dr. Schultze's analysis in which he argued, for example, specifically for elimination of six aircraft carrier fleets, and so forth?

Mr. KAUFMANN. Yes, sir; I would have to, because those are my numbers.

Chairman PROXMIRE. I am glad Dr. Schultze relies on such an authoritative source.

Dr. Rathjens, would you like to comment on that?

Mr. RATHJENS. I cannot comment with any great knowledge about all of the general purpose forces. I must say I find it very difficult to see how one arrives at a rational force level for army divisions, tactical air wings and some of the other components. But in a few areas I think there is a clear case for rather drastic reductions, and you have just alluded to one of them.

I do not see any basis at all for maintaining the 15 attack carriers. I would think that we would probably be almost as well off with a force level of half that size.

Another area in which we could afford drastic reductions is in anti-submarine warfare. It seems to me that our capabilities are so poor now and so irrelevant that almost all of that money is being wasted. I suppose one could argue that we should spend a great deal more in an

attempt to buy something useful. However, I see very little possibility, with no good ideas in sight, that we would be able to develop much of a capability no matter how much we spend. Therefore, I think most of our ASW systems could be eliminated without much diminution in our capability.

On the question of the Army component and the Air Force tactical air, as I say, I find much more difficulty. However, it does seem to me that probably both of those, the numbers of Army divisions and the number of tactical air wings, could very well be reduced substantially too. But I cannot say by how much.

Chairman PROXMIRE. Would you like to comment further, Dr. Stanley?

Mr. STANLEY. I would just like to say, Mr. Chairman, that there is some danger in breaking down all of the overhead costs—intelligence, communications, airlift, sealift, research, and development—and assigning them to strategic forces or to general purpose forces, which is basically the approach that I assume Dr. Kaufmann has taken.

Chairman PROXMIRE. This has great appeal to me, and I think it would have to a lot of other Senators, because you are talking in specific terms. If you just say that we are going to follow a one and a half war strategy or a two and a half war strategy, and nothing happens, you have the same budget. It appears as if the Defense Department really does not have a very clear idea itself of what it is doing and why.

It seems to me that every time you have a particular weapons system that is expensive, and every time you have a division that absorbs a given amount of manpower, you ought to know precisely why. And it seems to me you ought to be in a position to justify it.

You say, well, you cannot really attach these divisions and aircraft carrier fleets, and so forth, to a particular concept of a mission. I do not know how we can justify them at all if we cannot do that.

Mr. STANLEY. I think it is possible to justify them in the aggregate. If one takes the current unpopularity of our Asian involvement and adds the current unpopularity in some parts of the Senate of our European deployment, then one quickly reaches a zero requirement for general purposes forces.

I am arguing that even if you cannot demonstrate precisely the relationship of a given unit to a specific scenario—and as I say, I am not a believer in overall force planning on the basis of specific contingencies, except as a military analytical tool—then I think one wants to avoid a situation where other people's perceptions of the United States and what it is willing and able to do become quite different. For I think their behavior would then change in a way that might be very adverse to our interests.

Chairman PROXMIRE. Dr. Kaufmann, how would the reductions be translated into divisions, tactical aircraft, attack carriers, and so forth?

Mr. KAUFMANN. The \$10 billion?

Chairman PROXMIRE. Yes.

Mr. KAUFMANN. The computation was that, given the numbers we used for the forces allocated roughly to the Asian contingency, this would involve six U.S. Army division forces, and since the Marines cannot be touched by statute, six attack carriers of the nine that are currently in the Pacific, and then beyond that three—I believe it was three—Air Force wings and a modest reduction in both amphibious forces and in antisubmarine warfare.

That was the basis for the \$10 billion reduction.

Chairman PROXMIRE. Will you file the full data for the record, the breakdown?

(The following information was subsequently supplied for the record by Mr. Kaufmann:)

As you know, any allocation of our baseline general purpose forces to specific contingencies must contain elements of arbitrariness in it. It would be a mistake, therefore, to take such an allocation too literally when we are considering an increase or decrease in our general purpose forces. Our force structure, nonetheless, has evolved out of this kind of contingency planning. Consequently, when the Administration propounds as far-reaching a change in our foreign policy as is contained in the so-called Guam Doctrine, it seems only reasonable to make an adjustment of comparable proportions in our force structure. Simply to ignore such a change, or pretend that it has no implication for our general purpose forces, is to make a mockery of the skills of our military planners and of the defense planning process.

Exactly how much of an adjustment in the forces for the Asian contingency should result from the Guam Doctrine must await a more precise formulation of the Doctrine itself. However, for purposes of illustration, I have assumed here that we might still want several divisions, some amphibious capability, and a considerable amount of air power immediately available for emergencies in the Western Pacific and possible support of our Asian allies. I have also assumed that we would continue to support a substantial military assistance program in Asia, keep a large anti-submarine warfare (ASW) capability in the Pacific, and maintain essentially the same airlift that we are now programming (since we might want to use it in Europe as well as in Asia).

The following table shows the reductions I have made in the forces for the Asian contingency based on these assumptions. The table also shows the decline in the cost of the contingency as a function of the force reductions. All costs are estimated in FY 1971 dollars and include a share of R&D, intelligence and communications, and overhead, as well as the direct costs of the forces (procurement costs and operation and maintenance costs).

REDUCTION IN THE BASELINE GENERAL PURPOSE FORCES FOR THE ASIAN CONTINGENCY

[Dollar amounts in billions]

	Current status		Reduced status	
	Forces	Amount	Forces	Amount
Army divisions.....	6	\$5.1		
Marine division/wings.....	2	2.6	2	\$2.6
Guard and Reserve Forces.....				
Navy attack carrier wings.....	6 <sup>1</sup>	2.9	1 <sup>2</sup>	.5
Air Force tactical air wings.....	7	2.6	2	.8
ASW and AAW.....	50 percent of total	1.9	44 percent of total <sup>3</sup>	1.5
Amphibious forces.....	For three brigades.....	.7	For two brigades.....	.4
Airlift and sealift.....	50 percent of total	1.0	50 percent of total <sup>3</sup>	1.0
Military assistance.....	70 percent of total	.5	70 percent of total <sup>3</sup>	.5
		17.3		7.3

<sup>1</sup> There are 3 additional carriers in Pacific waters which I have not charged to the Asian contingency.

<sup>2</sup> Actually, 4 attack carriers would be available in the Pacific, enough to maintain at least 1 on station in the Western Pacific, if that were thought desirable.

<sup>3</sup> Assuming no other reductions in these programs.

As you can see from the above table, I have deleted the following forces from the Asian contingency:

[In billions of fiscal year 1971 dollars]

Forces:	Costs
6 Army divisions.....	\$5.1
5 Navy attack carrier wings.....	2.4
5 Air Force tactical air wings.....	1.8
2 CVS task forces (from the category of ASW and AAW).....	0.4
1 brigade's worth of Amphibious forces.....	0.3
Total .....	10.0

These reductions would still leave us with the following capabilities immediately available for contingencies in Asia :

Capabilities :	[In billions of fiscal year 1971 dollars]	Costs
2 Marine divisions with their air wings-----		\$2. 6
1 Navy attack carrier wing <sup>1</sup> -----		0. 5
2 Air Force tactical air wings-----		0. 8
80% of the ASW and AAW force originally allocated to Asia-----		1. 5
2 brigades' worth of Amphibious forces-----		0. 4
100% of the Airlift and Sealift force originally allocated to Asia-----		1. 0
100% of the Military Assistance program originally allocated to Asia---		0. 5
<b>Total -----</b>		<b>7. 3</b>

<sup>1</sup> 3 other attack carrier wings, in Pacific waters but not charged to the Asian contingency, would also be available.

It should be clear from this brief exposition that a somewhat different allocation of the \$10 billion in savings could be made, although I think that this particular reduction is consistent with the main thrust of the Guam Doctrine. An even stricter interpretation of that Doctrine might bring about further reductions, particularly in Naval and Air Force air power.

I should add that adjustments in our forces for other contingencies could also be made if there were further changes in U.S. foreign policy assumptions. However, a cautionary note is in order here. It is far easier and faster to tear down a force structure than it is to build it back up again. How precisely sensitive our military establishment should be to possibly transient shifts in foreign policy must, therefore, remain an open question.

Chairman PROXMIRE. Dr. Stanley, you state that our real choices for future defense budgets, even assuming a phase-down in Vietnam, are in a relatively narrow range and that they are not of great policy significance nor of critical importance from the standpoint of total national resources. I have two questions.

First, why should this Nation find itself locked in to a defense budget around \$70 billion? Do you really think it is impossible to escape from this trap? After all, not so many years ago the range was from \$30 to \$40 billion, and even today, the Soviet Union appears to be spending much less than a \$70 billion budget.

I would also like the other witnesses to comment on this, after you give me your response.

Mr. STANLEY. I would not say it was impossible, Mr. Chairman. Nothing is impossible. I would say it was undesirable. I think it particularly difficult and undesirable to make basic changes one way or the other in our strategic posture until we have some clearer idea of the other side's attitudes toward stability. And basically we are trying to find out that through the SALT negotiations.

But I think there are some dangers of lumping overhead in with forces. For example, in the general purpose forces, the actual Defense Department figure for those forces for 1971 is \$24 billion. Dr. Kaufmann gets up to \$44 billion, I guess, by simply assigning airlift, sea-lift, national guard, research and development, intelligence, and communications, or a portion of those, to general purpose forces.

Now, even if one were to take the step, which I do not recommend, of making really substantial reductions in the actual active forces, it does not imply that we would not want to increase our reserve capabilities, so that if the world situation changed we could fairly quickly resume a larger posture. To maintain that kind of a capability and to have the intelligence necessary for valid political judgments as well as

military, you are going to have to spend some of this money on that, unless we just go out of the defense business altogether.

So this is why I feel that there are certain factors which do tend to lock us into a certain range unless one is prepared to make really basic changes which I would argue are destabilizing at either end of the spectrum. And the fiscal year 1971 budget is only about \$55 billion in 1964 prices and not much above your \$40 billion figure in terms of the prices of the mid-nineteen fifties.

Chairman PROXMIRE. Dr. Rathjens?

Mr. RATHJENS. It does seem to me that it is quite reasonable to consider very substantial reductions. Let me refer to the strategic area first. In the first instance one ought to hold the line at least. What I am concerned about is an escalation that could eat up most of the reductions that one might have in the general purpose forces. Now, I really believe there is no reason for that kind of an escalation in the strategic budget, and it would be very prudent for us to try to achieve some reduction.

We may be making a grievous mistake if we go ahead with some of these programs hoping that we can negotiate an end to them in the talks in Vienna. That could be one of the tragedies of the Vienna negotiations, the possibility that we will go ahead with programs which in prudence we would not continue in the absence of those talks. We have done that before. We kept, I guess 2,000, B-47's longer than we would have in the hope that we could negotiate them away. I believe rather strongly that in the strategic area we should simply stop those programs which it is in our own interests to stop, and that should be done whether or not we achieve some success at SALT. It seems to me the MIRV program, and in particular the Minuteman III program, is perhaps the best example.

I do not see that the Minuteman III program can buy us anything, no matter what comes out of SALT, except a diminution in security both because of the increase in the risk of war and because we will have wasted money on it which could better be spent for other purposes. Thus, I do think that some of these programs should be stopped.

It is entirely possible, I think, even if SALT fails, to achieve possibly some reduction in strategic expenditures. On the general purpose forces it does seem to me that we can achieve some savings too.

Altogether I do not see any reason why we need be stuck with a \$72 or \$73 billion military budget for the next few years. That could well drop, and very substantially, in my view.

Chairman PROXMIRE. As I understand it, your position is that you would disagree with Mr. Stanley, inasmuch as you feel that to the extent we reduce our expenditures in Vietnam and our general purpose expenditures we would not have to increase our strategic arms, regardless of what happens at SALT, if we pursue that line which is in our own best interest as far as strategic arms are concerned.

In fact, that we would hope to save perhaps \$10 billion, I guess, \$11 billion—which Dr. Kaufmann says we are spending in the margin at Vietnam; to save that \$10 billion, or \$11 billion, you say we should not automatically let it go into strategic arms, is that correct?

Mr. RATHJENS. I believe that strongly. I think we may by 1975 or so see a development in Soviet strategic forces that would perhaps force us to buy some new systems. But it is certainly premature to make

that judgment, and I believe that we ought to hold off on some of these programs. Perhaps they will never be needed. I think they will not be. I would see no reason whatever for going ahead with, as I say, Minuteman III, or Safeguard. Probably we would do well to avoid going ahead with the B-I bomber program as well.

Chairman PROXMIRE. Dr. Kaufmann?

Mr. KAUFMANN. May I just make a few points, Mr. Chairman, first, on the question of allocating costs?

I think one of the problems we have had in the past and continue to have is that 30 percent of the defense budget shows up in these overhead costs, central supply and maintenance, training, medical, administration, and associated activities, retired pay. Now, it is very difficult to try and allocate those to specific weapons programs. But I think we have to come to grips with that, because otherwise, as I tried to indicate in my summary statement—and Secretary Chaffee brought this up quite recently in a speech—we chop off forces and this 30 percent overhead just stays there, and nothing happens to it.

And I think we have to understand much better than we now do what is the connection between Navy shore installations, Army bases and training—and similarly for the Air Force—and the forces that we are really interested in for operating purposes. Now, I have gone ahead and done a fairly arbitrary allocation, to the best of my ability.

I do not hold any strong brief for it, but I think that the relationship has to be made in order to avoid precisely what Dr. Stanley mentioned; namely, that we will have all overhead and no combat forces. And I think we have to work at that relationship. One way to work at it is by going ahead somewhat impetuously and making the allocations so as hopefully to stimulate others to arrive at a somewhat different and better allocation.

Second, as far as lumping the general purpose forces with airlift, sealift, guard and reserve, and R. & D., this, in fact, in the past year, for certain purposes, has been the practice within the Pentagon in order to arrive at some of these rather aggregate estimates which are, I think, useful for decisionmaking.

Third, although I myself feel that it remains necessary for the foreseeable future to maintain major defense capabilities, I would not be at all surprised, in the light of impending deficits—which I believe you, Mr. Chairman, have had something to say about—if the Defense Department and the administration surprise us with very substantial cuts in the defense budget, which suggests that they too view this as a variable.

Chairman PROXMIRE. Dr. Stanley, isn't it true that the difference between a \$68 billion and a \$76 billion budget is quite significant in terms of the resources that will be freed for nonmilitary use by the lower budget? Have you calculated what the peace dividend might be by 1975 if we were down to \$68 billion by that year?

Mr. STANLEY. I think you can calculate it in two ways: One, what it is now, that is, \$71.8 billion, which gives you roughly a \$4 billion potential saving; or you can calculate it against higher figures which would be called for by decisions you might have made but presumably did not.

Chairman PROXMIRE. Yes. I was talking about 1975.

MR. STANLEY. Yes. I think that saving is substantial and important. And certainly if it is not needed for defense, there is no reason to expend it.

On the other hand, I am a little skeptical of the notion of automatic transferability. You are much better acquainted than most people, and certainly than I am, with the limits on the total resources available to the Government for various purposes. Over time the transfer from one sector to another may balance out and, of course, it depends a great deal on which you decide not to do to take these cuts. If they affect the heavy industry sector of the economy—and I am not a professional economist, I am just talking from a commonsense point of view—it seems logical to me that the reverse multiplier effect of the loss of contracts, subcontracts, and so forth may have some effect on the gross national product for that period.

In time the reinvestment of those resources in other programs will catch up and compensate for it. But the notion that there is a fixed amount of resources which is quite independent of the various activities that make up the gross national product, just does not strike me as sound in commonsense terms.

Could I make one other point?

Chairman PROXMIRE. I think we all know that there is not a fixed quantity of resources. The fluctuations in the employment and unemployment, of course, are a part of this. We can increase the work force.

At the same time I think it is clear that to the extent that we do have a substantial military budget, to the extent that we have a \$78 or \$76 billion military budget as compared to one that is \$8 or \$10 billion less, we do have less to fight inflation, to ease the tax burden, and to achieve the social purposes in which all of us are interested.

MR. STANLEY. I would agree with that.

Chairman PROXMIRE. Did you want to make another point?

MR. STANLEY. Yes, sir.

I was going to agree with Dr. Kaufmann, that some of the interesting things which are worth looking at, I think, do go into these questions of "teeth versus tail," or active forces and overhead for those forces.

I think it is important to focus on the mix that we want to have between ready forces and reserve forces, for example; the mix between forward deployed forces and strategic reserve forces, in the sense of being centrally located in the United States; and the mobility question. And I think there are a lot of good questions that can be asked about these particular systems, many of which are mentioned in the Statements by my two colleagues.

One example that I find intriguing is the question of the Main Battle Tank. I once did a quick calculation and found that if these were procured at the numbers and the costs envisaged 2 or 3 years ago, and put into our European-type divisions, they would constitute something like half the total cost of a division set of equipment for this one item. And I think a number of people made that point, which may be why the procurement of the Main Battle Tank is under reconsideration.

I do not know what its status is at the moment. But again, given the limit of resources, I think one does have to look at how one can use them most effectively. And the tradeoff here really is between quantity and quality, between more of something that is perhaps a

little less effective, and the high technology, newer systems that I think one needs to keep operating at the frontiers of military technology.

But again the question of tradeoff between very high cost, sophisticated weapons systems and the more traditional ones is one well worth looking at.

Chairman PROXMIRE. Dr. Kaufman, I notice that you place incremental spending for Vietnam at \$17 billion for fiscal year 1970, and \$11 billion for fiscal year 1971. How did you develop these figures? As you know, the administration did not publish Vietnam costs in the budget, although I understand that recently Assistant Secretary Moot gave some Vietnam figures to the Senate Appropriations Committee. Are your figures the same as Moot's?

Mr. KAUFMANN. We worked these figures up by taking them on the basis of unclassified data in various hearings and the posture statements by Secretary McNamara and Secretary Clifford, what appeared to be the main incremental costs that were being incurred over and above what we would otherwise be spending.

Chairman PROXMIRE. You developed them for 1968 and 1969?

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. What were they, \$23 billion at the peak?

Mr. KAUFMANN. \$23 billion at the peak, I believe.

Chairman PROXMIRE. There should be about \$12 billion peace dividend by next year in that sense, at least \$12 billion saving in the Vietnam operation.

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. As you know, the administration did not publish Vietnam costs in the budget, although I understand recently Assistant Secretary Moot gave some Vietnam figures to the Senate Appropriation Committee.

Are your figures the same as Moot's?

Mr. KAUFMANN. Mine came before his. But I think if you would turn to table 4 of the appendix in my prepared statement, I have given what Secretary Moot now estimates to be the incremental costs of the war in Vietnam for fiscal year 1969.

Chairman PROXMIRE. So your figures are pretty close, if this is the same year, fiscal year 1969—

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. Yours are \$22.6 billion and his are \$21.5 billion: is that right?

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. And then in 1970 yours are \$16.2 billion and his are \$17.4 billion. You are a billion dollars higher in 1969 and a billion dollars lower in 1970.

Mr. KAUFMANN. We actually raised the costs for fiscal year 1970 to \$17 billion, so that we are even closer, because there is always the problem of the phasing of withdrawals and how much of the full year's saving you actually recover depending on the time at which troops are withdrawn and then demobilized, to the extent that they are demobilized. And we used the same methodology for arriving at our \$11 billion figure; however, that was arrived at before the incursions into Cambodia, and the delays.

Chairman PROXMIRE. With respect to the incursion into Cambodia in your judgment, on the basis of the information today and the sub-

stantial information that the President released the other night, does this indicate to you that there will be additional costs from that operation?

Mr. KAUFMANN. I believe there will be an additional cost.

Chairman PROXMIRE. I mean an additional cost in terms of, say, more than a billion dollars?

Mr. KAUFMANN. Yes, sir. I think there will. Because, as far as I can judge, there already has been and will be a delay in the withdrawal schedule.

Chairman PROXMIRE. Could you give us some estimate or rough estimate of how big a cost you think that might involve, the Cambodian operation?

Mr. KAUFMANN. My back-of-the-envelope calculation would be that it would be on the order of \$2 to \$3 billion.

Chairman PROXMIRE. Again, on the subject of the war in Vietnam, I have a difficult time reconciling the figures that have been leaking through the Pentagon this year with previously published figures.

In 1969, the budget showed a peak Vietnam outlay of \$28.8 billion, or \$29.2 billion with economic assistance to Vietnam included.

Now the peak year, according to your figures, was 1968, when only \$23.1 billion was spent. How do you explain this inconsistency? Is it all a matter of the margin instead of the incremental cost—I should say, instead of whatever cost they have allocated here?

Mr. KAUFMANN. I cannot really explain the DOD figures, although Secretary Moot in his testimony in April indicated that the higher figures were arrived at by calculating what he referred to as the full costs of the war; namely, the costs of the forces involved, even though they were forces that we would have been maintaining anyway in peacetime. And, therefore, as he made his presentation to the Appropriations Subcommittee he said that the full cost of the war should be regarded as \$28.8 billion, but the incremental cost, factoring out the costs of those forces that we would have been maintaining anyway, would bring the figure down to the \$21.5 billion.

Chairman PROXMIRE. Let me get back to your \$2 or \$3 billion back-of-the-envelope estimate on Cambodia. How did you figure that? A lot of people would argue that there has been almost no increased cost. While there have been substantial American troops, most of them were withdrawn, all except 17,000, I think the President said. Why would you argue that this is such a substantial cost?

Mr. KAUFMANN. Because, at least as we calculated the cost, we assumed a smooth withdrawal from Vietnam, averaging on the order of about 12,500 men per month being taken out.

Chairman PROXMIRE. Wait a minute. You are talking about something else, you are not talking about the Cambodian operation by itself, you are talking about the fact that the President announced last night that there will be 50,000 taken out by October 15, which is different from the withdrawal of 12,500 each month for the 12 months between May 1, 1970, and May 1, 1971.

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. This is not the Cambodian operation, it is the withdrawal schedule.

Mr. KAUFMANN. Yes, sir. But I attribute the delay to the Cambodian operation in that sense, if you wish.

Chairman PROXMIRE. That is an arbitrary judgment on your part, isn't it? Because the President did not, when he made his announcement, indicate that there would be an evenly calculated withdrawal of the same number each month, he simply said that there would be 150,000, and presumably you could withdraw all 150,000 of them the last month or the last couple of months.

Mr. KAUFMANN. You are quite right. Although the pattern has been one of relatively smooth withdrawal, with an interruption it means that the savings from withdrawal and demobilization will be smaller as a result of the delay. And our quick calculation is that this will result in a reduction in savings of \$2 to \$3 billion.

Chairman PROXMIRE. Congressman Brown?

Representative BROWN. Mr. Kaufmann, let me go back to the last table of your appendix in your prepared statement and talk about the options. In those figures you talk about the 30 percent irreducible overhead. Where do those show up now? Are they scattered throughout these figures?

Mr. KAUFMANN. Yes. I put them in precisely to show that when one looks at the program costs of the system as shown in the program budget I think one gets a somewhat distorted view of what the forces cost because of these overhead costs which are shown separately in the program budget.

As I indicated earlier—

Representative BROWN. Could you give me an example, that is, air wings, ASW, or any figure that you want to work on.

Mr. KAUFMANN. Yes, sir. And to take the ASW-AAW, that has allocated to it essentially \$960 million of support costs, overhead costs.

Representative BROWN. So when you talk about the conservative plan of \$3.8 billion you are talking about actual capability spending of either \$2.9 or \$3.8 billion, or some other figure?

Mr. KAUFMANN. Yes, sir. In addition, R. & D. money which is not ordinarily allocated to, say, the ASW-AAW programs is also built into it.

Representative BROWN. How much would we take out for R. & D.? In other words, the R. & D. is not in the 30-percent, basic continuing cost. What percentage is R. & D.?

Mr. KAUFMANN. In that particular case it is \$240 million.

Representative BROWN. Nine hundred and how many million?

Mr. KAUFMANN. \$960 million, I believe, and \$240 million. So that of the—

Representative BROWN. That is \$1.2 billion?

Mr. KAUFMANN. Yes.

Representative BROWN. So actually in the medium risk option we take \$1.2 billion, and in the medium risk operation streamlined we take out \$1.5 billion of operational expenses or operational funding, is that correct?

Mr. KAUFMANN. No, sir. The amount of support in R. & D. would vary, because presumably as you reduce the force you also would have reduced some portion of the overhead, and therefore the residual overhead cost would be less.

Representative BROWN. You talked about retirement pay, and the other factors that go into that. What would those be?

Mr. KAUFMANN. The retirement pay is now the one big uncontrollable. And that would remain fixed.

Representative BROWN. Wait a minute. If you retired people from these systems would your retirement pay remain fixed?

Mr. KAUFMANN. I am sorry. No, it could go up, depending on—

Representative BROWN. So in point of fact would part of the \$2.7 billion go up, remain the same or go down?

Mr. KAUFMANN. I would have to recompute it. But I think on balance it would go down.

Representative BROWN. How much reduction did you anticipate or would you anticipate in the R. & D. in the medium risk option streamlined?

Mr. KAUFMANN. There was no reduction in R. & D. in that case.

Representative BROWN. In other words, is R. & D. maintained throughout? The reason I ask the question is that if we reduce our posture we might be well advised to increase our expenditure in R. & D. because, if our assumptions are wrong we would have material on the drawing boards to jump into some different posture; we could expand our military capabilities if our assumptions were proven incorrect.

Mr. KAUFMANN. I agree, sir. I should explain, in that particular case the reduction from \$3.8 to \$3.3 billion is a reflection of phasing out the last four of the antisubmarine warfare carriers. We now have four, we previously had eight, and the administration phased out four of these. And there is a strong view that ASW carriers are not effective contributors to the ASW program, and, therefore, the four ASW carriers are phased out, and the S-3 aircraft, which is currently under development to be put on the ASW carrier, was, therefore, phased out also, since there were no longer carriers to put it on.

Representative BROWN. I want to be perfectly sure that I understand what you have said here. I have put down these figures while you were talking, and have done a little subtraction.

As an example, the ASW-AAW forces in the baseline option or the conservative option, would have \$3.8 billion, of which you suggest that \$1.2 billion is in fixed overhead?

Mr. KAUFMANN. Yes, sir.

Representative BROWN. Irreducible expenditures for fixed assets and R. & D. This leaves \$2.6 billion in actual capability.

Now, in the medium risk option, streamlined, that is reduced down to \$2.6 billion. You state that fixed overhead is something less than \$1.2 billion, but you are not sure what it is. I subtract \$1.2 billion and arrived at \$1.4 billion.

The point I am trying to make is that the reduction in capability is a reduction from \$2.6 to \$1.4 billion. You get a reduction of something like 45 percent in dollar capability. The \$77 billion expenditure, which is the total of the conservative option versus the \$45 billion expenditure of the medium risk option streamlined, is a somewhat smaller percentage reduction.

In other words, when you look at the total defense spending it looks like you have merely sliced off a small portion, but you have cut quite close to the bone in terms of capability. Is that not correct?

Mr. KAUFMANN. It may be correct; but the change in the program forces, in other words, the combat forces, given the methodology that was used here—for which I am fully responsible—would have changed the program from—what did we say, \$2.8 to \$2.2 billion?

Representative BROWN. \$2.6 to \$1.4 billion.

Mr. KAUFMANN. As I would do it, it would change from \$2.6 to \$2.2 billion. In other words, you would get a \$400 million shift, because the \$1.2 billion is not constant.

Representative BROWN. The \$1.2 billion drops to \$400 million, is that correct?

Mr. KAUFMANN. The support costs in this case—and I should explain as I did earlier—these are arbitrary allocations in order to try and force the connection between these overhead costs and the combat forces.

Representative BROWN. There is not a difference in the allocation between the conservative option and the medium-risk option streamlined, is there?

Mr. KAUFMANN. No, but I use a percentage.

Representative BROWN. You are making the same proportional allocation, are you not? In other words, ASW and AAW forces still get the same percentage in the conservative option as they get in the medium-risk option?

Mr. KAUFMANN. Yes, sir, but it is a declining amount.

Representative BROWN. I am talking about the same percentage of the total figure of overhead.

Mr. KAUFMANN. Yes, but if the budget, according to this methodology, goes from, in this particular case from, say, \$44 billion, or \$53 billion, down to \$34 or \$31 billion, the absolute amount of support shifts, and therefore, the percentage shifts as well. So that the \$1.2 billion is not a constant.

Representative BROWN. Let us start from the total figure. I understood that what you said was that 30 percent of the \$77 million is an overhead, is that correct?

Mr. KAUFMANN. Of the total defense budget.

Representative BROWN. That is right, 30 percent of \$77 billion is overhead?

Mr. KAUFMANN. Yes, sir.

Representative BROWN. Of the \$45 billion what would overhead be?

Mr. KAUFMANN. Thirty percent.

Representative BROWN. In other words, as you reduce your expenditure you also reduce your overhead proportionally, is that correct?

Mr. KAUFMANN. Yes, sir.

Representative BROWN. Can you explain to me why that would be the case? Wouldn't you have certain fixed expenses that would be irreducible?

Mr. KAUFMANN. This is precisely the issue that I think we are both trying to raise; namely, that this tends to be in fact the case, that the overhead costs tend to be a remarkably insensitive to changes in combat forces, and yet these overhead costs presumably are related to supporting the combat capabilities. Now, I think we have a very real problem—

Representative BROWN. Let me just take one small example. The Pentagon building would not reduce expenses by merely reducing forces as the overhead expenses would still be there.

Mr. KAUFMANN. I would argue from some experience, sir, that if you make major force changes you ought to be able to make changes in the number of people.

Representative BROWN. I do not have any question about that. My question is whether or not the 30 percent is realistic; do you in fact cut total overhead? Now, I operate a business, and when the volume of business changes I find that when business sags the overhead tends to become somewhat smaller or somewhat larger percentage of the total cost of doing business.

We still have basic overhead expenses as we have to have accountants around, and so forth. Now, in the defense establishment does that work differently?

Mr. KAUFMANN. No, sir; but let me repeat, there is no current way of tying these overhead costs to the teeth of the Military Establishment. Everybody is concerned about the fact that they do not vary even as much as you may have suggested in the business community when you make changes in the forces. They tend to vary unproportionately, which is I think a quite common phenomenon.

Representative BROWN. I do not want to labor the patience of the chairman as I have already extended beyond my 10 minutes of questioning, but it occurs to me that your figures are unrealistic in that you assume 30 percent overhead costs on \$77 billion and also assume 30 percent overhead costs on \$45 billion.

Now, I am not arguing that the overhead percentage goes up to 60 percent, or anything like that. But I am suggesting that it is not 30 percent but, probably substantially more than 30 percent. Even if you close military bases around the country there is an expense problem left that must be met by the Federal Government.

I sit on another committee in this Congress where we have the problem of trying to dispose of installations that we built in World War II; we are still attempting to dispose of some of them. This is an expense to the Government, an overhead expense. My suggestion to you, sir, is that the reduction in force capability is not 28 percent when we drop the total defense expenditure from the \$77 billion to the \$45 billion, but the reduction is substantially more than that in our force capability as we are spending a proportionately higher amount on overhead. That is the only point I wanted to make in this questioning.

Do you resist that suggestion?

Mr. KAUFMANN. Partly. First, the way in which we arrived at the basic numbers, leaving aside for the moment the overhead cost, was by actually identifying specific forces, to the best of our ability identifying their cost, and taking them out of the particular package, say, in the ASW case taking out the 4 CVS's, and taking out the S-3 buy, and then getting a reduction in the program which went from \$2.6 billion in this case to \$2.2 billion.

Now, I accept completely your point that there is not a straight line relationship between overhead and the combat forces.

Unfortunately, however, nobody to my knowledge knows how to make that relationship or how it varies as you vary the front end.

I, therefore, as I have tried to indicate, decided that these overhead costs nonetheless, being such a significant portion of the budget, should be allocated in a necessarily arbitrary way simply for illustrative purposes to show what not only are the effects of changes, but also that these forces represent higher costs than is generally attributed to them.

So I used a straight line method of allocating them.

Representative BROWN. A final question. Suppose we disarmed completely and had no effective military weaponry of any kind. What will be left in terms of Defense Department expenses? Does anybody know what that figure is?

Mr. KAUFMANN. Well, the retirement pay at current rates would be about \$3.2 billion.

Representative BROWN. You would have this expense?

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. Isn't it true that on the assumption that we have inefficiency in our overhead expenditure now that we could make some cutback there in addition? I think Congressman Brown has made a very good point that after all overhead is something that cannot be reduced proportionately, but I think you are right, that it can be reduced, and reduced significantly.

For example, the Defense Department increased by \$7.6 billion this past year, reaching a total of over \$200 billion, the amount of land that it owns, \$200 billion worth of land, 29.5 million acres. And much of this could be sold off. And there are many other areas of overhead cost and expenditures that can be reduced.

I would like to yield to Senator Percy.

Before I do that, let me just ask you a couple of quick questions.

Dr. Rathjens, I have been reviewing an excellent book, new book by Herbert York. It concludes that because of the spiral of the arms race, as our military expenditures increase, our security has decreased. Would the opposite be true in your judgment if we carefully reduced our military spending in the right places, do you believe our security would increase?

Mr. RATHJENS. I do believe that. I have been reviewing the same book, and I have reached the same conclusion.

Chairman PROXMIRE. I am doing mine for Life magazine.

Mr. RATHJENS. It is a good book, an excellent book.

I might say in that connection that the description on this table in the appendix to which you have just been referring, the last one in Professor Kaufmann's prepared statement, bothers me a little bit, in that the implication there is perhaps that the conservative option implies less risk and a medium risk. I would characterize these options perhaps more accurately as base line, expensive, cheaper, or something like that. Or if you want to do it in terms of risk, I would say the base line is the medium risk. The most expensive one is the highest risk, and the least expensive one is the least risk. I think, particularly considering some of the components here, the more we spend, the higher the risk.

Chairman PROXMIRE. You emphasize the prospect of large increases in the strategic nuclear budget. In your view, does this mean we are returning to a policy of massive retaliation?

Mr. RATHJENS. I do not know. I would not relate the two. But I am concerned about the Guam doctrine, if you like, or the Nixon doctrine. And particularly I am concerned about the rationalization—

Chairman PROXMIRE. You are concerned about the Guam doctrine?

Mr. RATHJENS. I am in the sense that I am concerned about the President's anti-Chinese rationale for Safeguard. If I understand his argument correctly, the implication is that we would rely on Safeguard to cope with possible Chinese nuclear attack against us. That kind of

an attack in my view could only be provoked if we were to use our nuclear weapons against them. I am concerned that with a reduction in emphasis on conventional forces we may be moving in a direction where there would be hope or inclination to use nuclear weapons to cope with problems in Asia and elsewhere. Perhaps this would not involve going quite to massive retaliation, but I would regard any such effort—

Chairman PROXMIRE. That certainly is not a necessary element of the Guam doctrine as announced, is it?

Mr. RATHJENS. That is not necessary.

Chairman PROXMIRE. I thought that was an excellent statement by the President.

Mr. RATHJENS. It is not necessary, but I would feel more comfortable if we had not heard that rationalization of Safeguard. That does worry me.

Chairman PROXMIRE. You place a great deal of importance, as all of us should, on the SALT talks. But only this morning there was a Pentagon announcement about the deployment of the first MIRV missile. We have also begun work on the Safeguard ABM. Now, I had assumed, and I think it is also implicit in your statement, that one of the primary, if not the primary purposes of SALT was to come to an agreement and possibly suspend deployment of MIRV and ABM. My question is this:

If the United States goes forward unilaterally with the deployment of MIRV and ABM, what is there left to negotiate at SALT? I would also like the other witnesses to comment.

Mr. RATHJENS. If we go forward with both of these, I suppose it is still possible to have meaningful negotiations. We could negotiate perhaps some limit on ABM, and perhaps some limit on the numbers of strategic offensive forces. But I would also say that we would have missed the main opportunities. I regard stopping both of those programs on both sides as the main opportunity. Beyond that, I would say that we ought not—as I remarked earlier, even independently of those talks—go forward with those programs at this time.

Chairman PROXMIRE. Is there any real hope, now that we have begun to deploy MIRV, is there any real hope that we can get an agreement, given their attitude and our attitude toward other spot inspection? Doesn't this depend on inspection, testing of MIRV which can be done unilaterally without any mutual faith?

Mr. RATHJENS. I am afraid that if we go forward with MIRV's on either side to any substantial degree, the ground rules for any negotiation would have to permit, as I remarked earlier, essentially a total restructuring of the strategic force posture of both sides, so that neither would continue to rely very heavily on its fixed facilities—fixed land-based missiles. It is still possible for me to see an agreement. It would necessarily imply the expenditure on both sides of many billions of dollars to do something about that vulnerability, perhaps to phase out Minuteman and build ULMS and other systems. I can see an agreement. However, it would not be a freeze at all but rather an agreement of a different kind. It would be an agreement that would permit the restructuring of forces at a very large expenditure, but perhaps with some constraint that would not obtain if you did not have the agreement.

Chairman PROXMIRE. Senator Percy?

Senator PERCY. Thank you, Mr. Chairman.

My first question is to Mr. Timothy Stanley. I first would like to say how pleased I am to see you here, and to publicly express appreciation for the great assistance that you gave to me and my staff when you were based at NATO as Minister and Defense Adviser.

I wonder, now that you have spent some time back in the States and looked at our national spending priorities, and as you contemplate the estimated \$14 billion that we spend as a contribution to the NATO defense, what your observation might be on the request that Senator Mansfield has put in, supported now by 51 Senators, I believe, for troop reductions in NATO. Also, what are your thoughts on the proposals that I have been making for more burden-sharing, having more of the cost of our NATO defense picked up by European countries which can well afford to do it today as against 25 years ago when they could not afford their own defense establishment?

Mr. STANLEY. Sir, as you may recall, I have been and still am a supporter of the notion that the balance-of-payments costs of our deployment in Europe are a very special problem for us, and they are ones on which I think we are entitled to look to our allies for more support than they have given us. I think we have reached pretty close to the bottom of the barrel as to how much can be offset by new procurement in the United States. And financing the deficit by simply floating paper on which we pay interest is not obviously a good long-term solution.

So I think that some combination of making the balance-of-payments costs more of a multilateral responsibility and getting our allies to directly offset some of our support costs in Europe is an eminently sound one, and one that I certainly support.

I do not think that I can say the same, however, for the resolution which you mention, because I am more concerned with the destabilizing effects that it has. Europe is very much in flux now. There are not only the SALT negotiations, but also the West German Ostpolitik. We do not know to what extent the other side is going to respond to the invitation which NATO issued last week at its Rome meeting to discuss European security generally and mutual force reductions specifically. So I think that in the short term we could really have some badly unsettling effect in Europe if we were to unilaterally withdraw our forces. I think, however, that over the next 2 or 3 years there will be an opportunity, in consonance with our allies, to reduce somewhat the level of our active presence there. And to the extent that this can be done without the undesirable political effects that I foresee, then I am for it.

Senator PERCY. I think there is a real question as to our ability to carry and sustain a \$14 billion level which will continue to escalate as wages increase and salaries for military personnel increase and costs over there increase. It seems to me strange that the European countries cannot seem to pick up a couple of billion dollars of that on their budgets. That is the big offset that we need. I do not see how we can continue this kind of spending.

It certainly seems to me ludicrous for us to be paying the salaries of German personnel, some 70,000 of them, who work for NATO. They are part of the common defense. Why should we be paying in

dollars or paying at all out of our budget the salaries of German personnel used in the common defense over there?

Why should we be paying the cost of installations, or paying the German Government for transportation costs? The Government owns the railroad system. Or power, because it owns the power system? Or paying local taxes, when we do not even pay them in this country?

It seems to me that there are hundreds of million dollars if not billions of expense that ought to be picked up. And I hope we would have your vigorous support as a very knowledgeable person on that. If we are not to massively reduce our troop level, then European countries are going to have to find a way to pick up some of these expenses.

Mr. STANLEY. Of course, you are very well aware of the background of this problem in that after World War II our overhead occupation costs were in effect picked up by the Germans as occupation costs. When the occupation formally ended, we agreed to take some of them back. At that time I do not think that we were as worried about a dollar drain toward Europe as we were about a dollar "gap." Now the situation is reversed. And I think there is a very good case that can be made along the lines you have just mentioned.

I would like to say, though, that before you came in we were having some disagreement about the relevance and meaningfulness of assigning dollar figures to specific contingencies. And I think that the \$14 billion figure is far larger than the total cost of our forces that are in Western Europe.

The actual cost of the forces that are physically in Europe is probably about \$3 billion, perhaps \$3½ billion.

Senator PERCY. I just gave you the best estimates I can get from the Bureau of the Budget as to what our cost is of the proportional share of our contribution to NATO. And this is the figure I get. This takes in, of course, the proportional amount of overhead attributable to NATO here in the United States.

Mr. STANLEY. But it includes a lot of divisions that are in the United States and have a kind of NATO tag on them in the sense that they are earmarked for NATO; and it includes a lot of Navy ships that may be in the Far East. But we say that if NATO has a war, then we will try to get them there within a certain period of time. So they are not really direct NATO costs, at least they are not the costs of our deployment in Europe.

Senator PERCY. Dr. Rathjens, I am always happy to see you. And we deeply appreciate the technical assistance that you have presented to many of us in the past on military weapons systems.

I wonder if you would care to comment on the unofficial talks that were carried on in Washington as to where we stand on SALT and the possibility of reaching some accord where we would have no ABM's except for the protection of our control centers in Washington and in Moscow.

I am sure the Soviets have almost an obsession with doing something to somehow protect Moscow. Even if they feel that we can penetrate it, symbolically they seem to want to protect it. And maybe there is some sense in providing some sort of protection to our control centers in Washington against some accidental launch or some third power launch. But would you care to comment at all on what you feel is the feasibility of this, and if you think it is feasible to reach some sort of an agreement, what we ought to be doing this year on voting

on appropriations on continuing phase I and phase II which would extend further the bases that we would be equipping with ABM?

Mr. RATHJENS. Senator, fortunately—I guess it is fortunate—I am not privy to the details of our negotiating position and I am not privy to the Soviet position so I feel I can talk freely about the speculations that have appeared in the Washington Post and elsewhere.

Considering them, and also private conversations with various people in and from the Soviet Union, I was not at all surprised at the report that the Soviet Union might be willing to go along with defenses limited to the two capitals, or might be willing to go even further and go along with an agreement that involved no ABM deployment on either side at all. It does seem to me the latter would be preferred.

I would hope that the United States would be willing to go along with either of those positions.

Of course, the Safeguard program as presently approved, and also as proposed by the administration for this year, has nothing to do with the defense of Washington. So that if one takes those reports at face value it would seem to me it is probably time for us to go back to the drawing boards.

I do not see any particular need for defending the two capitals—for defending the command and control facilities. I have little confidence that the system would work effectively in coping with either an accidental or with a deliberate mass attack. In either case it would seem to me it would buy very marginal improvement in our command and control capability. I do not know exactly what the Washington deployment alone would cost, but we would still be stuck with all of the R. & D. and the overhead costs that were referred to earlier. Therefore, even for a defense limited to Washington, the cost would be a number of billions of dollars. For costs far less than that I am sure we could buy a greater improvement in the reliability of our command and control system.

Accordingly, I would hope we would buy either position that the Soviet Union was willing to buy, and I would urge that we try to take advantage of that opening, if it is an opening, to reach an agreement that would involve both sides.

Senator PERCY. May I just ask this further question. We have had a lot of discussion on the Senate floor about the pros and cons of the unified budget. We have one deficit figure by the unified budget and another one by the old system of budgeting. Would you care to comment on—now that we have had a year's experience or more with it—whether you think the unified budget is a concept that is supportable, or whether it is in any way misleading as to the degree of deficit that we have, real deficit?

Mr. KAUFMANN. I really do not feel competent to comment, Senator. I guess my feeling for what it is worth is that it is nice to have both.

Senator PERCY. Thank you very much.

Thank you, Mr. Chairman.

Chairman PROXMIRE. Congressman Brown?

Representative BROWN. Mr. Rathjens, in your testimony I am not sure I understand the predicate that is laid in the testimony. You say that "we can now deliver over 4,000 strategic warheads against the

Soviet Union. Based on extremely conservative estimates, 400 would destroy 30 percent of the Soviet population and three-fourths of its industrial capacity."

What assumptions are you making as to the utilization of these strategic warheads? Is 4,000 based on what would be available after the first strike of the Soviet?

Mr. RATHJENS. We could deliver somewhat more than 4,000 if they did not destroy them. How many they could destroy—

Representative BROWN. It is not based on our first strike, is it?

Mr. RATHJENS. It is the number we would have in our strategic forces.

Representative BROWN. After the Soviet strike, what is your estimate as to how many of these would be available?

Mr. RATHJENS. That could vary enormously. At this time it would depend on the state of alert of our Strategic Air Command more than anything else, because the bomber force carries a very large number of those. It would depend on how many would be destroyed on the ground. I would think as a minimum one would assume that some 400 of the Polaris warheads would get there—

Representative BROWN. You mean survive and get through?

Mr. RATHJENS. Would survive and get through.

Representative BROWN. Let us talk about survival. You have another problem with respect to getting through.

Mr. RATHJENS. All right. I would think as a minimum 400 of the Polaris warheads would impact on the Soviet Union.

Representative BROWN. You mean survive and get through?

Mr. RATHJENS. Yes. And as a minimum, half of the Minuteman force, that is another 500. So we are up to something like 900. Beyond that I really think it is quite speculative, and could be anywhere from 300 or 400 up to perhaps 1,500.

Representative BROWN. Are you basing this on current capability?

Mr. RATHJENS. Yes.

Representative BROWN. What about force reduction?

Mr. RATHJENS. If there were force reduction the number of surviving warheads would depend, of course, on what you reduced.

Representative BROWN. Assuming you reduced the Strategic Air Command?

Mr. RATHJENS. In my view, the prudent thing to do would be, at this point in time, frankly, to begin to phase out Minuteman as a matter of priority and to retain the Polaris force as the most reliable component. If you retained just the Polaris force, I would assume that at least for many years that would be an invulnerable deterrent, and that the number of weapons we could deliver with that force would be almost independent of whether they struck us or not.

I do not believe that aside from those they might catch at port, they are going to destroy any Polaris submarines, except perhaps one or two.

Representative BROWN. You suggest a factor of 1 in 10 reduction, so I presume you mean we would have 400 strategic warheads at the end of that reduction. Now, of those 400 strategic warheads how many would you destroy?

Mr. RATHJENS. The numbers that would be destroyed would depend on which forces we retained. I would want to look at this in more detail.

But my off-the-cuff answer would be to retain perhaps half the Polaris force and perhaps a hundred B-52's or something like that, and get rid of the Minuteman force entirely.

Representative BROWN. And how many of the 400 warheads would this put in the Polaris?

Mr. RATHJENS. Each Polaris submarine now has sixteen missiles. The number of warheads depends on how you count the A-3—if you count that as three warheads, or one warhead, on each missile.

Representative BROWN. How were you counting when you estimated that we should reduce our force to 400?

Mr. RATHJENS. For most purposes I would count each A-3 as having one warhead, since the impact points are close together.

Representative BROWN. Let us use your figures.

Mr. RATHJENS. If you retain say, 20 Polaris submarines, that would give you 320 warheads there, counting the A-3's as having one warhead per missile.

And if you maintained 100 B-52's, I would think that with that combination you ought to be able to deliver 400 warheads.

Representative BROWN. How many warheads would that be with the B-52's?

Mr. RATHJENS. With the B-52's, that number is variable. But for a first approximation I think one can calculate about 4 per B-52.

Representative BROWN. So this is 720 warheads, rather than 200; is that right?

Mr. RATHJENS. Some of the Polaris boats will always be in port—

Representative BROWN. I am trying to clarify your statement which calls for a factor of 1 in 10 reduction from 4,000 warheads. I get 400 warheads out of that.

Mr. RATHJENS. That is right.

Representative BROWN. And you have given me 720 warheads here.

Mr. RATHJENS. All right. And I would think that of these 700, 400 might be delivered.

Representative BROWN. Is 4,000 what we now have, or what we now have that are deliverable? I was under the impression that 4,000 is what we now have available.

Mr. RATHJENS. The 4,000 is what we now have in total.

Representative BROWN. You would have 700 rather than 400; is that correct?

Mr. RATHJENS. There is nothing magic about either figure. A properly designed force of 700 weapons would be an adequate deterrent. So would be any force capable of delivering 400 warheads. I would go further than that as far as deterrence is concerned. In my view, 100 delivered weapons would be quite adequate.

Representative BROWN. How would you do it? Would you reduce our Polaris submarines?

Mr. RATHJENS. Having said that a hundred is adequate, I think more than a factor of 10 reduction in the total force would still give us an adequate deterrent.

Representative BROWN. How would you deploy the hundred? If we cut down on the defense establishment I would like to specifically know in what areas?

Mr. RATHJENS. Let me give you a posture which I would think would involve perhaps a factor of 10 reduction in cost, which I would view to be an adequate deterrent.

Representative BROWN. I am interested in the cost factor too, but I am interested here in your statement concerning strategic arms limitations and how we should reduce from 4,000 strategic warheads to 400. The figure you gave me was 720, and now you are suggesting we have a hundred; is that correct?

Mr. RATHJENS. I am saying a hundred delivered—the capability to deliver a hundred would be in my view adequate to deter any attack.

Representative BROWN. In order to deliver a hundred, how many warheads would we need?

Mr. RATHJENS. A good number would be 160, the equivalent of 10 Polaris boatloads.

Representative BROWN. In a first strike situation 60 of our 160 warheads would be destroyed, or would not be able to get through; is that correct?

Mr. RATHJENS. I think that is a fair estimate. Some would fail because of reliability failures.

Representative BROWN. What do you base that estimate on, sir?

Mr. RATHJENS. I would assume that the reliability of Polaris missiles is now somewhere between 70 and 80 percent. And I would assume that at any given time some number like 60 percent of the submarines may be on station, and another 20 percent in transit, and another 20 percent in port. Those that are in port might well be destroyed by Soviet preempted attack. I doubt if any of the other would be. So if you had, say, 10 submarines, I would assume that perhaps two would be destroyed, leaving eight. Not all of the warheads would get through, as I say, because of reliability failures.

Representative BROWN. Using your figures I have 102 that would be sent after destruction of 20 percent of the Polaris force, and failure of 20 percent.

What is the Soviet capability for defending against these warheads?

Mr. RATHJENS. Well, there are 64 interceptors around Moscow, or 67, depending upon which figure you read. That system might work. I cannot believe that they would count on it working at all. At most it could intercept if we chose to saturate it and exhaust it—

Representative BROWN. Shoot them all at Moscow?

Mr. RATHJENS. If we shot 65 at Moscow—I think it would be a very foolish thing to do with that size force, but you would be sure that some would get through if we did.

Representative BROWN. We are shooting off 102. How many of those will get through?

Mr. RATHJENS. It might depend on their targets, but I think very likely 102.

Representative BROWN. In other words all would get through because the Soviets have no defense against them?

Mr. RATHJENS. They have an ABM system around Moscow which I would consider to be probably not of any utility at all.

Representative BROWN. So a hundred percent of whatever we would shoot off after a first strike would get through?

Mr. RATHJENS. We could be sure that a hundred percent would get through if we targeted them against other targets in the Soviet Union.

Representative BROWN. How precise is this estimate?

Mr. RATHJENS. Which estimate?

Representative BROWN. Your estimate.

Mr. RATHJENS. Of what?

Representative BROWN. Your estimate of how many will get through?

Mr. RATHJENS. I guess we cannot go into that in detail here. We could get reliability figures from the Department of Defense.

Representative BROWN. The reason I ask this question is because I think we are in the area of considering what kind of military force we have. Prior to World War II we had gone through the exercise of attempting to negotiate a reduction in arms and attempting to withdraw from commitments previously made. We did have a first strike attack at the time of World War II and a good deal of our responsible capability was destroyed.

Now, I want to get some idea as to the validity of your estimates.

And again, I ask how much reliance we can place on your estimates?

Mr. RATHJENS. Referring to the calculation that we just went through, I suggested that on the average 20 percent of the submarines might be destroyed in port at any given time. That is uncertain. It depends on schedules for repair, retrofitting, and what have you. I would think that it would be unlikely in the normal course of events that more than 30 percent would be destroyed in port. The reliability of the missiles is much more uncertain. We have only tested, to the best of my knowledge, one Polaris missile to the point where it was launched from the submarine, actually went through the whole trajectory and then delivered a nuclear warhead which detonated. That did happen once, and it worked. We have fired many weapons with dummy warheads from the Polaris missiles on a variety of trajectories so there is a great deal of data available there. We have detonated a number of nuclear weapons, and we have a great mass of data on their reliability. But we have completed the whole sequence only once. Even then it was still only a simulation because it was not to a target within the Soviet Union.

But I do believe that our confidence in the ability of a Polaris missile, when you push the button, if you like, to get out of the tube, to have both stages function properly, to have the warhead detonate properly, and within reasonable tolerance of where it is supposed to land, is probably somewhere between 70 and 80 percent. I would be very surprised if it were less than, say, 40 or 50 percent, and very surprised if it were more than 90 percent.

Now, of course in the targeting plans that people develop out in Omaha when they allocate these forces, they use specific numbers which are best estimates. I would be quite sure that they would fall somewhere in the range I have just given you.

I might say, since you have raised the question of the forces in Europe and elsewhere, that we do have there, of course, an additional 7,000 nuclear warheads, a fair number of which could be delivered against the Soviet Union.

Most of those are of smaller yield, and most of those are not targeted against targets in the Soviet Union. But the Soviet planner who contemplates possibly striking us first or otherwise provoking a nuclear war would have also to count on the possibility that some of those weapons, indeed some of those that might be on the attack carriers as well, could be delivered against them.

So in addition to those 4,000 that I referred to here, there are another 7,000 or 8,000, some small fraction of which might also be delivered against the Soviet Union, depending upon the tactical situation.

Chairman PROXMIRE. Dr. Kaufmann, I take it that the list in your prepared statement consists of weapons systems which, although they promise a great deal, are likely to be "unable to deliver on the promise because they are low in reliability, only marginally better in other significant parameters of effectiveness, or both." Is this a fair conclusion?

Mr. KAUFMANN. No, sir; I did not wish to imply that the entire list fell within that category. I simply meant to suggest that these were all systems about which issues both of reliability and increased effectiveness—given the power costs of the systems they would replace—certainly questions about their reliability and about increases in effectiveness should be raised.

Chairman PROXMIRE. You question them rather than make an assertion about them, is that it?

Mr. KAUFMANN. Yes, sir.

Chairman PROXMIRE. Can you provide for the record the corresponding list of weapons systems which are scheduled to be replaced?

Mr. KAUFMANN. I would be glad to do that.

Chairman PROXMIRE. That would be helpful.

(The following information was subsequently supplied for the record by Mr. Kaufmann:)

Your request was that I indicate what weapon systems would be replaced by the new systems that I listed in my prepared statement. You may recall that I had drawn my list of new weapons from the Selected Acquisition Reports proposed by the Department of Defense, along with their estimated procurement costs. The point I was trying to make, in presenting this list, was that the cost of newer weapons is rising so rapidly that we face some difficult choices.

First, we can try to replace older systems on a one-for-one basis, in which case we are likely to see a very large increase in the defense budget, especially since operation and maintenance costs appear to be growing proportionately with procurement costs.

Second, we can argue that effectiveness is rising commensurately with cost, and—allowing for inflation—replace the older systems on an equal-cost basis, which would usually mean on less than a one-for-one basis numerically.

Third, depending on the evolution of potential threats, we can try to obtain less computer weapons with good performance, higher reliability, and power cost than the new systems so as to avoid having to choose so sharply between quantity and quality.

The third choice is frequently attractive not only because of financial considerations, but also because, in many military encounters, a numerical advantage in simple, reliable weapons can outweigh the uncertain qualitative merits of a few new and technologically advanced systems. If, for the same price, we have a choice between a tank with a 70 per cent probability of destroying its target, and two tanks—each with a 60 per cent probability of destroying the same target—we may well prefer the latter.

In the circumstances, what may be relevant is not so much the predecessors to the new weapons themselves, as whether the particular new systems represent necessary or wise replacements for older capabilities. Perhaps I can best illustrate the issues involved by a brief discussion of each of the new systems on my list.

SAM-D is a complex air defense system which, in its present incarnation, is supposed to provide field Army air defense. If deployed, it would replace the Hawk and Hercules batteries now providing this area protection. Despite its technical sophistication and great cost, SAM-D raises the question of whether it would provide any major increase in effectiveness over Hercules and Hawk against expected threats.

*MBT-70* is intended as the main battle tank for the Army, and would replace the M-60. The new, "austere" version would cost an estimated \$630,000 per unit (assuming a production run of 3,000 tanks) against about \$250,000 for the M-60. The two tanks differ in certain important characteristics, but there remains the question of whether one MBT-70 will be able to out-perform the two M-60s which we could buy in its place. Another issue here as elsewhere is which would be better in terms of cost and continuing effectiveness—making model improvements in the M-60 or attempting the technical leap forward represented by the MBT-70. In this connection, Army R. & D. Chief Lt. Gen. Austin W. Betts is quoted as having said: "There is nothing about this tank [the MBT-70] that we dislike except its cost and demonstrated reliability."

*TOW* is a heavy, tube-launched, optically-tracked, wire-guided, anti-tank missile which would presumably replace the ENTAC and SS-11 anti-tank missiles as well as the 106mm. recoilless rifle. Unit costs for these various systems are not available to me, and the issue here is not whether a successor to the older missiles would be desirable. Rather, it is whether the Shillelagh missile adapted to infantry use would be equally effective, less costly, and available much earlier. It has been said that "Shillelagh is not exactly something soldiers would carry around in their rucksacks. On the other hand, Congressman Charles S. Gubser observed last year that *TOW* is hardly a light weapon either: "The launching tube costs \$96,000 per copy and takes two to three men, and possible a jeep, to carry it." According to Representative Samuel S. Stratton, Shillelagh, after field tests and after having been accepted for production, costs "less than a third of the cost of *TOW*, which is still in the development stage." However, Representative Charles H. Wilson has argued that Shillelagh would have higher cost than direct procurement of *TOW*, 10-20 percent has range capacity, 30 percent less range capacity against high-speed moving targets, significantly lower accuracy, greater time of flight at all ranges, and heavier weight.

The *F-15* is being designed as an air superiority fighter for the Air Force, although it may become a multi-purpose aircraft with an air-to-ground capability. It will replace the *F-4*. Currently estimated unit costs are around \$15 million compared with \$4 million for the latest version of the *F-4*. It has been argued that, instead of the *F-15*, what we need to combat Soviet aircraft in the late 1970s is a much lighter and less costly fighter that would emphasize a high thrust-to-weight ratio, low wing loading, simple and reliable avionics, visual combat, and armament consisting of guns and the Sidewinder missile. A single-seat, single-engine, highly maneuverable aircraft of this type, it is maintained, would give much higher kill ratios than the *F-15* against advanced Soviet fighters, and would cost no more than the *F-4*.

The *F-111*, in the view of the Air Force, "represents a major step in modernizing our interdiction and long-range penetration capabilities." To the extent that the *F-111* replaces any aircraft, it is the *F-105*. Unit costs for the *F-111* appear to be running at around \$9-10 million a copy, compared with about \$2 million for the *F-105* and \$4 million for the latest model of the *F-4*. Two issues concerning the *F-111* have arisen. The first, brought out by Senator McClellan, has to do with the extent to which the performance of the aircraft conforms to the original specifications for it. According to Senator McClellan, the *F-111* has failed to meet performance specifications in such areas as takeoff weight, takeoff distance, landing distance, ferry range, combat ceiling, maximum speed at high altitude, dash distance at low altitude, and time to accelerate from mach .9 to mach 2.2. The second issue concerns the need for a major investment in interdiction and long-range penetration capabilities in the light of what are considered rather modest successes with this mission in both Korea and Vietnam.

The *F-14/Phoenix*. The *F-14* is being built as a multi-mission aircraft for Fleet air defense, air superiority, and air-to-ground combat. The Phoenix missile, to be carried by the *F-14A* and *F-14B*, is to be used for long-range Fleet defense. The *F-14* succeeds the now-defunct *F-111B* (to which it bears many similarities) and will presumably replace the *F-4* in the Navy inventory. It is also considered as a potential competitor to the *F-15*. Its cost reportedly approaches \$16.5 million per aircraft (presumably without the Phoenix missile), which compares with about \$11.5 million for an *F-111B* and \$4 million for the latest model of the *F-4*. The issues surrounding the *F-14* are similar to those connected with the *F-15*. In addition, since critics already consider attack carriers vulnerable to Soviet surface-to-surface missiles and attack submarines, they question whether the *F-14* will seriously increase the survivability of the carriers against this high-grade threat. Against other nations, they wonder whether an aircraft as complex and expensive as the *F-14* is even needed.

The S-3 is an anti-submarine warfare aircraft designed for operation from ASW carriers (CVSs), of which there are now four in service. It will replace the S-2. The S-3 has been described as a four-man, fixed-wing aircraft powered by two by-pass ratio turbo-fan engines. It would have vastly improved speed and range compared with the S-2, carry more torpedoes, and be able to monitor many more sonobuoys. The S-3 is expected to cost at least \$16 million per copy compared with \$2 million per unit for the much older S-2. The issue concerning the S-3 is not whether it is a promising aircraft or whether the effectiveness of the CVSs should be upgraded, if we maintain them in service.

It is whether we need the CVSs (and consequently the S-3) at all in view of the other capabilities already available for ASW including particularly the Purge, land-based force of P-3 aircraft. Critics of the S-3 argue that the P-3 performs the same functions as the CVS-S-3 combination, has the land bases available to provide equal coverage, and is just as effective at lower cost.

The SSN-688 attack submarine is primarily a weapon for anti-submarine warfare, although it can also be used to attack enemy naval and merchant vessels. As such, it does not really replace vessels other than the now-obsolete diesel-powered submarines as we build toward a force of more than 60 first-class nuclear attack submarines. Rather, it succeeds the Sturgeon class (SSN-637) attack submarines. The first SSN-688 is expected to cost over \$200 million; subsequent boats in the class are currently estimated at \$160 million a copy. The Sturgeon class, by contrast, has cost about \$80 million per boat. Although it appears to be widely agreed that we should build to a force of at least 60 first-class SSNs, there is some question as to whether the larger size and somewhat increased speed of the SSN-688 bring benefits at all commensurate with the doubling in cost over the Sturgeon class boats. Presumably, we could have two Sturgeons for the price of one SSN-688. Moreover, it appears that the improved sonar, fire control systems, and acoustic countermeasures planned for the SSN-688 could be retrofitted into the Sturgeon boats.

The DLGN-38 is a nuclear-powered destroyer leader, or frigate, which will serve as escort for nuclear-powered attack carriers. It can also operate independently or serve as escort to ASW and amphibious forces. Four DLGNs (the number currently programmed) are considered capable of replacing six conventional escorts for the purpose of screening an attack carrier. In principle, the DLGN-38s can be considered as replacing conventional destroyers of World War II vintage, which we plan to replace anyway, given their age. Thus, what is relevant here is the choice of replacement. A DLGN-38 will probably cost between \$200 and \$225 million. A DD-463 (see below) is currently estimated to cost close to \$100 million; and a DE-1052 (Knox class destroyer escort) might cost \$50 million if production of this class were to be continued. The DE-1052 makes only 27 knots, which is considered below the "magic" speed of 30-35 knots required for escorts of nuclear attack carriers. But it could still be used in that role, or at least the ASW part of it. In the past, proponents of nuclear propulsion have argued that the higher procurement costs of the nuclear escort would be made up for by lower operating costs and the smaller number of escorts required for attack carrier. Whether that argument still holds, with the DLGN-38 class estimated at over \$200 million per escort, is worth some examination.

CVAN-70 is a nuclear attack carrier of the Nimitz class and is supposed to be the third in a series of four or possibly five such carriers. The official estimate of its cost is about \$510 million, but there is widespread speculation that it will end up costing between \$600 and \$700 million. In addition, if it were provided with four nuclear escorts and a new suit of aircraft (including the F-14), the procurement cost of the task force would amount to well over \$2 billion. Annual operating costs of the task force would be more than \$150 million. If we maintain a force of 15 attack carriers in the Fleet, CVAN-70 would replace CVA-34, the Oriskany, which, with subsequent modernizations, is estimated to have cost about \$162 million. If we reduce the attack carrier force to 12, CVAN-70 would replace CVA-41, the Midway, which has just completed a \$200-million modernization. It is generally assumed that the Midway, with this modernization, should be able to operate effectively until at least 1980, and possibly longer. Yet CVAN-70, if built now, would replace it by about 1976. In other words, if we go down to a force of 12 attack carriers, we would not really have to start CVAN-70 (or its updated equivalent) until at least 1976. It is also worth noting that the last conventional carrier we built—CVA-67, the John F. Kennedy—cost about \$278 million, or less than half the probable cost of CVAN-70.

DD-963 is a new class of multi-purpose destroyers, of which 30 are supposed to be built. Each DD-963 would be twice the size of previous destroyers and would have a full load displacement of 7,000 tons (the full load displacement of the DE-1052 is 4,000 tons). The DD-963s will presumably replace much older destroyer types from World War II, and there is general agreement that these ships should be replaced. At issue is whether the DD-963 represents the necessary replacement. Official estimates give the cost for each DD-963 as \$85 million, but unofficial estimates now run as high as \$110 million. By contrast, the DE-1052s have been costing \$30-35 million, and might cost as much as \$50 million if new keels were laid under present conditions. The DD-963 will probably go 3 knots faster and carry an additional 5-inch gun. But whether these and other possible advantages justify a ship double the cost of the DE-1052 is a question that remains to be explored. It is noteworthy, nonetheless, that whether we buy DLGNs at \$200 million, DDs at \$100 million, or DEs at \$50 million, the Navy's total "requirement" for escort ships seems to remain remarkably stable.

Chairman PROXMIRE. Dr. Stanley, your idea of the role of the Congress seems to me to be not only unsatisfying but a bit limited. As you know, the constitutional concept is that the Congress and the Executive are co-equal, and I do not believe that military policy should be an exception. Yet, you would have the Congress only act as a sort of sounding board for the Executive. Could you elaborate on what you mean?

I would like to hear from Mr. Kaufmann and Mr. Rathjens on this too.

Mr. STANLEY. Yes, Mr. Chairman. I meant simply that I do not want to take anything away from Congress' constitutional responsibilities or indeed its vital interests in the subject, but that there are certain limitations on how much can be done with the staffs available to Congress as opposed to the analytical staffs available to the Defense Department. I was really trying, in a sense, to pay you a back-handed compliment by saying that based on my observations within the executive branch there is a great deal more attention paid to expressed and anticipated congressional concerns and views than I think is sometimes apparent from up here.

Chairman PROXMIRE. Wouldn't it be wise, in view of the preliminary statement, then, to beef up and improve the congressional staffing?

Mr. STANLEY. Yes, I think it would. I think it is really the process by which good decisions, or good recommendations for Congress to consider, are made by the Defense Department, that is, the process of having to sort out their own thoughts and articulate their assumptions in anticipation of the Congressional review which you give to their recommendations.

Chairman PROXMIRE. You see, we have a constitutional responsibility for the purse, for appropriating money. This enters into some of the amendments that are either pending now on the floor or which are going to come up on the floor of the Senate on later bills. But we have a duty. There is no way we can justify giving that away—we have given that away, in the view of many of us in the past, because we feel that we do not have this competence that you say we ought to have. But I just wonder if we do not have an absolute duty to determine whether or not we should go ahead with these expensive systems based on our judgment.

The President can recommend to us, but he is just one person, whose competence is very great and whose sources of information are excellent, but who is fallible, and whose judgment we have a duty to ques-

tion, and then we make a decision on this as far as the expenditures are concerned.

Mr. STANLEY. I would have to respectfully disagree a little bit, Mr. Chairman, on the theory that the responsibility for the consequences of that decision falls pretty clearly on the President of the United States; this responsibility is much more diffused in the Congress.

Chairman PROXMIRE. We suffer from it. It certainly does not fall entirely on the President of the United States, it falls on us, Congressman Brown and myself and every other Member of the Congress.

Mr. STANLEY. But if, for example, Congress were to force the Executive, as I think it has a constitutional right to do, to make drastic troop withdrawals from Europe, let us say, and if that were to have the effect of shifting the whole basis of European security so that the German attitude changed, and one had a Europe of an entirely different kind than we have now, then I think that would have enormous political and economic consequences for the United States.

And again, the focal point it seems to me, to avoid that, has to be the Executive—

Chairman PROXMIRE. I am not so sure. As you know, Senate Majority Leader Mike Mansfield has put in a resolution, of which I am co-sponsor, as well as a majority of Senators, calling for a substantial withdrawal of troops from Europe. And we can, of course, give that some power by just refusing to appropriate funds in this area if we wish to do so.

I would agree that we probably will not do it as long as we have a President who has a contrary view that is very strong. I think we should, but we probably will not. But I do not see why we should not have every right to go ahead and do it, since we have a constitutional right, and we have, it seems to me, a duty to determine where these funds should be expended.

Mr. STANLEY. The Congress and Senate in particular, of course, have some responsibilities also in the foreign affairs field. But still the Constitution really requires the President to conduct our foreign relations. And it seems to me that Congress is not discharging its constitutional duty if it takes actions of any kind that effectively foreclose his possibilities.

I do not say they can not do it. Potentially, the Constitution is unworkable if you have an impasse between the two branches. But it does seem to me that the balance of responsibility for national security, broadly defined, really does have to rest with the executive branch. I know that is not a popular view to express in this forum, but it is one that I nevertheless hold.

Chairman PROXMIRE. Dr. Rathjens?

Mr. RATHJENS. Of course, the responsibilities have to be shared. I do feel that the development of the last 2 years, where the Congress has exerted itself and has begun to question the Defense Department budget and other national security related items in the same way that it has those relating to domestic affairs, has been a very constructive one.

I felt that until the last 2 years or so sometimes Defense Department programs went through without adequate questioning by the Congress.

Now, in part it seems to me that this was based on the misguided

assumption that these things were too technical to be understood without a great deal of study. I think that that is wrong. You do not have to be able to design a phased-array radar to make some reasonable decisions about an ABM system. I believe Congress can understand most of these issues just as well as they can the corresponding problems that come up in connection with the domestic economy, and that it should continue to exercise the same kind of scrutiny, the same kind of control, with respect to the Defense Department budget that it does in all other areas that involve large expenditures of money.

It is half the budget—or it has been in the past, it is less than that now—and it does seem to me that the Congress has an important role. In my view, particularly in this last year, it has been discharging it very well.

Chairman PROXMIRE. Dr. Kaufmann?

Mr. KAUFMANN. I share Dr. Rathjen's view, sir. From somewhat painful experience I would say that from the standpoint of the Executive, at least, certain portions of it would have long ago welcomed an invention of the character that has been occurring in the last year or two.

Chairman PROXMIRE. Unfortunately, gentlemen, I have to go to the floor.

Congressman Brown has some more questions. And I will turn over the chair to him.

I want to thank all of you again for a superlative job, not only in your statements, but in your responsiveness and your answers. You have been most helpful. And I think you have made a fine record.

Congressman Brown?

Congressman BROWN (presiding). Thank you, Mr. Chairman.

I would just make one observation with respect to the point Mr. Kaufmann raised. It seems to me that the Congress should start out every year at a zero base, and should do the same job that the Bureau of the Budget presumably does with the President, and project financial needs, and then blend them with other branches. By this method we might have a better sharing of that responsibility in our system. I would like to pursue a couple of questions with Mr. Stanley.

In your prepared statement you state what I think is the meat of this whole problem:

We have learned that too high a level of defense can be destabilizing by arousing fears in others, and too low a level can have the same effect by arousing temptations, or miscalculations and by affecting confidence and attitudes of other countries. While there are important and difficult decisions to be made affecting particular weapons systems, the overall level of U.S. defense spending is constrained within fairly narrow political limits in present circumstances.

I would like to pursue the political limits of our withdrawal from Europe with you for a moment. In this reference how successful do you think we might be in persuading other nations to undertake the burden of Western defense?

Mr. STANLEY. I am afraid I am a pessimist, Mr. Brown, on the basis of having tried to get as much of that done as we could during the last four and a half years. And I think the reason for it is not at all one of economic lack of capacity—

Representative BROWN. You mean their lack of economic capacity?

Mr. STANLEY. Yes, sir. But I think it is the sense on the part of the West European countries that it is the U.S. presence, and the

kind of guarantee that is implicit in that presence, without which their own efforts are meaningless. That is, they cannot have any kind of effective deterrence of or influence on another nuclear superpower, the Soviet Union, without our participation. I think we can get them to do what they are doing better in qualitative terms. But the price of that is some substantial continuing U.S. presence there for the next several years.

Representative BROWN. I want to be perfectly sure that I understand what you are saying. Are you suggesting that the price of our withdrawal might be the creation of yet another nuclear power?

Mr. STANLEY. That was not the point I was making. But I think that is a good point.

Representative BROWN. Is that implicit in your argument?

Mr. STANLEY. It is implicit in it, and I think that is a possibility. We have strongly encouraged the Germans and our other allies to sign the Nonproliferation Treaty.

Representative BROWN. Let me pursue it just a minute. You said that our mere presence is a certain amount of reassurance for the other NATO powers and that as long as we have some kind of a physical presence they will feel that we are their backstop as a nuclear power. If we withdraw they might feel we are not directly involved, and at that point Western Europe, and specifically Germany, would not have an adequate nuclear defense?

Mr. STANLEY. Yes, sir.

Representative BROWN. You are suggesting that the price of our withdrawal might be the establishment of Western Europe as a comparable—or to a degree competitive but noncomparable—nuclear power with the Soviet Union?

Mr. STANLEY. No, because I do not think the current political climate in Europe is going to permit the creation of a kind of "United States of Europe," nor do I believe that they could overcome the many years of leadtime to establish a credible nuclear force on their own.

I think you would have destabilizing tendencies, perhaps a realignment favorable to the East, and a reassessment of the obligations of the Nonproliferation Treaty which would have adverse political effects. But I do not think that Western Europe could create its own deterrent scientifically and physically.

Representative BROWN. Can we explore those destabilizing influences for a moment? In your opinion is the Middle East a destabilizing influence at this point?

Mr. STANLEY. Yes, I think perhaps so, but not with as direct a connection. I think the Soviets are pursuing their own objectives in the Middle East as they see them. But I feel that their judgment of how far they can safely go is affected by the general posture and attitude that they see on the part of the United States regarding its overseas involvement and interests.

Representative BROWN. In effect what you are saying is that the reduction in defense spending, to the degree that it is radical, may to a similar degree embolden any potential adversary?

Mr. STANLEY. Yes, sir.

The point I was making earlier was put very well by a member of the Belgian Parliament. When I asked him what would be the effect on

the Belgian defense effort, which is rather minimal even as it is, of a U.S. withdrawal of substantial size, he said this :

Logically we Europeans ought to greatly increase ours. But in fact the smaller countries would feel then that their money would be completely wasted, it would buy them nothing at all. The effect would be just the opposite, we would reduce our budget in the feeling that self-defense was hopeless if the American forces went home.

I may not be right in saying this, but it is a commonly held view in Europe.

Representative BROWN. The reason being that the proportion of budget that the smaller nations would have to put into defense would be so much higher?

Mr. STANLEY. That would not achieve any meaningful result, and therefore "why do it?"

Representative BROWN. The political adjustments that would be required by a small nation, or for that matter even a large nation in Europe, would include the possibility of accommodation, and to the extent that it is accommodation, less vigorous participation in whatever our strategic posture might be?

Mr. STANLEY. Yes, sir.

Representative BROWN. That is very interesting.

Mr. STANLEY. I know our time is limited, Mr. Brown. But could I just say one thing for the record? Dr. Rathjens' views are his and I think they are shared by a number of other people in the academic world. But I would like to state just for the record that they are not mine; for example, on the reduction in strategic forces which he was discussing, and they are not those of a number of other people. So that I do not think the committee has yet heard a representative spectrum of views on that subject. But I do not want to take up your time to give my own views about it.

Representative BROWN. I think one of the things that the committee is always interested in is a representative spectrum of viewpoints. Have you a suggestion in this area where we might look for some further information?

Mr. STANLEY. On the particular subject of strategic forces, one suggestion would be my colleague from Johns Hopkins, Robert Osgood, who is returning there this fall after having been on leave to work at the NSC. Another would be any of the people from the Hudson Institute, and particularly Donald Brennan, who has done a good deal of work in the same area that Dr. Rathjens has done. And I think they have both written widely on opposite sides of the question.

Representative BROWN. That would be very helpful. And I will suggest to the chairman that it might be desirable before we terminate these hearings to have these viewpoints expressed.

We are making economic judgments from the military judgments, which in turn are based on foreign policy judgments, and all of which boils down to political judgments on the part of not just the Congress or the President, but the American people. Somebody earlier was discussing our Constitutional responsibilities.

The very basic constitutional responsibility is the general welfare and the common defense. Balancing these two is what we are talking about in this committee a good part of the time. A failure to do either, or a failure to do both successfully, exposes not only the President, but

Members of this Congress with the possibility of having that job turned over by the people to somebody else. Ultimately the American people make this decision.

Are there any other comments?

The staff has pointed out to me that we convene again on the 15th of June, and we have scheduled Robert Wood of Harvard MIT Joint Center for Urban Studies; Maurice Mann, the Assistant Director of the Bureau of the Budget; and Herbert Stein, Council of Economic Advisers—which would seem to move us into another area.

Perhaps with the chairman's interest in this subject we will follow your suggestions with regard to getting other people on this particular viewpoint.

Mr. STANLEY. I did not want to suggest anything about the balance of your witnesses. I just wanted to put on the record, without taking the time to go further into the strategic questions that Dr. Rathjens is covering, that my views are quite different from his.

Representative BROWN. Thank you.

I have no further questions.

Mr. Rathjens or Mr. Kaufmann, do you have any other observations you would like to make?

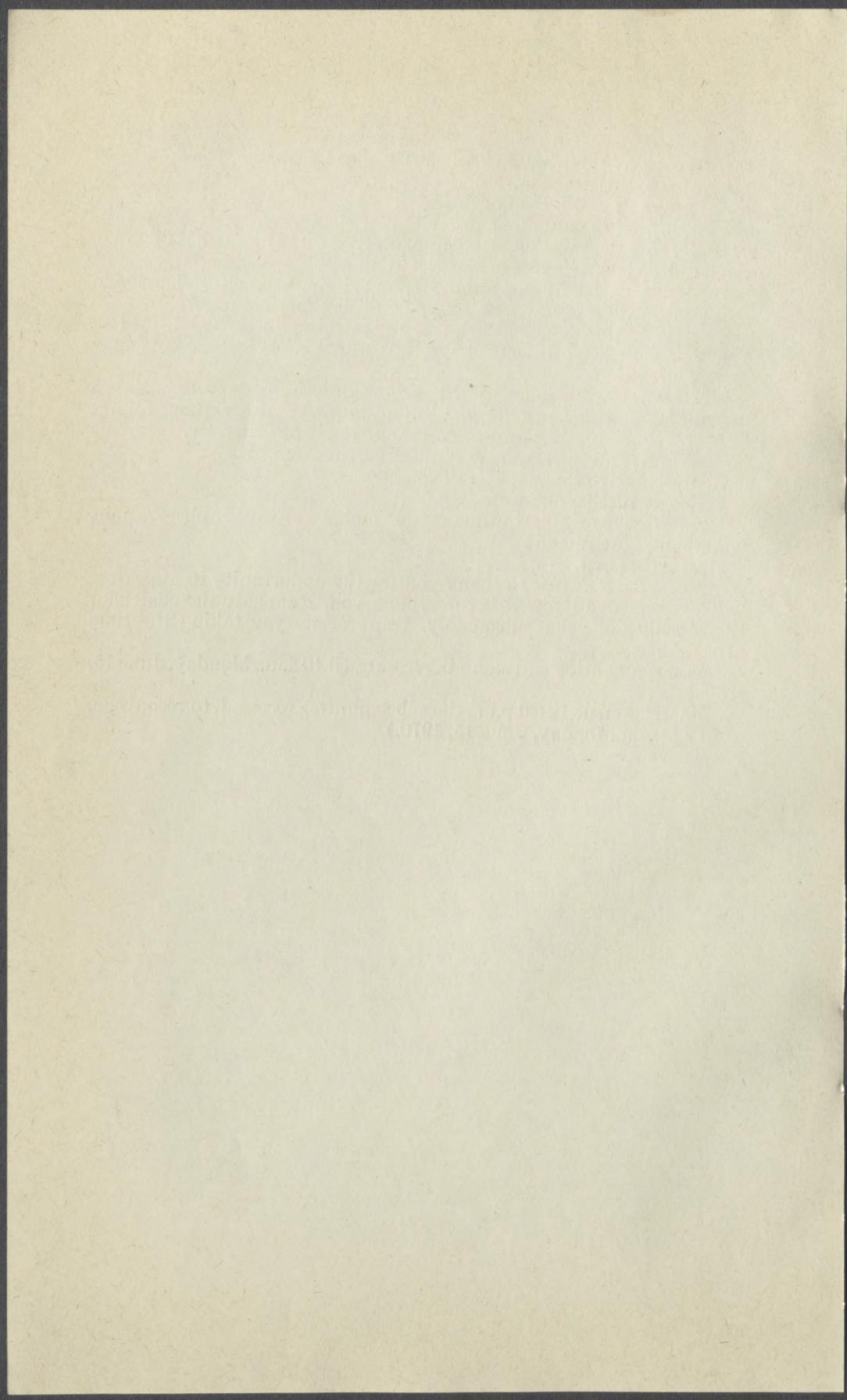
Mr. KAUFMANN. No, sir.

Mr. RATHJENS. Just to thank you for the opportunity to appear.

Representative BROWN. Let me thank you. I am sure the chairman has already done that adequately. I appreciate you taking the time to be with us.

The subcommittee will stand in recess until 10 a.m., Monday, June 15, 1970.

(Whereupon, at 12:30 p.m., the subcommittee recessed, to reconvene, at 10 a.m., on Monday, June 15, 1970.)



## APPENDIX

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(The following study was subsequently supplied for the record by Mr. Weidenbaum, who was a witness at the hearing of June 3, 1970:)

### ECONOMIC ENVIRONMENT AFTER VIETNAM: ANALYSIS OF MILITARY EXPENDITURE TRENDS

(By Murray L. Weidenbaum, Professor of Economics, Washington University, March 1969, Working Paper 6901)

#### INTRODUCTION

Any meaningful analysis of the economic adjustments to changes in defense spending must take account of the current role of military programs in the American economy. Military programs generate a variety of economic impacts, some of dramatic importance and others much more subtle.

By way of perspective, the nation's military requirements claim almost one-tenth of the Gross National Product and a similar portion of the labor force. When translated into regional impacts, these same requirements exhibit considerable variation. Most regions, states, and major metropolitan areas are affected to a limited degree by these national security programs while a small but considerable number of such geographical areas depend on these programs for a dominant share of their total employment.

Similarly, the major impact of military programs on the industrial economy are found in a relatively few sectors. Many large industry groupings—food, clothing, textiles, lumber, furniture, automobiles, mining, construction, machinery, retail and wholesale trade, and service establishments—find the military market to be of relatively small significance. Even among the biggest defense contractors—the companies receiving the largest amount of prime military contracts—the majority rely on civilian markets for the bulk of their sales.

These aggregate comparisons fail, however, to reveal the often catalytic role of defense expenditures in the American economy. Because the "market basket" of goods and services procured by the military establishment differs so markedly from the purchase patterns of the civilian economy, military programs produce significant differential effects on the economy. For example:

1. Military programs utilize highly specialized resources. Military spending claims a major share of all of the scientific and engineering talent in the United States.
2. Military programs account for the great bulk of all the goods and services purchased by the Federal Government. In creating this vast market for private industry, these programs have also served as the means of expanding the direct role of the government in the American economy as a purchaser and consumer.
3. Because of the specialized nature of military procurement—largely high-technology weapon systems—a relatively few durable goods industries provide most of these needs and have become oriented to meeting governmental rather than commercial requirements. In turn, these industries were among the leading growth industries in the country during the period following the end of World War II; the regions in which they are concentrated have been among the fastest growing areas. Hence, periods of reduction in defense demand may create significant problems of adjustment for these industries and regions.
4. Military programs represent a large share of the national economy which is independent of the level of, or of changes in, private consumption and investment; these governmental programs are relatively independent of forces producing fluctuations in the private sector of the economy because they respond to a

different set of demands. In practice, this tends to introduce an additional item of instability in the American economy.

#### SOME AGGREGATE IMPACTS OF MILITARY PROGRAMS

Until comparatively recently, expenditures for national defense were a minor factor in the American economy. In the half century prior to 1930, such outlays normally equalled less than one percent of the GNP (except during World War I). During the 1930's military outlays averaged 1.3 percent of GNP. World War II, of course, raised these expenditures to what appears to be a relatively permanent high level.<sup>1</sup> In 1967, purchases by the Department of Defense were \$72 billion or 9 percent of the nation's total output<sup>2</sup> (see Table 1). This proportion was only marginally higher during the Korean War (peak of 12 percent). It was only during World War II that military outlays so clearly dominated the economy (reaching a peak of 48 percent of GNP in 1944). Coupled with direct controls over manpower, production, prices, and consumption, the U.S. approached temporarily the status of a collectivist state.

In terms of economic activity these military programs now account for four-fifths of all Federal Government purchases of goods and services. Measured in real terms (adjusting the dollar figures to eliminate for changes caused solely by inflation) virtually all of the increase in Federal purchases during the past two decades has been accounted for by defense programs.<sup>3</sup>

TABLE 1.—PURCHASES FOR NATIONAL DEFENSE AND GNP  
[Dollar figures in billions of current dollars]

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
National defense purchases.....	\$46	\$46	\$45	\$48	\$52	\$51	\$50	\$50	\$61	\$72
Defense as percent of Federal purchases.....	86	86	84	83	81	79	77	75	78	80
Defense as percent of GNP.....	10	10	9	9	9	9	8	7	8	9

Source: U.S. Department of Commerce, *The National Income and Product Accounts of the United States, 1929-65*, 1966, pp. 6-7; and *Survey of Current Business*, July 1968, p. 19.

In the aggregate, purchases of all other Federal Government agencies are close to the same real level as in 1940, with the large increases in Federal civilian spending being accounted for by transfer payments and grants. These latter two items do not show up directly in GNP since they represent financial transfers and not claims on goods and services. Hence the rise in the share of GNP devoted to Federal purchases from 6.1 percent in 1940 to 11.5 percent in 1967 has been almost entirely accounted for by defense expenditures. On this basis, it is clear that security-related expenditures have been the primary medium through which the Federal Government as a purchaser and consumer of goods and services has expanded its role in the American economy.

The employment resulting from defense activity is another indicator of its economic impact. In 1967, defense-generated activity was responsible for 7.4 million jobs, representing 10 percent of total United States employment. Over half were employed directly by the Federal Government, either in the Armed Forces or as civilian employees of the military establishment. The remainder were in defense-generated employment in private industry, working for prime defense contractors, subcontractors, or firms providing materials and services to contractors (see Table 2).

<sup>1</sup> U.S. Bureau of the Census *Historical Statistics of the United States, Colonial Times to 1957*, Washington, U.S. Government Printing Office, 1960, *passim*.

<sup>2</sup> U.S. Bureau of the Census, *Defense Indicators*, September 1968, p. 4.

<sup>3</sup> The military portion of the total Federal Budget is a large but less dominating figure (about one-half) than the relationship to Federal purchases because the budget includes large transfer, interest, and subsidy payments which are not included in the concept of purchases of goods and services.

TABLE 2.—DEFENSE GENERATED EMPLOYMENT  
[Fiscal years, employment figures in thousands]

	1965	1967
Public employment:		
Armed Forces.....	2,716	3,350
Civilian employees of the Military Establishment.....	932	1,107
Total, public.....	3,648	4,457
Private employment (defense contractors, subcontractors and suppliers).....	2,101	2,972
Total, defense-generated employment.....	5,749	7,429
Defense-generated employment as percent of total employment.....	9	10
Civilian defense-generated employment as percent of total civilian employment.....	5	6
Private defense-generated employment as percent of total private employment.....	4	5

Source: Richard P. Oliver, "The Employment Effect of Defense Expenditures", Monthly Labor Review, September 1967, p. 9.

Within the domestic economy, defense spending does not exhibit the more predictable patterns of other major sectors such as consumption and investment. In its relatively autonomous role, defense spending does not regularly act as a stabilizer to counter shifts in private consumption or investment, but neither does it necessarily move in parallel to accentuate such destabilizing swings in the private economy.

The impact of defense spending on the economy depends on many factors other than the level and rate of change of such disbursements. The alternative methods of financing military programs have different economic effects. Much heavier reliance on deficit financing during World War II (in contrast, greater shares of expenditure were met through taxation during the Korean and Vietnam Wars) produced more serious inflationary pressures and hence more difficult economic stabilization problems. Also, consumer and business expectations may differ from one period to another. This was exemplified by the spurt in consumer purchases of durables at the beginning of the Korean War buildup, but not during the same period of the Vietnam buildup. Also, the availability of unutilized resources may be a significant influence. To the extent that increases in military demand may be met by drawing upon the unemployed and other idle or underutilized resources, inflationary effects may be avoided. Once a relatively full employment economy is achieved, of course, further increases in military spending will tend to come out of civilian production, either indirectly through inflation or directly through manpower and material controls.

#### *Budgetary Implications*

Military spending dominates the Federal Budget. In the fiscal year 1967, total expenditures of the Department of Defense (for military functions plus military assistance) came to almost \$70 billion out of a total budget outlay of \$158 billion. The military share of the Federal Budget came to 44 percent. This relationship has been relatively stable during recent years, even with the Vietnam War (see Table 3).

TABLE 3.—DEPARTMENT OF DEFENSE EXPENDITURES AND THE FEDERAL BUDGET (FISCAL YEARS)

[In billions of dollars]

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Department of Defense expenditures.....	41	44	43	45	48	50	51	47	55	70
Total Federal expenditures.....	83	92	92	98	107	111	119	118	135	158
Defense as percent of total Federal.....	50	47	46	46	45	45	43	40	41	44

Source: U.S. Bureau of the Budget, Budget in Brief, fiscal year 1969, Washington, U.S. Government Printing Office, 1968, p. 69.

The composition of these military expenditures offers additional insight into the public sector's impact on private activity via defense programs. As shown in Table 4, capital outlays—which roughly correspond to plant and equipment expenditures in the private economy—receive 41 percent of the funds. This is

in striking contrast to other sectors of the economy, such as consumer purchases of goods and services. Consumer spending on durables (including residential housing) accounts for only 21 percent of total personal consumption expenditures plus housing. Such hard goods or capital items produced for DOD are currently almost one-third as large as the total production of new plant and equipment for the economy's private sector.

TABLE 4.—COMPOSITION OF DEFENSE EXPENDITURES, FISCAL YEAR 1967

[In billions of dollars]

Category	Amount	Percent
Capital outlays:		
Procurement of weapons systems.....	19	28
Research and development.....	7	11
Construction.....	2	2
Total capital outlays.....	28	41
Operating expenses:		
Military personnel.....	20	29
Operation and maintenance.....	19	28
All other.....	1	2
Total operating expenses.....	40	59
Grand total.....	68	100

Source: Unpublished Tables of the U.S. Department of Defense.

Research and development represent one-fourth of military capital outlays; they finance about one-third of all the R & D performed in the United States (32 percent in the fiscal year 1967 and larger proportions in earlier years as shown in Table 5). Federal R & D expenditures (primarily military and space) also represent the major element in the rising trend of R & D performed in this country since World War II, far surpassing in dollar significance the increase in R & D funds supplied by all other sources, including private industry, colleges and universities, and other nonprofit institutions. To some extent, portions of the Federal R & D spending may have replaced private financing and thus not represent a net increase in the volume of research and development performed in the United States.<sup>4</sup>

TABLE 5.—MILITARY EXPENDITURES FOR RESEARCH AND DEVELOPMENT

[Fiscal years. Dollar figures in billions]

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Military expenditures for R. & D.....	\$3.7	\$4.2	\$5.7	\$6.6	\$6.8	\$6.8	\$7.5	\$6.7	\$6.7	\$2.7
As percent of total Federal expenditures for R. & D....	74	72	74	71	65	57	51	45	42	46
As percent of total performance of R. & D.....	34	34	42	46	44	39	39	33	30	32

Source: Special Analyses, Budget of the United States, fiscal year 1969, Washington, D.C., U.S. Government Printing Office, 1968, p. 154.

#### *The industrial distribution of defense work*

The composition of the firms and industries supplying goods and services to the Department of Defense is largely a function of its requirements. For example, during the period of peak procurement of Army ordnance equipment for the Korean War (July 1950 to June 1953) the General Motors Corporation, a major producer of tanks and trucks, was the number one military contractor based on size of orders received.<sup>5</sup> It was down to ninth place by the fiscal year 1967.<sup>6</sup>

<sup>4</sup> For an evaluation of this "substitution effect", see Richard Nelson, "The Impact of Arms Reduction on Research and Development", *American Economic Review*, May 1963, pp. 435-446.

<sup>5</sup> Merton J. Peck and Frederic M. Scherer, *The Weapons Acquisition Process*, Boston, Harvard University, 1962, appendix 5A.

<sup>6</sup> U.S. Department of Defense, *100 Companies and Their Subsidiaries Corporations Listed According to Net Value of Military Prime Contract Awards, Fiscal year 1967*.

The shift to general war capability during the interim has brought aerospace companies such as Lockheed, Boeing, and North American into the forefront of military contractors.

Only a relatively few hard goods producing industries account for the bulk of military contracts: aircraft, electronics, motor vehicles, petroleum refining, chemicals, rubber, and construction, and generally in that order.<sup>7</sup>

A far greater variety of companies and industries participates at the subcontractor and supplier level. The different levels at which companies participate in the defense program influences the nature of the impacts that result. For the prime contractors doing business with the government find themselves dealing with governmental rules and procedures drastically different from ordinary commercial relationships. The major subcontractors—those providing electronics for an aircraft or missile weapon system—although nominally doing business with the private firms that hold the prime contracts—soon learn that by-and-large they must follow similar government laws and regulations. In contrast, the companies that supply the prime contractors with standard off-the-shelf, commercial-type items generally follow standard commercial business practices. Many of the latter firms may not even be aware that the materials they sell are going to be used on military programs. This subcontracting partially modifies the tendency toward concentration and also serves to expand the impact of defense programs onto a wider industrial base. Major DOD prime contractors subcontract approximately half of all the contracts they receive.<sup>8</sup> In the fiscal year 1967, 43 percent went to small business firms, which represented a substantial rise from 37 percent in 1960.<sup>9</sup>

The extent of dependence on defense work varies widely among industries. It is estimated that about 90 percent of ordnance production is consumed by defense, 80 percent of aircraft, 60 percent of shipbuilding, and 35 percent of electrical equipment. In contrast, the proportion is less than 5 percent for such important industries as food, clothing, leather, lumber and wood, wholesale and retail trade, services, finance, and construction.<sup>10</sup>

The market for military goods is highly concentrated among a relatively small group of fairly large firms. In fiscal 1967, the one hundred companies receiving the largest dollar volume of military prime contracts accounted for 66 percent of the Department of Defense's total (see Table 6). Small business firms received one-fifth of the total amount awarded to business firms.<sup>11</sup> Nor is this concentration a recent development. In World War II the 100 largest contractors ranked by dollar volume of contract awards accounted for 67 percent of total contract value and among these the top 25 companies had 46 percent.<sup>12</sup> The reasons for this situation are numerous: the way the military buys, the nature of the sellers, etc.

TABLE 6.—CONCENTRATION TRENDS IN MILITARY PROCUREMENT—SHARES RECEIVED BY MAJOR DEFENSE DEPARTMENT CONTRACTORS

Rank of company	1960	1961	1962	1963	1964	1965	1966	1967
1 to 25 .....	54	55	51	52	53	48	43	45
26 to 50 .....	11	11	12	14	13	13	12	12
51 to 75 .....	5	5	6	5	5	5	6	6
76 to 100 .....	3	3	3	3	2	3	3	3
All other .....	27	26	28	26	27	31	36	34
Total .....	100	100	100	100	100	100	100	100

Source: U.S. Department of Defense, "100 Companies and Their Subsidiary Corporations Listed According to Net Value of Military Prime Contract Awards," fiscal year 1967.

There are two fundamental differences between the way military departments and civilian agencies make their purchases. The typical weapon system contract

<sup>7</sup> M. L. Weidenbaum, "Defense Expenditures and the Domestic Economy", in Stephen Enke, editor, *Defense Management*, Englewood Cliffs, Prentice-Hall, Inc., 1967, p. 322.

<sup>8</sup> U.S. Department of Defense, *Military Prime Contract Awards and Subcontract Payments, July 1963-June 1964*, p. 49.

<sup>9</sup> U.S. Department of Defense, *Military Prime Contract Awards and Subcontract Payments or Commitments, July 1967-June 1968*, p. 54.

<sup>10</sup> *Manpower Report of the President, March 1965*, Washington, U.S. Government Printing Office, 1965, pp. 61-64.

<sup>11</sup> U.S. Department of Defense, *Military Prime Contract Awards and Subcontract Payments or Commitments, July 1967-June 1968*, p. 8. Generally, a small business concern is one that is independently owned and operated, is not dominant in its field of operations, and does not employ more than a specified number of employees (usually not more than 500, 750, or 1,000) depending on the type of product called for by the contract.

<sup>12</sup> Peck and Scherer, *op. cit.*, appendix 5A.

is awarded to a company chosen as the result of a lengthy series of negotiations. The typical civilian agency order is given to the company that has offered the lowest sealed bid. Most civilian agency procurement orders involve fixed-price contracts; military orders are frequently cost-reimbursement types, although the proportion of firm fixed-price contracts has been rising rapidly in recent years, reaching 56 percent of the total in the fiscal year 1967.<sup>13</sup> Some of this shift from cost-plus contracting merely reflects the changing product mix resulting from the Vietnam war (more commercial-type items such as food, clothing and small arms and fewer missiles, long-range bombers and related sophisticated equipment).

The Defense Department maintains that negotiation does not signify lack of competition.<sup>14</sup> However, often technical performance rather than lowest price is the basis on which firms compete for military contracts.<sup>15</sup> Hence, this type of competition is not the price competition that occurs in a market situation. The technical competition occurs at what may be termed the paper design stage—before the end product has been developed. The actual production contracts are often awarded on a “sole source” basis (without competition) to the firm that wins the relatively small development contract.<sup>16</sup>

Numerous suggestions have been made to broaden the competition for military business, primarily by awarding the development contract to one set of firms and opening the production phase to the wider array of firms that includes companies with the necessary manufacturing skills but lacking in the advanced aerospace technology required for designing new weapon systems. Other suggestions include breaking out more component parts (now produced by the prime contractors) for competition and widening the participation in defense subcontracts. Many of these subcontracts are divided among the same group of firms that receive much of the prime contracts.<sup>17</sup>

The Defense Department reports that almost one-half of its contracts were competitively let in the fiscal year 1967.<sup>18</sup> However, the Pentagon's statistics have been criticized on several occasions. Recently, the Comptroller General has chided the Department for classifying as competitive all awards under \$2,500 and all contracts for which only one bid was received, although requests for proposals had been sent out to several firms.<sup>19</sup> In the absence of comprehensive statistics on competition for military business, some indirect methods of analyzing the degree of competition have to be relied upon.

One method is to examine the turnover among the major contractors. Table 7 shows the turnover between 1958 and 1967. The entrenchment of the dominant firms is substantial; 18 of the top 25 in 1967 also were in the top 25 in 1958.

TABLE 7.—TURNOVER AMONG MAJOR DEFENSE CONTRACTORS 1958-67

Top 100 contractors, fiscal year 1967	Ranking of the same firms in calendar year 1958					Total
	1 to 25	26 to 50	51 to 75	76 to 100	Below 100	
1 to 25.....	18	3	1	1	2	25
26 to 50.....	4	8	5	1	7	25
51 to 75.....	1	3	2	3	14	25
75 to 100.....	0	1	3	3	18	25
Total.....	23	15	11	8	43	100

Source: U.S. Department of Defense, “100 Companies and Their Subsidiary Corporations Listed According to Net Value of Military Prime Contract Awards,” Calendar year 1958 and fiscal year 1967.

<sup>13</sup> U.S. Department of Defense, *Military Prime Contract Awards and Subcontract Payments or Commitments, July 1966-June 1967*, p. 44.

<sup>14</sup> See U.S. House of Representatives, Committee on Appropriations, *Hearings on Department of Defense Appropriation for 1963*, Part 4, Washington, U.S. Government Printing Office, 1962, p. 19.

<sup>15</sup> See U.S. Senate, Select Committee on Small Business, *The Role of Small Business in Defense Missile Procurement—1958*, Washington, U.S. Government Printing Office, 1958, p. 59.

<sup>16</sup> See George R. Hall and Robert E. Johnson, *A Review of Air Force Procurement, 1962-1964*, Memorandum RM-4500 Pr, Santa Monica, California, Rand Corporation, May 1965.

<sup>17</sup> Oliver E. Williamson, “The Economics of Defense Contracting: Incentives and Performance,” in Roland N. McKean, editor, *Issues in Defense Economics*, New York, Columbia University Press, 1967, pp. 240-250; Carl Kaysen, “Improving the Efficiency of Military Research and Development,” in Carl J. Friedrich and Seymour E. Harris, editors, *Public Policy 1963*, Cambridge, Mass., Harvard University Press, 1963, pp. 250-253, 264-268.

<sup>18</sup> U.S. Department of Defense, *Military Prime Contract Awards and Subcontract Payments or Commitments, July 1967-June 1968*, p. 35.

<sup>19</sup> U.S. Congress, Joint Economic Committee, *Economy in Government*, Part 1, Washington, U.S. Government Printing Office, 1967, p. 9.

The relatively low turnover among the top firms in the military market, which are mainly the large aerospace and electronics companies, results in good measure from the substantial barriers to both entry into and exit from the markets for major weapon systems. The entry barriers here mainly take the form of scientific and engineering capabilities required to design and produce modern aerospace weapons. The exit barriers, in contrast, can be inferred from the many unsuccessful attempts these companies have experienced in penetrating commercial markets.<sup>20</sup>

In contrast, considerable mobility is evidenced in the ranking of the firms which have substantial but lesser shares of military business. Of the next 75 firms, 43—more than half—were not on the list of the top 100 defense contractors in 1958. Between 1965 and 1966 alone, 28 percent of the firms on the top 100 list were replaced.

These shifts, which occurred primarily among nonaerospace firms, also reflect differences in military strategy and the changing product mix of military procurement and, hence, the influence of technology rather than a shift in competitive forces. A decade ago, the large missile programs brought many firms into the military market as suppliers of mechanical ground support equipment, fabricators of silos, and builders of tracking stations. The decline in missile procurement and the rise of ordnance for limited war is requiring a different set of technical capabilities and a new variety of industries.

Whereas many defense contractors are "locked-in" to military work as a result of their becoming dependent on government business, there is another side to the coin. In the absence of a highly developed arsenal system, the leading contractors represent the backbone of the scientific, engineering, and manufacturing capability to design and produce weapon systems and the government becomes locked-in to or dependent upon them. On the basis of rough calculations, it can be estimated that the military establishment currently produces only one-tenth of the aerospace equipment it requires, 3 percent of the electronics, and maintains no facilities identified as producing motor vehicles, petroleum products, rubber products, engines, or primary metals.<sup>21</sup> Thus, a symbiotic relationship develops where the defense industry becomes dependent on military orders and the defense establishment primarily looks to these companies for the development of its new weapon systems.

#### *Manpower Impacts of Defense Work*

Military spending has had a double impact on the development of scientific and engineering talent available in the American economy. On the one hand, military programs represent a source of demand for such specialized resources. About one out of every five scientists and engineers in private industry is employed in defense-related activity.<sup>22</sup>

Overall, defense workers are more skilled than the civilian labor force as a whole (see Table 8). In the fiscal year 1967, nearly 16 percent were in the broad professional group, compared with 13 percent of the general labor force. Over 45 percent were skilled and semi-skilled craftsmen, compared to less than 32 percent for the economy as a whole. In contrast, a smaller proportion of defense employees were in service occupations (4 percent versus 13 percent) or in sales (2 percent versus 6 percent).

<sup>20</sup> John S. Gilmore and Dean C. Coddington, *Defense Industry Diversification*, Washington, D.C., U.S. Government Printing Office, 1966, pp. 42-53; M. L. Weidenbaum and A. B. Rozet, *Potential Industrial Adjustments to Shifts in Defense Spending*, Menlo Park, California, Stanford Research Institute, 1963, pp. 25-37.

<sup>21</sup> M. L. Weidenbaum, *The Military/Space Market: The Intersection of the Public and Private Sectors*, Washington University, Department of Economics, Working Paper 6712, September 1967, p. 44.

<sup>22</sup> Max A. Rutzick, "Worker Skills in Current Defense Employment," *Monthly Labor Review*, September 1967, p. 17.

TABLE 8.—DEFENSE AND TOTAL U.S. EMPLOYMENT, BY OCCUPATIONAL GROUP (FISCAL YEAR 1967)

[Percentage distributions]

Occupation group	Defense generated employment	Total civilian employment
Professional workers.....	16	13
Managers, officials, proprietors.....	8	10
Salesworkers.....	2	6
Clerical and kindred workers.....	18	16
Craftsmen, foremen, and kindred workers.....	21	13
Semiskilled operatives.....	25	19
Service workers.....	4	13
Laborers and farmworkers.....	6	10
Total.....	100	100

Source: Max A. Rutzick, "Worker Skills in Current Defense Employment," Monthly Labor Review, September 1967, p. 17.

The impact of defense programs has not been limited to the demand side however. Both directly and indirectly it has increased the supply of scientists, engineers, and other technical personnel. The direct means include university fellowships, aid to research funding, and training programs. More indirect influences on this supply are exercised by creating a favorable labor market via increased pay rates and employment opportunities.

The consequences of these developments have not been contained within the military market. There has been considerable mobility of the personnel employed by military agencies and defense contractors. Numerous veterans of the armed forces are now using skills, such as those in the field of electronics, which were acquired in the military service. The mobility of civilian personnel within the military labor market is exemplified by the result of the Dyna-Soar space vehicle cancellation: two-thirds of the laid off employees found jobs in non-defense fields.<sup>23</sup> Other examples include the Martin Marietta Corporation ICBM layoff where 75 percent of the released employees found non-defense jobs and the Republic Aircraft layoff where 60 percent were rehired in non-defense jobs.<sup>24</sup>

#### *Regional Aspects of Defense Activity*

If military expenditures were distributed across the United States proportionally to each region's industrial base, the geographic impacts of military buildups and cutbacks would be relatively easily dealt with by aggregate economic policy. However, in actuality, the regional pattern of defense expenditures ranges from extreme dependency to minor regional influence. Nor are these patterns stable once established; regional impacts of military programs vary as the changing military requirements redistribute prime contracts geographically. Individual regions of the country tend to specialize in supplying different types of military equipment. For example, firms in the East North Central states (Ohio, Indiana, Illinois, Michigan, and Wisconsin) supplied 68 percent of the tanks and related automotive equipment ordered by the military in the fiscal year 1967; the Pacific Coast states (mainly California and Washington) provided 53 percent of missile and space systems; and the Middle Atlantic states (New York, New Jersey, and Pennsylvania), produced 27 percent of electronics and communication equipment.<sup>25</sup>

Certain states and communities, because of their relatively high degree of dependence on specific categories of defense work, are especially vulnerable to shifts in the size and types of defense programs. Missouri represents one such example; military contract dollars increased 53 percent from fiscal year 1963 to 1964 and moved this state from the tenth highest in prime contracts to third. Concurrently, Ohio fell back to eighth from third with a 28 percent decrease in dollar volume. Texas represents a similar example; in fiscal 1967 it became the second largest recipient of military contracts, rising from a position of eighth during 1950-56.<sup>26</sup>

<sup>23</sup> U.S. Arms Control and Disarmament Agency, *The Dyna-Soar Contract Cancellation*, Washington, D.C., U.S. Government Printing Office, July 1965, p. 101.

<sup>24</sup> U.S. Arms Control and Disarmament Agency, *Martin Company Employees Reemployment Experiences*, Washington, D.C., U.S. Government Printing Office, December 1966 pp. 1-3; and *Post Layoff Experiences, Republic Aviation Workers*, Washington, D.C., U.S. Government Printing Office, August 1966.

<sup>25</sup> U.S. Department of Defense, *Military Prime Contract Awards by Region and State, Fiscal Year 1967*.

<sup>26</sup> *Ibid.*

Three key factors underlie the geographic shift and concentration or dispersion of defense procurement: the kinds of products being purchased, the upward or downward trend of a few large individual projects, and the kinds of industries (along with their ability to compete) located within each region.

In some states relatively large amounts of defense work represent comparatively small portions of total employment and payrolls because of the state's broad industrial base. This factor cushions the impact of defense programs. One measurement of this dependence is the portion of total industrial activity in a state which is derived from direct military payrolls and from wages and salaries of defense workers in private industry (see Table 9). Based on the available data (which cover 1966), five states and the District of Columbia—Utah, Vermont, California, Massachusetts, and Connecticut—all depend on defense work for at least 8 percent of their economic activity. For twenty-one states, the dependency ratio is 5 percent or more. This proportion is less than 2 percent for Nevada, Kentucky, South Dakota, Montana, and Wyoming.

Within various states the concentration is far greater; important examples are such metropolitan areas as Washington, D.C., Boston, Wichita, Huntsville, Cape Kennedy, Los Angeles, San Diego, St. Louis, and Seattle.<sup>27</sup>

TABLE 9.—*State dependence on defense activity in 1963 (defense expenditure impact as percent of State gross output)*

State:	Percent
Alaska .....	25
Connecticut .....	19
Washington .....	19
Utah .....	19
California .....	16
Maryland .....	14
Virginia .....	13
Colorado .....	13
Hawaii .....	12
Arizona .....	11
Massachusetts .....	11
North Dakota .....	11
Florida .....	10
Alabama .....	10
Missouri .....	10
Georgia .....	9
New Jersey .....	9
New Mexico .....	9
Texas .....	9
Indiana .....	9
Pennsylvania .....	8
Rhode Island .....	8
New Hampshire .....	8
Oklahoma .....	8
Maine .....	8
New York .....	8
Mississippi .....	7
Wyoming .....	7
Montana .....	7
Louisiana .....	7
South Dakota .....	7
Kansas .....	7
Ohio .....	7
West Virginia .....	7
Vermont .....	6
Michigan .....	6
Tennessee .....	6
North Carolina .....	6
Minnesota .....	6
South Carolina .....	6

<sup>27</sup> *Report of the Committee on the Economic Impact of Defense and Disarmament*, Washington, U.S. Government Printing Office, July 1965, p. 7.

Table 9.—State dependence on defense activity in 1963 (defense expenditure impact as percent of State gross output)—Continued

State—Continued	Percent
Illinois .....	5
Delaware .....	5
Kentucky .....	5
Wisconsin .....	5
Arkansas .....	5
Oregon .....	5
Nebraska .....	5
Iowa .....	5
Idaho .....	4
Nevada .....	4

Source: Consad Research Corporation, *Regional Federal Procurement Study*, A Report to the Department of Commerce Independent Study Board, 1967, p. 8.9.

Defense expenditures influence a region directly and indirectly via their impact on income and employment. The cumulative effect depends upon a variety of factors: the amount of defense subcontracting coming in and going outside the region, the amount of prime military contracts received, the presence of military bases, and the demand of the employees of these business firms and military organizations for food, housing, transportation, and other locally-supplied goods and services. By adding these direct, indirect, and induced employment effects, the total impact expands the effect of defense expenditures on employment to over two-fifths of total employment in the cases of Los Angeles and Seattle.<sup>28</sup>

The tendency of defense programs to cluster in a relatively few areas, and in a pattern different from that of American industry generally, is of fairly recent origin. In World War II, the distribution of defense contracts more or less followed the then prevailing pattern of manufacturing activity. The major industrial states—Michigan, New York, Pennsylvania, Ohio, and Indiana—ranked high in prime contract awards.<sup>29</sup> Korea marked the turning point in this pattern, with older manufacturing states declining in relative position. As long as automotive and conventional ordnance products were a substantial part of defense procurement, the capabilities of established manufacturing firms were drawn upon. With the increasing importance of aircraft, missiles, electronics, and space systems, newer firms became increasingly important and they tended to locate in the newer industrial states of California, Texas, Washington, or in rejuvenated New England States. As aerospace and electronics activities grew in terms of military importance, California displaced New York as number one and Texas appeared in place of Michigan in the number two position.

#### SOME LONG TERM EFFECTS OF MILITARY PROGRAMS

Defense procurement policies have established a relationship between the Department of Defense and its corporate suppliers which may become precedents in future relationships between the public and private sectors. The close dealings between the government and its major defense contractors have been viewed in various ways, some favorable and others quite unfavorable.<sup>30</sup> Andrew Shonfield and John Kenneth Galbraith view this form of government-industry relationship as an important step toward rational economic planning.<sup>31</sup> Others have noted the same phenomenon with fear and opposition. Walter Adams, contending that the award of the bulk of defense contracts is "as much the result of political as economic bargaining", describes a conversion process whereby the private contractor has been transformed into a "quasi-governmental, mercantilist corporation, maintained in a privileged position by 'royal' franchise."<sup>32</sup>

<sup>28</sup> Charles Tiebout, "The Regional Impact of Defense Expenditures," in Roger E. Bolton, editor, *Defense and Disarmament: The Economics of Transition*, Englewood Cliffs, Prentice-Hall, 1966, p. 131.

<sup>29</sup> Peck and Scherer, *op. cit.*, p. 111.

<sup>30</sup> Bernard Udis, *Random Thoughts on the Consequences of a Reduction in Military Expenditures*, a paper prepared for a Joint Session of the Regional Science Association and the Peace Research Society (International), Cambridge, Mass., November 10, 1968, pp. 9-10.

<sup>31</sup> Andrew Shonfield, *Modern Capitalism: The Changing Balance of Public and Private Power*, New York and London, Oxford University Press, 1965, pp. 341-346; and John Kenneth Galbraith, *The New Industrial State*, Boston, Houghton-Mifflin, 1966, pp. 314-324 and 361-368.

<sup>32</sup> Walter Adams, "The Military-Industrial Complex and the New Industrial State," *American Economic Review*, May 1968, pp. 652-665.

The present writer has expressed a somewhat different concern. To some extent, the autonomous nature of major corporations largely dependent on the military market has gradually been reduced. It has been contended that, in long-term dealings with its major suppliers, the Defense Department has slowly and undramatically taken over, either directly or indirectly, many of the decision-making functions which are normally the prerogatives of business management: the choice of which products the firm is to produce, the source of capital funds, and the internal operation of the firm.<sup>33</sup>

#### *Defense Industry Entrepreneurship*

By awarding massive contracts for research and development, the Department of Defense has come to strongly influence or determine which new products its contractors will design and produce. The military establishment also uses its vast financial resources to supply the bulk of the plant and equipment used by its major contractors and a very large share of the working capital that they require.<sup>34</sup> The most pervasive way in which the Department of Defense may be said to partially assume the managerial decision-making functions of its contractors is through the standard provisions contained in the procurement contracts it awards. As a result of legislation and regulation, military suppliers are required to accept many clauses giving the government power to veto its decisions on the following matters: which activities to perform in-house and which to subcontract, which firms to use as subcontractors, which products to buy domestically rather than to import, what internal financial reporting systems to establish, what minimum as well as average wage rates to pay, how much overtime work to authorize, and so forth.<sup>35</sup> In recent years, the role of the military establishment in the internal operations of its contractors has continued to expand.

The causes of such a trend partially stem from the shift from the general resource requirements of conventional military needs, prevalent during World War II and the Korean conflict, to the highly specialized facilities required for contemporary, high technology military hardware. A large share of the work currently performed for military programs is carried on in highly specialized facilities specifically built for this purpose, often at the initiative of the Defense Department who frequently continues to retain title to the factories and equipment. Moreover, many of the companies involved were set up for performing, and so much of their experience is limited to the design and production of, military weapon systems and related aerospace vehicles.

All of this has produced a "locked-in" effect wherein major defense firms have difficulty in diversifying into more conventional civilian market areas. The appearance of such government-oriented firms may be significant as a long run institutional change; such a development could set a pattern for government programs in other public sector areas.

#### *Technological transfer*

Another aspect of defense program impacts which may become of long-run significance is the "spill-over" or transfer of defense technology to other areas of the economy. Numerous efforts have been made to encourage such civilian use, both by Federal agencies and private organizations. Yet, attempts to quantify these induced effects of defense technology have yielded extremely limited results thus far.<sup>36</sup> It would appear that the bulk of these civilian by-product benefits, to the extent that they will occur, are to take place in the future.

Ever since the end of World War II, the major military contractors have sought to diversify into new markets and new production lines. With one major exception these efforts at technological transfer have been relatively modest. The exception, of course, is transport aircraft for commercial airlines. The large jet liners—the DC-8's, the 707's, and the 880's—have each involved large number of scientists, engineers, and other employees; the unit sales prices are comparable with those of many military products.

Except for the few firms selling to the airlines, the large defense suppliers and the specialized defense divisions of the more diversified companies have reported commercial sales of 2 percent or even less in recent years. The list of abandoned

<sup>33</sup> See M. L. Weidenbaum, "Arms and the American Economy: A Domestic Convergence Hypothesis," *American Economic Review*, May 1968, pp. 428-437.

<sup>34</sup> Stanford Research Institute, *The Industry-Government Aerospace Relationship*, Menlo Park, California, 1963, Volume II, p. 119.

<sup>35</sup> Armed Services Procurement Regulation, Sections 3-900, 1-800, 1-707, 7-203.8, 6-100, 3-800, 1-1700, 12-601, and 12-102.3.

<sup>36</sup> Denver Research Institute, *The Commercial Application of Missile/Space Technology*, Denver, Colorado, September 1963, pp. 22-26.

commercial efforts is a long and growing one, literally ranging from canoes to computers to coffins.

One large defense company acquired a plastics research firm and subsequently closed down the operation. Another large military contractor began producing metal curtain wall panels, lost money, and discontinued the venture. A third defense firm acquired companies manufacturing mobile homes, reported operating losses, and subsequently sold the entire line of business. One of the companies also began and subsequently abandoned an effort to penetrate the industrial computer business.<sup>37</sup>

A variety of explanations is given by students of the defense industry for the frequent inability of the large specialized government contractors to use their capabilities successfully in commercial endeavors. The major reasons for the past failures fall into two major categories: lack of management motivation and lack of required capabilities.<sup>38</sup> The lack of management motivation is due to such basic factors as their belief that strong incentives to diversify out of the military market are absent and that suitable commercial opportunities are inadequate for them. The lack of required capabilities covers commercial marketing and distribution experience, relatively low capitalization, and lack of producing at high volume and low unit cost.

The more recent diversification efforts of defense contractors have tended to de-emphasize the private economy and to center on newly-emerging markets within the public sector itself. Although the dollar volumes of these public sector diversification efforts are still small in relation to military programs, they encompass a wide variety of activities. Recent examples include operating Job Corps and Peace Corps training camps, doing exploratory research on information systems for state and local governments, hospital systems planning, and classroom scheduling for schools and colleges.<sup>39</sup>

While these efforts are still too recent to be judged as business successes in terms of customary standards such as profitability, their direction—towards meeting non-defense public sector requirements—is quite clear.

#### *The "burden" of defense programs*

The growth-inhibiting effects of defense expenditures represent another area of long-term impact. Analyses of the "burden" of defense expenditures—both those made by public and private groups—have generally concluded that, if necessary for military or political reasons, the American economy could handle, with a minimum of dislocation or hardship, a far higher level of such spending than was experienced during the recent cold war period. Studies or statements of this type have been made by such diverse groups as the Committee for Economic Development, a group of outstanding university and research economists appearing before the Joint Economic Committee of the Congress, and a panel of government, industry, labor, and academic economists convened by the Arms Control and Disarmament Agency.<sup>40</sup> Many such analyses have been concluded that among the long-term growth and prosperity of the United States do not require even the current level of national security spending and that, after an adjustment period, the rate of economic growth might be more rapid than otherwise. In its report in early 1969, the Cabinet Coordinating Committee on Economic Planning for the End of Vietnam Hostilities concluded that the cost of the Vietnam war has been a load for the American economy to carry and "not a supporting 'prop' ". The Committee also stated, "prosperity has not depended on the defense buildup and will not need high military spending to support it in peacetime."<sup>41</sup>

Thus economic constraints do not appear to be a fundamental limitation on the level of defense spending—directly. Indirectly, and essentially through the Federal budgetary process, financial constraints have and are likely to continue

<sup>37</sup> Stanford Research Institute, *op. cit.*, p. 31.

<sup>38</sup> *Ibid.*, pp. 34-37.

<sup>39</sup> Aerospace Industries Association, *Aerospace Technology: Creating Social Progress*, Washington, D.C., 1968.

<sup>40</sup> Joint Economic Committee, *Federal Expenditure Policy for Economic Growth and Stability*, Washington, U.S. Government Printing Office, November 5, 1957, pp. 504-557; Committee for Economic Development, *The Problem of National Security*, New York, July 1958, pp. 20-28; U.S. Arms Control and Disarmament Agency, *Economic Impacts of Disarmament*, Washington, U.S. Government Printing Office, January 1962, pp. 2-3.

<sup>41</sup> Cabinet Coordinating Committee on Economic Planning for the End of Vietnam Hostilities, "Report to the President," in *Economic Report of the President*, Washington, D.C., U.S. Government Printing Office, 1969, p. 187.

to restrict the portion of the Nation's resources devoted to these purposes. This reflects the "opportunity" costs of the defense programs—that is by devoting resources to this activity the Nation foregoes the opportunity of utilizing these good and services for other purposes, either public or private. The estimation of this "opportunity" cost of defense spending presents numerous conceptual difficulties. For example, the resources used to feed, clothe, and house the members of the armed forces would have to be utilized for such basic purposes, regardless of whether the men were in the armed forces or the civilian economy. Similarly, many expenditures for training and research would likely continue, even under general and complete disarmament.

## VIETNAM AND THE ECONOMY

Although the data used are the most recent available, the analysis in this chapter thus far has focused on the relatively long-term aspects of the impacts of military spending on the economy during the relatively protracted period of cold war (interspersed with two limited wars) characteristic of the years since the end of World War II. An examination of the more recent economic impacts of the Vietnam War provide a useful basis for examining economic adjustments to future changes in the level and composition of defense outlays.

The fiscal years 1966 and 1967 witnessed the bulk of the expanded commitment of U.S. resources to the Vietnam fighting. The actual expenditures in the fiscal year 1968 and the estimates for 1969 and 1970 indicate a much slower rate of increase<sup>42</sup> (see Table 10). The large and rapid expansion in Vietnam military spending has exerted several impacts on the American economy. It has significantly altered the absolute allocation of resources between the private and public sector, increasing the Government share of a rising GNP from 20 percent in 1964 to 27 percent in early 1968.<sup>43</sup>

TABLE 10.—EXPENDITURES FOR SPECIAL SUPPORT OF VIETNAM OPERATIONS

[In billions of dollars]

Fiscal year	Expenditures	
	Amount	Increase
1965.....	\$0.1	\$0.1
1966.....	5.8	5.7
1967.....	20.1	14.3
1968.....	24.5	4.4
1969.....	28.6	4.1

Source: U.S. Bureau of the Budget, *Summer Review of the 1969 Budget*, September 1968, p. 6.

The rapid shift of resources from civilian to military use generated sharp and perhaps avoidable inflationary pressures. Much of the economic difficulty stemmed from three related sources: the inability to realize quickly enough the economic consequences of the military buildup, the underestimate of military expenditures in late 1965 and much of 1966, and the lack of prompt policy measures to offset the inflationary pressures. There is nothing inherent in the American economy that would force a repetition of this situation during another period of major change in the level and composition of military demand. Perhaps the Vietnam experience indirectly served to make the Nation more aware of the difficulties that need to be faced in making economic policy operational.

In any event, the nature of the economic adjustments to the Vietnam military buildup created a legacy of economic problems which in a sense are constraints limiting policymaking for the adjustments to a post-Vietnam economy:

1. Continuing cost-push inflationary pressures following from the reversal of the relatively stable pre-Vietnam price and cost situation.
2. Substantial budget deficits.
3. Continuing balance of payments disequilibria.
4. An undermining of confidence in the ability to "fine tune" domestic economic stabilization policy.<sup>44</sup>

<sup>42</sup> U.S. Bureau of the Budget, *Summer Review of the 1969 Budget*, September 1968, p. 6. On the basis of their past performance, official projections of military expenditures must be considered highly unreliable. During the Vietnam War, due in part to uncertainties, the estimates have tended to be too low.

<sup>43</sup> *Survey of Current Business*, July 1968, p. 11.

<sup>44</sup> See M. L. Weidenbaum, *Economic Impact of the Vietnam War*, Washington, D.C., Georgetown University Center for Strategic Studies, 1967, Chapter 3.

Despite these shortcomings, the primary policy objective of rapidly redirecting a large flow of resources from civilian uses or idleness to military programs was achieved. Moreover, this sudden shift was implemented in the absence of direct controls over prices, wages, and materials (although set-asides were in effect for copper and a few other key materials). Nor was there general sacrifice imposed on the American public, since economic growth and real improvement in average living standards continued despite increased defense spending and inflation. However, many anticipated increases in domestic welfare programs were postponed or eliminated.<sup>45</sup>

The rising American participation in the Vietnam conflict has not only increased the size of the military budget by more than one half; it has also altered its composition. Most of these changes should ease rather than impede the economic adjustment to peace in Vietnam. With the increased emphasis on limited war capability, there has been a concomitant shift of emphasis toward conventional weapons such as army ordnance and away from more sophisticated equipment such as missiles (see Table 11).

TABLE II.—THE CHANGING PRODUCT MIX OF MILITARY PROCUREMENT

[Percentage of obligations incurred]

Category	Korea (fiscal year 1952)	Cold war (fiscal year 1962)	Vietnam (fiscal year 1967)
<b>Sophisticated equipment:</b>			
Aircraft.....	46	36	40
Missiles.....	1	26	8
Electronics.....	5	8	5
Subtotal.....	52	70	53
<b>Conventional equipment:</b>			
Ships.....	6	12	10
Ordnance.....	32	13	26
Other.....	10	5	11
Subtotal.....	48	30	47
Total.....	100	100	100

Source: Unpublished tables supplied by the Office of the Assistant Secretary of Defense (Comptroller).

### *Industrial and geographic impacts*

In general, the Vietnam-oriented budget looks more like its counterpart during the Korean War and less like the more recent cold war budgets. Once again, the traditional industries such as automotive, mechanical, textile, clothing, and rubber, have become important military suppliers. The most dramatic procurement increases have occurred in ammunition, clothing and textiles, army ordnance, and food.<sup>46</sup>

The highly specialized, science-oriented aerospace and electronics firms, although still very significant defense contractors, have experienced declines in their relative shares of the military market. In contrast to the period of large weapon systems production—such as ICBM's which could only be supplied by a few of the industrial giants with especially sophisticated capabilities—Vietnam military requirements are being fulfilled by numerous smaller contracts involving a large number and variety of medium-sized firms.

Hence termination of Vietnam hostilities is likely to reduce the procurement role of those industries which have benefited most during the last few years—precisely those which are most heavily oriented toward civilian markets and for whom, presumably, the adjustment task would be easiest.

The geographic counterpart to Vietnam-induced shifts in the military product mix also offers to facilitate readjustment. Large proportions of the companies supplying Vietnam orders are located in the Upper Midwest and in other relatively older industrial states in the East, all of which have long-standing interests in consumer and industrial markets. The Far West, which had previously been

<sup>45</sup> "Budget Program Reductions and Reforms," *Budget of the United States Government, Fiscal Year 1969*, Washington, U.S. Government Printing Office, 1968, pp. 19–22.

<sup>46</sup> U.S. Department of Defense, *Military Prime Contract Awards and Subcontract Payments or Commitments, July 1967–June 1968*, p. 23.

receiving so large a share of defense orders, has been experiencing some absolute as well as relative declines<sup>47</sup> (see Table 12). Hence, reductions in military demand for conventional equipment accompanying a post-Vietnam adjustment are likely to result in declining defense business in those geographic areas which are most heavily oriented to consumer and industrial markets. To some extent, these civilian-oriented areas may have experienced lagging growth rates in recent years. Thus, sharp declines in military contracts might tend to accentuate their secular problems.

## CHANGING GEOGRAPHIC DISTRIBUTION OF DEFENSE CONTRACTS

[Percentage distribution of dollar volume]

Census region	Korean War (fiscal year 1952)	Cold war (fiscal year 1962)	Vietnam (fiscal year 1967)
<b>Northeast:</b>			
New England.....	8	11	12
Middle Atlantic.....	25	19	17
Subtotal.....	33	30	29
<b>Midwest:</b>			
East North Central.....	27	12	13
West North Central.....	7	7	7
Subtotal.....	34	19	20
<b>South:</b>			
South Atlantic.....	8	10	12
South Central.....	6	8	17
Subtotal.....	14	18	29
<b>Far West:</b>			
Mountain.....	1	5	2
Pacific.....	18	28	20
Subtotal.....	19	33	22
<b>Total.....</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: U.S. Department of Defense, military prime contract awards by region and State, Fiscal Year 1967.

*Balance of payments impacts*

Another special aspect of the impact of Vietnam expenditures on the American economy is the effects on the U.S. balance of international payments. The direct, adverse balance-of-payments impact of Vietnam has grown with the size of operations there.

Table 13 shows the composition of the U.S. Military Balance of Payments. There are three main items involved: (1) the foreign exchange cost of the Vietnam conflict itself, (2) the foreign exchange cost of American military activities in Western Europe and other locations (excluding Vietnam), and (3) the offsetting receipts from the sales of U.S. military equipment to West Germany and other foreign nations.

TABLE 13.—U.S. MILITARY BALANCE OF PAYMENTS

[Fiscal years. In billions of dollars]

Category	1961	1962	1963	1964	1965	1966	1967
Vietnam-related costs.....			0.1	0.1	0.2	0.7	1.5
NATO and other non-Vietnam costs.....	3.1	3.0	3.0	2.8	2.6	2.7	2.6
Receipts from sales of military equipment.....	-3	-9	-1.4	-1.2	-1.3	-1.2	-1.8
Net deficit.....	2.8	2.1	1.7	1.7	1.5	2.2	2.3

Source: Defense industry bulletin, March 1968, p. 6.

<sup>47</sup> U.S. Department of Defense, *Military Prime Contract Awards by Region and State, Fiscal Year 1967*.

The largest and most stable of the three items is the deficit due to stationing U.S. armed forces in Western Europe and other non-Vietnam posts. Much of this amount, however, was offset by sales of weapons to West Germany. This temporary item shot up from \$1.2 billion to \$1.8 billion between 1966 and 1967. Meanwhile, Vietnam costs rose from \$200 million in 1965 to \$1.5 billion in 1967.<sup>48</sup>

Concerning the relatively stable \$2½ billion of NATO and related forces, the recent increases in pay rates for members of the armed forces, and for U.S. civilian employees as well, exert an upward but limited pressure on this category.

A large fluctuation is likely in the receipts from military sales abroad. The high 1967 level resulted from a bunching of receipts under the offset arrangement with West Germany. Under that arrangement, Germany offset the bulk of the cost of stationing American troops there by buying an equivalent amount of military goods and services from the United States. That arrangement has now run its course. To provide a partial offset during fiscal 1968, Germany agreed to buy a half billion dollar's worth of U.S. Government medium-term securities. The Pentagon estimates that receipts from cash sales of armaments abroad will be down to about \$1 billion next year.<sup>49</sup>

The last category in the military balance of payments is Vietnam itself. Southeast Asia deployments in the fiscal years 1968 and 1969 are scheduled to rise above the average for 1967. The military deficit in the balance of payments during fiscal 1968 may well have reached \$3 billion, with \$2 billion of that attributable to the Vietnam War.

#### OUTLOOK

For over a quarter of a century, military programs have represented a relatively large but volatile share of the American economy. The magnitude and composition of future military budgets will depend both on the state of international tensions and on this Nation's reaction to it.

One among many views of future trends in U.S. military spending is similar to Adam Smith's statement that the cost of defense "grows gradually more and more expensive, as the society advances in civilization."<sup>50</sup> More specifically, this approach assumes that the basic Communist objective of world domination or influence will continue. Although the nature of the threat may change, and the American response to it, the underlying demand for defense forces to counter that threat would thus persist.

A distinguished analyst of the Federal Budget has stated along these lines: "outlays for defense and international purposes . . . have been stimulated by a number of unforeseen shocks and have exhibited an erratic steplike upward growth in the post-World War II period in response to Soviet challenges . . . This steplike movement may well be the pattern over the long-run future, as long as the cold war remains with us, but there need not be upward steps every year."<sup>51</sup>

Other analysts hold somewhat more optimistic views concerning the possibility of achieving long-term reductions in the level of military expenditures in the United States. In good measure, this alternative approach depends on an understanding with Soviet Russia as to reasonable levels of international conduct between capitalistic and communistic power over long periods of time. In some scenarios, the United Nations or similar international or supernational organization comes to perform a major role.

On balance, it would appear that relatively high levels of military spending are the most likely prospect for the coming decade. Whether the military budget trend line has an upward or downward slope will be determined by a variety of future actions.

Perhaps Professor Bastable in his classic work in public finance has come closest to providing a reasonable description of the future military environment: "But while strongly insisting on the great advantage of peace, and the reduction of military and naval expenditure, it is quite as essential to assure that so long as present conditions last, a well-organized and effective system of defense is a necessary part of State expenditure . . . to maintain a due balance between the excessive demands of alarmists and military officials, and the undue reduc-

<sup>48</sup> "Defense Budget Highlights", *Defense Industry Bulletin*, March 1968, pp. 5-6.

<sup>49</sup> *Ibid.*, p. 6.

<sup>50</sup> Adam Smith, *The Wealth of Nations*, New York, The Modern Library, p. 668.

<sup>51</sup> Samuel M. Cohn, "Problems in Estimating Federal Government Expenditures," *Journal of the American Statistical Association*, December 1959, p. 719.

tions in outlay sought by the advocates of economy, is one of the difficult tasks of the statesman."<sup>52</sup>

#### POSSIBLE REDUCTIONS IN U.S. MILITARY EXPENDITURES

This section analyzes two possible military cutback situations sequentially. The first is the potential reductions in U.S. military spending following the termination of active hostilities in Vietnam. Then, after the postulated post-Vietnam budget reductions have been worked through, the budgetary impacts of a specific arms control agreement are analyzed.

#### POTENTIAL MILITARY CUTBACKS FOLLOWING PEACE IN VIETNAM

It is extremely difficult to estimate the nature and size of a cutback in military spending following peace in Vietnam. At a technical budget level, there is a lack of firm data as to what the current costs of waging the war in Vietnam come to. In addition, a return to the pre-Vietnam dollar "base" of military spending may not be feasible. Price increases on military procurements and wage and salary increases for the armed forces and civilian employees of the military establishment have been substantial. Also, "built-in" increases indicate upward pressures in military budgets for the next several years. Furthermore, with the continuation of high levels of military tensions, pressures are mounting for authorizing new and more advanced weapon systems.

#### *The Incremental Cost of Vietnam*

The Department of Defense has utilized the so-called "incremental" method in estimating the cost of Vietnam. Incremental costs are the expenditures over and above the "normal" costs of the Department of Defense. These "normal" costs are estimated by using the last pre-Vietnam year, the fiscal year 1965, as a base, and adjusting for changes in military activities not related to the war<sup>53</sup> (see Table 14).

As a general proposition, the difference between the actual expenditures of the Department of Defense in recent years and the "normal" base is assumed to be due to the Vietnam War. However, in the case of consumption of ammunition and attrition of aircraft in Vietnam, the actual replacement costs are used. Construction projects in Vietnam were identified separately. Since the preparation of the detailed data contained in Table 14, the U.S. Bureau of the Budget has estimated the added cost of the Vietnam War to be \$28.6 billion in the fiscal year 1969; however, no more detailed information was supplied.<sup>54</sup>

TABLE 14.—ESTIMATED COST OF VIETNAM WAR  
[Fiscal years. In billions of dollars]

Category	1966 actual	1967 actual	1968 estimated	1969 estimated
Military personnel.....	1.6	4.4	5.5	5.8
Maintenance and operation.....	3.0	6.6	7.3	7.9
Research and development.....	.1	.2	.3	.2
Construction.....	.6	.9	.8	.3
Procurement:				
Ammunition consumption.....	2.0	3.7	5.3	5.8
Aircraft attrition.....	.9	1.2	1.7	1.8
Other equipment consumption.....	1.2	2.4	3.1	3.4
Subtotal, procurement.....	4.1	7.3	10.1	11.0
Total.....	9.4	19.4	24.0	25.2

Source: U.S. Department of Defense, reported in U.S. House of Representatives, Committee on Appropriations, Department of Defense Appropriations for 1969, Washington, D.C., U.S. Government Printing Office, 1968, p. 460.

#### *"Built-In" increases in the military budget*

To devote the same amount of real resources to defense programs as prior to the Vietnam War would require a substantially higher level of expenditures than in 1965 because of the sizeable pay raises for the armed forces and civilian personnel and the increased costs of weapons and supplies that have occurred in the last three years.

<sup>52</sup> C. F. Bastable, *Public Finance*, London, Macmillan & Co., 1895, pp. 67-68.

<sup>53</sup> U.S. House of Representatives, Committee on Appropriations, *Department of Defense Appropriations for 1969*, Washington, D.C., Government Printing Office, 1968, pp. 460-461.

<sup>54</sup> U.S. Bureau of the Budget, *Summer Review of the 1969 Budget*, September 1968.

Depending on when peace is achieved, the new base would be on the order of \$60-70 billion. The dollar cost of the new base expands over time because of further pay and price rises. There also are several other "built-in" increases. For example, under existing law, the pay of the armed forces and civilian employees of the military establishment is scheduled to rise by over \$2 billion between the fiscal years 1969 and 1970, in order to establish comparability with private wage scales. Moreover, many weapon systems are in early stages of production and the large expenditures are scheduled to come in the next year or so (examples include several nuclear carriers and destroyers, the Poseidon and Minuteman III missiles, and the Sentinel anti-ballistic missile system). Furthermore, the non-Vietnam portions of the military budget have been squeezed in recent years and considerable "catching up" is likely to occur in the areas of deferred maintenance, inventory replenishment, and advanced research and development.<sup>55</sup>

This is all aside from the future consequences of any decisions that currently are being made to bolster our long-term arsenal of strategic and tactical weapon systems. There will be close interrelationships between the size of post-Vietnam cutbacks and general attitudes towards military spending (ranging from generous to parsimonious). A restrictive attitude on military spending after peace in Vietnam could result in far sharper reductions in the defense budget than otherwise.

One indication of future Congressional action is the recent report of the Preparedness Investigating Subcommittee of the Senate Armed Services Committee. Reflecting a year of detailed study and hearings dealing with strategic forces, the committee urged, "Prompt decisions should be forthcoming for the deployment of additional and more modern weapon systems and improvements to existing weapon systems. . . ." The committee specifically recommended rapid development of a new long-range strategic bomber and an accelerated research and development effort on an advanced ICBM.<sup>56</sup> The Senate Armed Services Committee also has under way reviews of tactical aircraft, missile, and naval systems.

#### *Estimates of military budget reductions*

Numerous organizations and individuals, at various points in time, have prepared estimates of the reductions in U.S. military expenditures that would take place after the end of the Vietnam War. The Council of Economic Advisers, in its annual report issued in February 1968, analyzed the impacts of the possibility that "defense outlays in real terms would return to the level prevailing in 1963-65."<sup>57</sup> Cumulative reductions in military spending were estimated at about \$15 billion over a period of a year and a half.

Larger post-Vietnam cutbacks have been analyzed by a task force of the Chamber of Commerce of the United States, by the Committee for Economic Development, and by *Fortune* magazine. *Fortune* estimated the cumulative cutbacks at \$19 billion over a two year period. The CED and the Chamber of Commerce each used an assumption of \$20 billion, the Chamber phasing out the reduction over a period of a year and a half and the CED over two years.<sup>58</sup>

In contrast, a number of analysts have estimated smaller reductions in defense spending. Professor George Perry, of the University of Minnesota, has projected a net decline in military spending after the end of the war at less than \$10 billion. Even that amount of reduction is postulated to depend on relatively tight military budgets during the period. Built-in wage and price increases, as well as the introduction of a minimum number of new weapon systems, are considered to use up a considerable portion of the direct savings from peace in Vietnam. With a Presidential administration "highly sympathetic to the requests of the military", Professor Perry forecasts a \$3 billion decline in the military budget over a two year period, with an upturn thereafter.<sup>59</sup>

<sup>55</sup> See Charles L. Schultze, "Federal Budget Priorities", in Kermit Gordon, editor, *Agenda for the Nation*, Washington, D.C., Brookings Institution, 1968, pp. 13-48.

<sup>56</sup> U.S. Senate, Committee on Armed Services, Preparedness Investigating Subcommittee, *Strategic Forces*, Washington, D.C., U.S. Government Printing Office, 1968.

<sup>57</sup> *Economic Report of the President, February 1968*, Washington, D.C., Government Printing Office, 1968, p. 90.

<sup>58</sup> Gilbert Burck, "How Big a 'Peace Dividend'?", *Fortune*, June 1, 1968; Chamber of Commerce of the United States, *After Vietnam*, Washington, D.C., March 1968; Committee for Economic Development, *The National Economy and the Vietnam War*, New York, April 1968.

<sup>59</sup> George L. Perry, *The Post-Vietnam Budget Outlook*, National City Bank of Minneapolis, October 14, 1968, p. 5.

Similar estimates were made by a group of market analysts and planners assembled by the Electronics Industries Association. They predicted high levels of U.S. military spending on the assumption that, "During the 1970's the nuclear stalemate, Chinese nuclear potential, and the Communists' exploitation of 'wars of national liberation' will require the U.S. to maintain an adequate and effective tactical capability while updating the strategic force."<sup>60</sup>

Professor Otto Eckstein of Harvard University stated that he did not expect the defense budget to recede below \$70 billion. "If the new President accedes readily to military requests, the defense budget could remain above \$75 billion permanently."

Professor Eckstein offered two "scenarios": \$13 billion savings from Vietnam with strong expenditure control and \$8 billion with what he terms "weak expenditure control."<sup>61</sup>

Clearly, there is no consensus as to the exact size of a post-Vietnam cutback in military expenditures. However, the more recent estimates tend to be lower than the earlier forecasts, as they increasingly take account of built-in cost rises as well as the future expenditure effects of new weapon systems which recently have been authorized or are deemed likely to be approved.

Table 15 presents some alternative projections of the net cutback in military spending following peace in Vietnam; they are offered as a synthesis of available data.

TABLE 15.—ALTERNATIVE EXPENDITURE PROJECTIONS OF DEPARTMENT OF DEFENSE—MILITARY FUNCTIONS  
[Fiscal years. In billions of current dollars]

Assumption		1969	1970	1971	1972
Vietnam	Other military				
Status quo .....	Some new programs .....	80	86	89	92
Do .....	Restraint .....	78	83	85	87
Peace .....	Some new programs .....	78	72	72	76
Do .....	Restraining .....	76	70	66	68

Note: "Status quo" projections assume no fundamental escalation in the U.S. commitment in Vietnam. "Peace" projections assume termination of hostilities early in calendar year 1969.

As a base, \$78 billion can be taken as a working estimate of total expenditures in the fiscal year 1969. That figure can be derived in either of two ways: continuation of the war in Vietnam with restraint on non-Vietnam military programs or peace in Vietnam with some initiation of production of new weapon systems. Numerous permutations and combinations are possible: with continuation of the war and something less than restraint, total defense spending could reach \$80 billion for the year. Peace coupled with budgetary restraint, in contrast, might lower DOD expenditures to \$76 billion.

Price and wage increases alone could raise military spending in the fiscal year 1970 in the neighborhood of \$5 billion. Hence, continuation of the Vietnam war could result in a military budget of about \$83 billion. With peace early in calendar 1969, military spending for the twelve month period ending June 30, 1970, could be down to about \$70-72 billion, about a \$6-8 billion decline from the current level and a fairly sizable peace dividend. Under this latter circumstance, the fiscal year 1971 could witness a further reduction in military spending. Hence, a level of \$66 billion would appear to be a relatively minimum initial post-Vietnam military budget base prior to either further arms reduction or another escalation in the arms race.

Beyond 1971, the trend of U.S. military spending would depend on the state of foreign relations and on the resultant desire to maintain a given level of military strength.

#### COMPOSITION OF POST-VIETNAM MILITARY BUDGETS

Via a number of reasonable assumptions and some statistical analysis, it is possible to develop estimates of the composition of the military budget during the period following the end of hostilities in Vietnam.

<sup>60</sup> Electronics Industries Association, *The Post Vietnam Defense and Space Market Environment*, Washington, D.C., 1968, Vol. 1, p. 4.

<sup>61</sup> Otto Eckstein, *The Fiscal Choice Ahead*. A paper presented to the New York Chapter of the American Statistical Association, April 26, 1968.

### Major budget categories

As an initial base, the level and composition of military expenditures in the fiscal year 1964 can be utilized. That period is chosen as a point of departure, rather than the year immediately prior to the Vietnam military buildup (fiscal year 1965); because it represents the most typical recent year not affected by special circumstances. The expenditure level of 1965 was unduly depressed; for example, outlays for the procurement of weapon systems and other military "durables" were at the lowest point in over a decade.

In order to devote the same amount of real resources to military programs after the Vietnam War as previously, it is necessary to "inflate" the 1964 expenditure figures to reflect current price levels. Unfortunately, good price indices for military outlays are not available. Some proxies or substitutes must be relied upon. In general, the GNP deflator for Federal Government purchases of goods and services is utilized in the following calculations because the great bulk (about four-fifths) of these purchases is devoted to military programs. For military personnel, however, a higher deflator was developed to reflect the substantial wage and salary increases given to Federal military and civilian employees during recent years, increases which were above average for the economy as a whole because they were designed to bring Federal employee compensation in line with levels in the private sector. A similar deflator was utilized for the portion of operation and maintenance expenditures devoted to civilian employee pay.<sup>62</sup>

The results of these initial calculations can be seen in Table 16. Actual expenditures of the Department of Defense in the fiscal year 1964 were \$51.2 billion, compared to \$78.7 billion officially estimated for 1969 in the January 1968 budget. After converting the figures for 1964 into dollars of approximately 1969 purchasing power, we arrive at \$60.1 billion as the estimate of the current cost of maintaining the pre-Vietnam level of military resource utilization.

TABLE 16.—PEACE IN VIETNAM: ESTABLISHMENT OF NEW MILITARY BUDGET LEVEL

[In billions of dollars]

Category	Fiscal year 1969 expenditure estimate	Fiscal year 1964		Allowance for cutbacks	Projected inflation 1969-71	Post- Vietnam level Fiscal year 1971
		Actual	Inflators (1964=100)			
Military personnel.....	22.8	14.2	1.19	16.9	1.8	18.7
Operation and maintenance.....	22.3	11.9	1.17	14.0	1.1	15.1
Procurement.....	23.4	15.4	1.16	17.9	1.1	19.0
R.D.T. & E.....	7.8	7.0	1.16	8.1	.5	9.0
Construction.....	.5	1.0	1.16	1.2	.1	2.1
All other.....	1.9	1.7	1.16	2.0	.1	2.1
Total.....	78.7	51.2	1.16	60.1	4.7	66.0

Source: U.S. Departments of Defense and Commerce; 1971 estimates by the author.

Several additional adjustments need to be made. During the last few years, two categories of the non-Vietnam military budget have been cut back below the 1964 level, notably construction and research, development, test, and evaluation. Substantial "catching up" is likely during the period following the end of the Vietnam War. Therefore, an allowance is made in Table 16 for reducing the backlog of construction and R and D projects.

The final adjustment made results from the lag between the time hostilities cease and the U.S. military presence in Southeast Asia is reduced to a more peacetime level. It is assumed here that active hostilities will end early in the calendar year 1969 and that American troops will be withdrawn during the following two years. Thus, the new post-Vietnam military budget level would be attained in the fiscal year 1971. Hence, it is necessary to add a further allowance for the additional price and wage increases that are likely to occur during the fiscal years 1970 and 1971 (here assumed at 3 percent a year for procurement plus an allowance for the built-in pay increases discussed earlier).

<sup>62</sup> See Robert L. Winestone and Bernard S. Beckler, *Military Price Index: Preliminary Presentation*, McLean, Virginia, Research Analysis Corporation, January 1968.

As a result of all these assumptions and calculations, total expenditures of the U.S. Department of Defense (military functions, including military assistance) are estimated at \$66.0 billion in the fiscal year 1971. A breakdown by major budget category is also shown in Table 16.

#### Product categories

Table 17 contains a similar analysis of the procurement expenditure line of Table 16. The level of detail shown in Table 17 corresponds to the product breakdown used by the Department of Defense in its standard budget reports. The major additional adjustment that has been made is to reallocate funds from missiles to ordnance, reflecting a basic change in the military product mix during recent years. The major postulated reductions between the fiscal years 1969 and 1971 are estimated to be in ordnance and vehicles (down \$3.2 billion), aircraft (down \$1.4 billion), and miscellaneous (down \$1.0 billion), missiles (up \$200 million), and electronics (up \$200 million).

TABLE 17.—PROJECTIONS OF DETAILED PROCUREMENT CATEGORIES

[In billions of dollars]

Product category	Fiscal year 1969 expenditure estimate	Fiscal year 1964			Program shifts	Projected inflation 1969-71	Post-Vietnam level Fiscal year 1971
		Actual (1964=100)	Inflators (1964=100)	In 1969 dollars			
Aircraft.....	8.9	6.1	1.16	7.1	-----	0.4	7.5
Missiles.....	2.7	3.6	1.16	4.2	-1.5	.2	2.9
Ships.....	1.7	2.1	1.16	2.4	-----	.1	1.5
Ordnance and vehicles..	6.7	1.6	1.16	1.8	+1.5	.2	3.5
Electronics.....	1.4	1.3	1.16	1.5	-----	.1	1.6
Other.....	2.0	.8	1.16	.9	-----	.1	1.0
Total.....	23.4	15.4	1.16	17.9	0	1.1	19.0

Source: U.S. Departments of Defense and Commerce; 1971 estimates by the author.

#### Industrial final demand categories

Given the information in Table 17 on Defense Department procurement expenditures by end product category, it is possible to make estimates of the resultant impact on the final demand of the major producing industries in the United States. This can be done by using the estimates prepared by the Research Analysis Corporation which show the relationship between military expenditures in each product category and the final demands generated in each major industry.<sup>63</sup> For example, 54 percent of the aircraft procurement expenditures are estimated to go to industry 3721—aircraft, 13 percent to 3722—aircraft engines, 9 percent to 3662—radio and TV equipment, 6 percent to 3729—aircraft equipment not elsewhere classified, 2 percent to 3811—scientific instruments, and 16 percent to all other industries. The RAC data are clearly estimated, being based on an analysis of a sample of weapon systems.

Table 18 is the result of applying the RAC factors to the figures for military procurement expenditures for the fiscal years 1969 and 1971 contained in Table 17. It shows the projected change in U.S. military procurement expenditures between the fiscal years 1969 and 1971. This analysis does not take account of the role of secondary and tertiary supplying industries who provide components and services to the prime contracting industries shown in Table 18. It is necessary to utilize input-output analysis to get at these indirect impacts; this subject is dealt with in other studies.

It can be seen that four industries would suffer the largest declines in prime defense contracts—ammunition (down \$1.2 billion), aircraft (down \$1.1 billion), motor vehicles (down almost \$1 billion), and tanks (down over \$5 million).

<sup>63</sup> Donald J. Igo and others, *Economic Impact Analysis: A Military Procurement Final-Demand Vector*, McLean, Virginia, Research Analysis Corporation, March 1967, pp. 15-50. In some cases the RAC categories do not coincide with the available breakdowns of military procurement expenditures.

TABLE 18.—ESTIMATED MILITARY PROCUREMENT EXPENDITURES BY SUPPLYING INDUSTRY

(Fiscal years 1969 and 1971; in millions of dollars)

Industry	1969	1971	Difference
151. General building contractors.....	46	27	-19
191. Guns and related equipment.....	65	57	-8
192. Ammunition.....	3,629	2,416	-1,213
193. Tanks.....	1,108	569	-539
194. Fire control equipment.....	62	78	+16
195. Small arms.....	138	109	-29
196. Small arms ammunition.....	202	106	-96
199. Ordnance, not elsewhere classified.....	243	166	-77
229. Miscellaneous textile goods.....	25	16	-9
239. Miscellaneous fabricated textiles.....	43	23	-20
249. Miscellaneous wood products.....	33	18	-15
289. Miscellaneous chemical products.....	57	51	-6
335. Rolling and extruding nonferrous metals.....	22	26	+4
344. Fabricated structural metal products.....	135	170	+35
351. Engines and turbines.....	180	130	-50
353. Construction machinery and equipment.....	322	204	-118
354. Metalworking machinery.....	294	237	-57
356. General industrial machinery.....	68	64	-4
357. Office and computing machines.....	500	418	-82
358. Service industry machines.....	36	24	-12
359. Miscellaneous machinery.....	70	56	-14
361. Electric transmission and distribution equipment.....	268	205	-63
362. Electrical industrial apparatus.....	418	291	-127
366. Communication equipment.....	3,356	3,438	+82
367. Electronic components.....	46	40	-6
369. Miscellaneous electrical machinery.....	27	30	+3
371. Motor vehicles and equipment.....	1,995	1,041	-954
372. Aircraft and parts.....	7,749	6,615	-1,134
373. Ship and boat building.....	1,148	1,593	+445
381. Engineering and scientific instruments.....	242	206	-36
382. Measuring instruments.....	41	35	-6
384. Medical instruments and supplies.....	49	25	-24
386. Photographic equipment.....	220	132	-88
891. Engineering and architectural services.....	63	32	-31
All other.....	500	352	-148
Total.....	23,400	19,000	4,400

Source: Table 17 and appendix table 1.

Despite the aggregate cutback in military procurement assumed here, the change in the product mix would result in added contracts to a few industries—shipbuilding (up over \$400 million), communication equipment (up \$82 million), and fabricated structural metal products (up \$35 million).

#### POSSIBLE REDUCTIONS IN MILITARY SPENDING RESULTING FROM ARMS CONTROL OR DISARMAMENT

It may be useful to speculate on the fiscal significance of possible arms control or disarmament efforts in the time period following the cessation of hostilities in Vietnam. Without necessarily forecasting such eventualities, reference may be made to several alternative possibilities.

Table 19 contains an array of such alternatives, each of which could be superimposed on a post-Vietnam military budget. They range from gradual reduction in total military spending (estimated in the neighborhood of \$7 billion) to general and complete disarmament. Except for the disarmament and detente assumptions, the data below are based upon a study by the National Planning Association prepared for the U.S. Arms Control and Disarmament Agency.<sup>64</sup> The data have been revised to reflect the more current price basis and changing concepts of a strategic freeze. The disarmament estimates have been taken from the "Benoit Panel" Report.<sup>65</sup> The "detente" assumption is based on a recent analysis by Carl Kaysen, formerly deputy special assistant to the President for national security affairs.<sup>66</sup>

<sup>64</sup> National Planning Association, *Community Adjustment to Reduced Defense Spending*, U.S. Arms Control and Disarmament Agency Publication 33, Washington, D.C., U.S. Government Printing Office, 1965.

<sup>65</sup> U.S. Arms Control and Disarmament Agency, *Economic Impacts of Disarmament*, Washington, D.C., U.S. Government Printing Office, 1962.

<sup>66</sup> Carl Kaysen, "Military Strategy, Military Forces, and Arms Control", in Kermit Gordon, editor, *Agenda for the Nation*, Washington, D.C., Brookings Institution, 1968, pp. 549-584.

### *Gradual reduction*

The gradual reduction postulated here would be centered in aerospace weapon systems (notably aircraft and missiles), with smaller cuts taking place in other categories. The easing but not the elimination, of international tensions would make possible such reductions, it is assumed, over a five year period.

### *Strategic delivery vehicle freeze*

The second alternative is an international agreement among the major powers to freeze the existing inventory of vehicles capable of delivering bombs and similar weapons to strategic targets. Such a ban would cover long-range bombers, ICBM's, submarine-launched strategic missiles, and anti-ballistic missiles. Hence, both offensive and defensive weapon systems would be included. There would be provision for replacement for normal attrition and for test firing. Production of weapon systems would be for replacement only and not to expand the existing military arsenal. It is estimated that a strategic delivery vehicle freeze would result in a reduction of military expenditures in the neighborhood of \$8 billion, phased out over a five-year period. (see Table 19 for details).

TABLE 19.—ARMS CONTROL: COMPOSITION OF CUTBACK—MAJOR CATEGORIES

[In billions of fiscal year 1969 dollars]

Category	Post-Vietnam level, circa 1971	1975 (without arms control)	Strategic cutback	1975 (with arms control)
Military personnel.....	18.7	22.4	-----	22.4
Operations and maintenance.....	15.1	18.1	-----	18.1
Procurement.....	19.0	22.8	6.0	16.8
R.D.T. & E.....	9.0	10.8	2.0	8.8
Construction.....	2.1	2.5	-----	2.5
All other.....	2.1	2.5	-----	2.5
<b>Total.....</b>	<b>66.0</b>	<b>79.1</b>	<b>8.0</b>	<b>71.1</b>

Note: Based on strategic delivery vehicle freeze.

### *Detente with the Russians*

A third alternative is based on the Kaysen analysis, which assumes that the two "superpowers"—the United States and the Soviet Union—will come to realize that the contest to obtain a margin of strategic nuclear superiority is both self-deflating and destabilizing. Under such circumstances, more modest, but still very substantial "second strike" capabilities would be maintained to provide a large measure of deterrence to any potential aggressor who might strike first.

In Kaysen's analysis, by an undesignated period in the 1970's, U.S. military budgets would decline to a level of about \$53 billion, in then current dollars. Most categories of defense spending would be reduced below the real level that obtained prior to the Vietnam War. The largest dollar reductions would be made in the two major combat categories—strategic and general purpose forces.

### *Across-the-board arms cut*

A fourth alternative is an across-the-board reduction in military programs. Such an action could affect aircraft, missile, tank, artillery, and ship development and procurement, as well as related operating expenses. Over a five year period, it is estimated that this alternative would reduce the military budget by about \$20 billion.

### *General and complete disarmament*

The Panel of Economic Consultants set up by the U.S. Arms Control and Disarmament Agency (the Benoit Panel) costed out the effects of implementing the United States proposals to the United Nations for General and Complete Disarmament in a Peaceful World. Massive reductions in expenditures would occur in all military budget categories with the largest proportional declines in procurement of weapon systems and the related research, development, test, and evaluation. Over a 12 year period, the phased, step-by-step reductions in U.S. military spending would come to \$44-51 billion, in terms of dollars of current purchasing power.

TABLE 20.—SUMMARY TABLE—PEACE IN VIETNAM AND ARMS CONTROL

Nature of cutback	Peace in Vietnam	Arms control
Magnitude.....	\$8,000,000,000 to \$20,000,000,000, depending on policy toward remainder of military budget.	Additional reduction of \$7,000,000,000 to \$22,000,000,000, depending on whether strategic freeze or across-the-board cutback.
Timing.....	Relatively quick (about 2 years).....	Drawn out and extended (perhaps 5 to 10 years).
Duration.....	Short-range (cyclical, possibility of return)....	Long-term (secular, relatively permanent).
General composition.....	Mainly limited war forces; labor-intensive....	Mainly strategic forces; capital-intensive.
Specific composition.....	Mainly military personnel, operations and maintenance, procurement of aircraft, ordnance, and vehicles.	Mainly development and procurement of aircraft, missiles, electronics, and space systems.
Distribution.....	Spread out over many industries and regions (but heavily aerospace and ordnance).	More localized in a few regions and industries (aerospace, ordnance, electronics, and instruments).

## CONCLUSIONS AND COMPARISONS

Table 20 compares the key characteristics of the two major types of reductions in U.S. military spending analyzed here—declines following from peace in Vietnam and those resulting from arms control, the latter either a formal agreement or informal and/or unilateral. Under most alternatives examined, the post-Vietnam cutback would come more rapidly, mainly involve tactical or limited war forces, and be short-run in duration. The economic impacts would be spread out over many industries and regions.

In contrast most of the arms control situations would be longer, more drawn-out affairs, with a relatively long-term or permanent change in the expectations concerning future trends in military spending. The cutbacks would fall heavily in the strategic weapons categories, as well as in tactical forces. The economic impacts would tend to be more localized in a relatively few regions and industries, particularly those hard goods firms designing and producing aircraft, missiles, electronic systems, and major component subsystems.

Following peace in Vietnam, an upturn in U.S. military spending is likely; such long-term increases in military demand would compete with civilian programs, both private and public. In contrast, arms control would tend to result in a relatively long-term decline in military outlays, thus making resources available for non-defense activities. The precise utilization of the released resources would depend on the relative emphasis given tax reduction, which would bolster private purchasing power, as opposed to increases in other government program expenditures.

Should the level of aggregate demand in the economy not be maintained at relatively full employment levels, declines in military demand might then result merely in rising unemployment of manpower and other resources. This latter type of problem is generally dealt with through general economic measures such as changes in monetary and fiscal policy.

APPENDIX TABLE I.—RELATIONSHIP OF MILITARY SUPPLYING INDUSTRIES TO PROCUREMENT CATEGORIES—  
INDUSTRIAL PROPORTIONS OF MILITARY PROCUREMENT EXPENDITURES

Industry No.	Aircraft	Missiles	Ships	Electronics	Ordnance and vehicles	Other
151	0.13				0.32	0.63
173	.06				.15	.31
179	.01				.02	.04
191			1.44		.38	.75
192		34.97			40.03	.12
193					10.35	20.71
194	.17		2.25	0.59		
195	1.31				.26	.21
196					3.02	
199	.57	.46	.99		2.35	.28
224	.01					
229	.09				.16	.32
232					.06	.11
239	.04				.37	.74
249	.04				.28	.55
259	.01		.08			
265			.03			
273	.02			.13		
281					.10	.02
289		1.40			.29	
291					.07	
301	.02					
306	.01				.14	.28
307					.04	.09
314					.04	.09
331				.04	.02	.05
332		.06				
335		.20	.04	1.17		
337			.18			
339			.09			
342	.10				.13	.26
343					.03	.06
344	.07		6.12	.07	.28	.66
346	.01	.17		.19		
349	.04	.15	.14		.06	.12
351	.01		2.29		1.31	2.62
353	.94	.21	.45		2.10	4.21
354	.42	3.35	1.43		1.32	2.63
355			.81		.01	
356	.41		1.06		.13	.30
357	2.03	.06	1.71	8.30	1.61	3.22
358	.04	.17	.09	.07	.24	.48
359	.59		.18		.13	.26
361	1.17	1.09	.45	.41	1.23	2.47
362	1.76	.03	.74	1.35	2.14	4.29
364	.07			.01	.10	.21
365	.21		.09	.21		
366	8.64	28.63	16.62	85.75	4.10	2.83
367	.15	.17		1.04	.13	.26
369	.10	.32	.45	.08	.01	.01
371	.33	.36		.08	18.27	36.54
372	75.35	28.20		.09	3.18	3.35
373	.01		61.65	.01	.92	1.84
381	2.49		.51	.02	.11	.22
382	.42		.09		.02	.04
383	.02		.02	.01	.01	.02
384					.46	.93
386	.55			.36	1.55	3.10
387	.05					
399					.03	.06
891	1.53				.59	1.18
Undistributed		3.00		.02	1.15	2.53
Total	100.00	100.00	100.00	100.00	100.00	100.00

Notes: Industry numbers correspond to those contained in U.S. Bureau of the Budget, "Standard Industrial Classification Manual," Washington, D.C., U.S. Government Printing Office, 1967. Percentages for "ordnance and vehicles" are arithmetic averages of ammunition and weapons, vehicles, and other supplies. Percentages for "other" are based on "weapons, vehicles, and other supplies."

Source: Data from Donald J. Igo and others, "Economic Impact Analysis: A Military Procurement Final-Demand Vector," McLean, Va., Research Analysis Corporation, March 1967, pp. 15-50.

