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LONG-TERM DEFICIT OUTLOOK

HEARING

BEFORE THE

SUBCOMMITTEE ON DEFICITS, DEBT MANAGEMENT AND INTERNATIONAL DEBT

OF THE

COMMITTEE ON FINANCE
UNITED STATES SENATE

ONE HUNDRED SECOND CONGRESS

FIRST SESSION

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LONG-TERM DEFICIT OUTLOOK

FRIDAY, APRIL 12, 1991

U.S. SENATE,
SUBCOMMITTEE ON DEFICITS, DEBT MANAGEMENT
AND INTERNATIONAL DEBT,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 2:03 p.m., in room SD-215, Dirksen Senate Office Building, Hon. Bill Bradley (chairman of the subcommittee) presiding.

[The press release announcing the hearing follows:]

[Press Release No. H-11, April 9, 1991]

HEARING PLANNED ON LONG-TERM DEFICIT OUTLOOK; SENATOR BRADLEY SEEKS BETTER WAYS TO MAKE BUDGET DECISIONS

WASHINGTON, DC—Senator Bill Bradley (D., NJ), Chairman of the Subcommittee on Deficits, Debt Management and International Debt, announced Tuesday that the Subcommittee will hold a hearing on the long-term outlook.

The hearing will be *Friday, April 12, 1991 at 2 p.m.*, in Room SD-215 of the Dirksen Senate Office Building.

The hearing will examine the outlook for deficits over the long run, as well as the long-term national priorities reflected in current decisions about deficits and budgeting. In addition, it will examine ways that the Federal Government could better measure the long-term impact of Federal spending and tax policy.

"Our current Federal budget policy lacks a star to steer by. We too often lose sight of the long-term effects of today's decisions. I hope that this hearing will start to focus on ways to improve the Federal budget to help policymakers make better long-term decisions. We need to determine what kinds of additional information or analysis will help us in this process," Bradley said.

OPENING STATEMENT OF HON. BILL BRADLEY, A U.S. SENATOR FROM NEW JERSEY, CHAIRMAN OF THE SUBCOMMITTEE

Senator BRADLEY. The subcommittee will come to order. This is the first hearing of the new subcommittee created by Senator Bentsen, called Deficits, Debt Management and International Debt. I call it the three horsemen of the apocalypse. Over the next 2 years I hope and expect and we will examine a series of topics in the international and domestic area.

The first hearing today, and I expect that there will be more on this overall topic, will examine the outlook for U.S. budget deficits over the long run as well as the discussion of long-term national priorities reflected by current budget decisions. In addition, we will examine ways that the Federal Government could better measure the long-term impact of Federal spending and tax policy.

The subcommittee will also be holding hearings in the future on international debt. Over the next 2 months we will hold two hear-

ings, one on debt conversion proposals such as debt for nature swaps and the other on debt and capital flight in Latin America.

Today's hearing is on the budget. We all know that we have budget problems but we lack a framework or a set of principles for viewing the solutions to the problem. Tax reform, something I worked on for a long while, was based on a set of principles: fairness, equal incomes pay equal taxes, lowest rates for efficiency. Those principles helped us to evaluate alternative proposals and helped us to explain why taking away some preferences was necessary for the greater good over the longer term.

I am concerned that the debate over deficit reduction often is not based on principles and often is not focused on the implications of Federal actions for the future. Actions on the budget in my view need a star to steer by, and the purpose of these hearings is to try to address whether we can find some stars to steer by as we make very tough choices on the budget.

I will be asking all of the witnesses some of the same questions: How well does the current budget as constituted provide us with sufficient information to guide us in the future? What kind of additional information or analysis would help in our understanding of how the budget affects the future? If we continue with our current priorities, where will be in 10 or 20 years? What set of principles should we use to guide budget policy? What principles look to the future? Is there a star that can help us set our sails?

I hope that these questions will provide a thread of continuity for the hearing and a thread of deliberation for the committee as we try to take a serious look at the budget in the future over the next several months.

Our first witness will be Dr. Robert Reischauer who is the Director of the Congressional Budget Office in Washington. Dr. Reischauer, thank you very much for coming and the floor is yours.

STATEMENT OF DR. ROBERT D. REISCHAUER, DIRECTOR, CONGRESSIONAL BUDGET OFFICE, WASHINGTON, DC

Dr. REISCHAUER. Thank you, Mr. Chairman. I appreciate the opportunity to appear at the inaugural hearings of this subcommittee on an extremely nice day to discuss an important topic: namely, the development of Federal budget information that could help to improve long-range decisionmaking.

With your permission, I will submit my prepared statement for the record and will summarize some of the points that were made in that statement.

Senator BRADLEY. All right.

Dr. REISCHAUER. As a backdrop to this discussion, let me start by saying a few words about the budget outlook for the next few years. CBO's latest estimates are presented in my prepared statement. They show that the deficit will be up at record levels in the current fiscal year and the next fiscal year. In other words, it will be around $300 billion in 1991 and 1992. After 1992, however, the budgetary situation should improve markedly as the impact of temporary factors begin to fade: the recession that we are currently experiencing, and the hemorrhage of spending for the deposit insurance accounts; namely, the savings and loan debacle.

The outlook is also expected to improve because the savings from last year's budget agreement will begin to mount and mount substantially. In fact, by 1995, they should amount to something in the neighborhood of $160 billion. If the spending limits that the new Budget Enforcement Act established are adhered to, the deficit should fall below $100 billion in 1995. If this occurs, it will be the first deficit that is under 1 percent of GNP for the previous two decades.

Much of the concern about the huge deficits that we have piled up during the last two decades is related to a vague apprehension that the deficits are going to be a burden to future generations. I think most economists would agree that these concerns are quite justified for when the government spends more than it takes in, it has to borrow. This borrowing absorbs private savings and reduces the pool of resources that are available for productive investments. Fewer investments, of course, mean a smaller capital stock, slower growth and, ultimately, lower standards of living.

While it is far from perfect, the budget deficit as currently measured is an acceptable yardstick of the impact of current budget policies on long-term growth. A number of analysts would disagree with that assessment. In fact, they would argue that the current deficit measure seriously overstates the detrimental impact of recent budget policy on national saving and economic growth.

Among the more frequently heard criticisms of this sort are that the conventional measure of the deficit is not adjusted for inflation and does not treat net government investment properly. For the most part, adjustments for these factors can be made. In fact, CBO has done so in a recent study.

We found that once one made adjustments for these criticisms and others, the basic pattern of deficits was not appreciably changed. The conclusion that the government has absorbed far more of the Nation's saving in recent years than in earlier periods remained true. As a result, one is still left with the sorry conclusion that future standards of living are likely to be lower because of our recent budgetary policies.

A number of analysts have advocated that the Federal Government adopt a capital budget. They have argued, in part, that this would reduce the bias that current budgetary practices exert towards current spending and against future-oriented investment spending. A capital budget would remove Federal investment outlays from the conventional budget and account for them separately. Only the deficit in the remaining budgetary accounts, which would be labeled the operating accounts, would then be the focus of policy concern since only that part of the budget would show the government's impact on reducing national saving and economic growth.

CBO has expressed a good deal of skepticism about capital budgeting because we feel that it has several limitations. The first of these relates to the potential for political manipulation of capital budgets; what you might call the New York City syndrome. This danger arises because it is inherently difficult to determine which program should be considered investments. Political pressures would inevitably arise to classify more and more types of spending as investments in order to protect these programs from the deficit

discipline that might be meted out on the operating side of the budget.

A second concern that CBO has relates to the inherent difficulty encountered when one tries to determine depreciation on government assets. There are no markets for many government assets and, therefore, depreciation would have to be estimated. This estimation process would be subject to considerable error.

A final concern that CBO has is that if we maintain both a capital and an operating budget, it would be less likely that the full resource costs would be taken into account when budgetary decisions are made.

Those who focus on the budget as a tool that helps policymakers make decisions about allocating resources among different uses have long recognized that conventional budgetary practices treat inadequately certain programs: namely, those involving credit and various types of contingent liabilities.

The Omnibus Budget Reconciliation Act of 1990 reformed the budgetary treatment of direct loan and loan guarantee programs starting with fiscal year 1992. This represented a major step forward.

The new credit reform system will include the present value of the government subsidy as the outlay in the year in which the loans are disbursed. All other cash flows resulting from credit programs will not affect the budget deficit. This treatment of credit programs will more accurately reflect their economic effects and will represent a more accurate measure of what it is that decisionmakers can control.

The current budgetary treatment of Federal deposit insurance suffers from many of the same shortcomings. Under the new budget law, CBO is required along with the Office of Management and Budget to examine different budgetary treatments of deposition insurance. We will be reporting back to the Congress on this topic in the next couple of months.

Recently, a number of economists who are concerned about the possibility that current budget policy might represent a burden on future generations and who are convinced that our current metrics are not capable of analyzing this kind of issue have begun to develop new types of models.

One of these efforts, which has been undertaken by Professors Auerbach and Kotlikoff, calculates a system of generational accounts. At your request, CBO has begun to assess the feasibility, advantages, and drawbacks of implementing such a system.

The system of generational accounts is intended to be an explicit and precise estimate of the net burdens that government policies, if extended indefinitely, impose on different age groups, including the unborn. Generational accounts indicate, in terms of present value, the net amount that each current and future generation is projected to pay to the government. This system illuminates the generational implications of the budget as a whole as well as those of particular fiscal measures that the Congress might enact.

While we are still at the initial stages of our analysis, CBO has several reservations concerning whether this approach is likely to have widespread utility. Let me mention just five of these.

First, a tremendous number of assumptions are needed for this type of system, and the analysis that results can only be as good as the assumptions that go into it. We plan to investigate the sensitivity of the results to variations in the assumptions.

With respect to the assumptions, it is also worth pointing out that models and methodologies that depend on controversial assumptions are likely to be less useful to policymakers. This comes through very clearly to those at CBO who have been involved in estimates of the distributional consequences of various Federal policies, particularly in the tax area where we quickly get into disputes over the appropriateness of certain assumptions. The analysis is attacked and discredited on the basis of the assumptions, which is quite correct if the assumptions are dubious in any way. But this type of problem will be multiplied many times with respect to a system of generational accounts.

Second, it is inherently difficult to decide exactly what future commitments are implied by current spending and tax policies, which are an essential ingredient into this methodology. While such judgments can plausibly be made for a 5- or even a 10-year period, it would be very difficult to extend such kinds of judgments to a life time, which is what a system of generational accounts requires.

Third, the important feedbacks between fiscal policy and national economic growth are not taken into account, in the current version of the generational accounting framework. From my earlier remarks, you might have guessed that CBO feels that these are the primary ways in which current budget policy affects unborn generations.

Fourth, generational accounting does not deal with the conventional kinds of distributional analysis, such as the impact of government policies on the income distribution at a point in time. For some issues, this is the overriding consideration for policymakers.

Fifth and finally, the results of generational accounting may be hard to interpret for some. It may be difficult to attach meaning to the results of this analysis. One does not really have a standard to judge the appropriateness or the inappropriateness of the results. Future generations will probably be better off than current generations. How much redistribution should there be from the future to the present given that likelihood?

Let me conclude by saying that I do not want you to interpret my reservations as a rejection of this line of analysis. Comprehensive and forward-looking frameworks, such as generational accounting, could fill an important gap in the information that is currently available to policymakers. As such, they would best be viewed as supplements to, rather than as substitutes for, our existing budget accounting systems. But before they can even fill this more limited role, a good deal of further work needs to be done to refine the models. CBO will be working with you and with this committee to try and do that.

Senator BRADLEY. Thank you very much, Dr. Reischauer, for your testimony. It is appropriate that you be first to frame some of the questions that some of the later panelists will also address. And I am sure you are familiar with the work of many of the people who will follow you.

In building on what was done in last year's budget in terms of present value for the government subsidy of loan programs, one of the later witnesses is Jane Gravelle, who will testify about the use of present value in measuring tax changes.

Do you agree with her that a 5-year budget treatment really does hide longer terms costs? And the present value analysis might actually be a better way at getting at the longer term cost question.

Dr. REISCHAUER. Certainly for certain kinds of——

Senator BRADLEY. And to just lay it out—I mean yes or no? This is the day when I hope a lot of people will disagree or agree.

Dr. REISCHAUER. I would say that analyzing changes in certain kinds of tax policy in a present value framework is important. It should be a supplement to what we do now. The same way that when CBO analyzed the cost of the savings and loan bailout, we presented our analysis in present value terms. In addition, we included the standard budget presentation as well. I think you know that different questions are answered by different methodologies, different approaches. This is a case where long-term impacts that change either in magnitude or in sign in the distant future are important to analyze in present value terms to understand those costs and benefits.

Senator BRADLEY. So you see no problem in developing this kind of information for things other than the——

Dr. REISCHAUER. Oh, I see problems in developing it. I mean the methodological problems are tremendous. One has to make assumptions about discount rates that can be quite controversial.

Senator BRADLEY. In your testimony that was submitted, you indicated that payroll tax cuts would reduce national savings and investment and shift burdens among generations. Could you elaborate on both those outcomes? How would it shift and how would it reduce?

Dr. REISCHAUER. Yes. The Finance Committee released yesterday a CBO study that estimated the impacts of reductions in payroll taxes using growth models. To summarize the findings, over the very short run—the next couple of years—a payroll tax cut would stimulate the economy slightly and add to employment because we currently have less than full capacity utilization. But in the longer run analysis, a payroll tax cut it would reduce national saving, reduce the capital stock and, thereby, lower standards of living.

This analysis also took into account the long-run implications of plans, such as Senator Moynihan's, which call for higher payroll taxes in the next century. By the same token, when that occurred, the national saving would rise and growth would increase.

Senator BRADLEY. So that if you have done this for a payroll tax cut, could you do this for any tax change?

Dr. REISCHAUER. Yes.

Senator BRADLEY. And do you have that capacity now?

Dr. REISCHAUER. Yes, we do.

Senator BRADLEY. You just have not been requested to do that, is that correct?

Dr. REISCHAUER. Yes. At various times, we have done this sort of analysis as to what would increase in the deficit, whether caused by tax cuts or spending increases do to long-run growth.

Senator BRADLEY. I hear your comments on the idea of generational budgeting, but what thoughts do you have in helping us think through what the impact of specific decisions we take are actually going to be on future generations—other than the obvious which is that if you reduce the deficit and you will increase savings and everybody will be better off? If you would be more specific.

Dr. REISCHAUER. Well, this is the point where we ask whether the tools of economists are precise enough to provide you with specific answers, such as the generation born in the year 2000 will be X percent worse off or better off from this policy. I guess I am at the position where I do not think we have the capacity to do that.

Senator BRADLEY. But your fifth red flag that you raised about generational budgeting, you said you assume that future generations are going to have a higher standard of living?

Dr. REISCHAUER. Because I assume that we will have real economic growth in this country, which I do not think is an unrealistic assumption given the history of the last 100 years and expectations about technological change and the fact that, while net investment has been low, it has been positive.

Senator BRADLEY. Well, what was your fifth point then? You said that it is difficult to redistribute the future to the present?

Dr. REISCHAUER. No. Even if I could provide you with a set of estimates that policy A, if adopted, would change the generational accounts in the following way, you are still faced with some very difficult questions that basically involve value judgments that boil down to how much better off should future generations be than current generations. Each political cohort, in a sense, makes those judgments usually implicitly, rarely explicitly. This would probably bring those sets of decisions out into the public debate more. I, for one, think it would probably tilt decisions more in favor of future generations, which would be a good antidote to the policies of the last several decades.

Senator BRADLEY. So that you see that given the fact that it ultimately is going to be a political/value judgment

Dr. REISCHAUER. But that is a value judgment on my part.

Senator BRADLEY. But given the premise that it is going to be a political/value judgment, it is possible to at least lay out the economic facts or implications. Some people would say no.

Dr. REISCHAUER. Whether it is possible to lay them out generation-by-generation—I mean, 10-year cohort by 10-year cohort—is an open question in my mind. Whether we can say policy X is likely to improve the situation for generations yet unborn or hurt them is quite doable, but it is also quite doable through much simpler mechanics——

Senator BRADLEY. Such as?

Dr. REISCHAUER [continuing]. Than generational accounting, such as the growth models that we have relied on for the analysis of the Social Security tax cut.

Senator BRADLEY. So you see that as two separate paths to achieve the same objective?

Dr. REISCHAUER. I do not want to put words in his mouth, but I think Professor Kotlikoff would say that the feedback effects or macroeconomic impacts of reduced deficits can be built into a framework of generational accounts, therefore, having in a sense

the best of both worlds. But one would still be left with the allocation within a generational accounting framework being determined by hundreds of assumptions, some of which might be extremely controversial, some of which might be stabs in the dark.

As you know, when we present you with a printout, it becomes a lot more certain than when I am speaking about this.

Senator BRADLEY. Right.

Dr. REISCHAUER. These numbers might take on more of a life than they deserve.

Senator BRADLEY. I am certainly aware of the iron law of the table, particularly the distribution table. But just so there might be some sense here, when you look at 3 years, 5 years and 10 years, what is the increase in the margin of error as you estimate?

Dr. REISCHAUER. I think you would have to tell me exactly what it is that we are estimating here.

Senator BRADLEY. Well, all of the assumptions that have to go into estimating say, budget policy, size of the deficit, interest rates, unemployment, all those things. As you look out, after a certain point it becomes——

Dr. REISCHAUER. Mammoth.

Senator BRADLEY. It is hard for me to understand how scientific it is as opposed to just picking a number.

Dr. REISCHAUER. That is good. We would like to let you stay in that state. These numbers become highly uncertain. By the time you are 5 years out or 10 years out, I think the margins or error are tremendous. Some of the underlying assumptions about the world, the labor force or population change.

Senator BRADLEY. So that would pertain to your own analysis of the Social Security tax cut as well as to generational accounts?

Dr. REISCHAUER. It would apply more to generational accounting.

Senator BRADLEY. Why?

Dr. REISCHAUER. Because what we did in our analysis of the impact of a cut in Social Security taxes was basically to use growth models to ascertain the effect of a reduction in government revenues—holding spending the same, increasing the deficit—on inflation and the GNP.

Senator BRADLEY. You say it is a more modest analysis?

Dr. REISCHAUER. Right.

Senator BRADLEY. Of your five questions about the idea of generational accounting, which one do you feel is the most important to address or the most significant?

Dr. REISCHAUER. The first three are major problems; one being the assumptions. Now if we found that the assumptions one had to make to engage in this kind of analysis—that two plausible assumptions gave different signs on the effects—then the question would be, what is the usefulness of this approach? It really will be open to a lot of controversy, a lot of debate. So that is terribly important. You have to get over that hurdle before you can go onto the next stage.

My second reservation involved the question, how do you really define current policy out into the future? Maybe this is the kind of issue that could be resolved in the same way that the baseline definitions are set in the Budget Act.

Senator BRADLEY. No change you mean?

Dr. REISCHAUER. Well, but there is a question on what does no change mean. Certain parts of our law are set in nominal terms—target prices for wheat or whatever. By the year 2050, there will be no program for all practical purposes, if that assumption held true.

How do we define current policy with respect to Aid to Families with Dependent Children (AFDC) benefits? AFDC benefits are determined at the State level and the Federal Government pays a fixed percentage—well, a percentage that varies according to the State's squared per capita income.

Over the last 15 to 20 years, real benefit levels have declined by about one-fifth in AFDC. Is current policy to continue the decline by one-fifth every 20 years? By the year 2050, we will have, for all practical purposes, no AFDC program.

Senator BRADLEY. I see. So your point is that if you were going to seriously do this, you would have to be able to assume spending and taxing patterns that are not under the control of the government even though the Federal Government pays the bill?

Dr. REISCHAUER. We would have to have some acceptable definition. Are we going to say that food stamps will always provide 4 percent or some fixed percentage of the income of the lowest quintile and we will define that as current policy? One could do this. It would be an interesting and useful exercise. Whether it should be defined as official government policy for a government agency to do is another question entirely.

Third reservation I had related to feedbacks between fiscal policy and national economic growth. This certainly could be worked into a system of generational accounts if we knew more. I think we should devote more research to estimating these types of feedback effects. They are very difficult to estimate.

I mean you think of something really quite simple—the provision of benefits to the aged in America. To a large extent, the government provision of Social Security benefits could be offsetting private transfers that would have occurred in their absence. In other words, children would have taken care of their parents. We are looking at one side of this account. In complete framework one might want to work in the private offsets to public policies.

Senator BRADLEY. You are raising a whole nest of complications which I appreciate. But are you saying there are no solutions to these complications? I mean these are all serious concerns. They raise, well, can you actually get any accuracy from a longer term analysis. And that is basically what we are exploring today; not any particular one.

Dr. REISCHAUER. I will have a more definitive answer to that question when we finish our analysis of this model, which we are now undertaking for you.

Senator BRADLEY. All right. Well, I will look forward to receiving the analysis and I appreciate very much your testimony. And thank you very much.

I have here some questions from Senator Grassley, which I will submit to the record if you could answer them. Thank you.

[The questions appear in the appendix.]

Senator BRADLEY. Our next witness is Charles Bowsher, Comptroller General of the United States.

[The prepared statement of Dr. Reischauer appears in the appendix.]

Senator BRADLEY. Mr. Bowsher, welcome to the subcommittee and thank you for your own credibility on these issues. As I look around I see that every time I turn, you are there telling what the facts are as you see them, which is what I think you should be doing. And I see you have come well prepared.

Mr. BOWSHER. Right. I got a good team here.

Senator BRADLEY. The floor is yours.

STATEMENT OF HON. CHARLES BOWSHER, COMPTROLLER GENERAL OF THE UNITED STATES, WASHINGTON, DC

Mr. BOWSHER. All right. Well, thank you very much, Senator. And we are please to be here today. On my right is Dave Mathiasen; on my left is Sid Winter and Jim Kirkman. And we will be pleased to answer any questions. What I thought I would do is just read a few paragraphs of my statement and summarize the balance of it and then I would like, if possible, to have it put in the record in its entirety.

Senator BRADLEY. Your full statement will be put in the record in its entirety.

[The prepared statement of Mr. Bowsher appears in the appendix.]

Mr. BOWSHER. Our budget policies today are among the most important elements that will determine the national standard of living in the 21st century. Without sufficient investment in new factories, highways, research, education and all of the other factors that determine the productivity of our labor force, the United States will not be competitive in the future world economy. Unless we save today in order to provide for that investment, our children and grandchildren may find they cannot sustain a high standard of living while also supporting an increasingly large retired population. Without increased savings and investment, our standard of living may fall behind that of other industrial nations, and the United States may very well lose the preeminent position it holds today in the world economic order.

Unfortunately, our budget policies of the last decade have shortsightedly promoted consumption at the expense of our future economic well-being. Huge Federal deficits have drained private savings that could have been devoted to new plants, equipment, and other productive private investments. At the same time, the budget has provided inadequate funding for highways, education, research and other public investments.

And if I could just run over the numbers a little bit here. In other words, when the President sent his budget up here a couple of months ago, it was finally acknowledged that our official budget deficit was $300 billion and over 5 percent of the GNP. As we have pointed out several times, even those official figures are somewhat lower than what the real figures are, because the real figures, if you took away the trust funds like the social security trust fund receipts that you are using to pay general operations, you really have a deficit of around $400 billion here at the Federal Government level.

And it is interesting to think that in 1986, when the Gramm-Rudman law was passed, we were at the $200 billion level. And so the deficit has really been moving up rather than moving down which is what, of course, the intent was of that law and other efforts.

I think also we have to recognize that the debt is moving up very dramatically. I remember briefing some of the incoming members of the Bush administration and saying that you should not be overly impressed with some of the numbers that you are going to see here in the official documents, because many of the problems such as the S&L crisis that you are inheriting are going to be much larger than anything that is booked there.

And so you have got a $3 trillion debt now and you are heading to $4 trillion. And I was hoping at the time that there would be policies put in place that would start to bring that down. But the truth of the matter is, we are heading to that 4 trillion. We are at something like 3½ now. By the end of this year, I think we will be at over 3.6. And we will not be too far away from the 4 trillion in 1992. And if we do not turn the trend around, why we can easily head to the $5 trillion level.

This has a tremendous impact on the interest cost. I think CBO has estimated that the cost might hit $300 billion this coming year if we count the interest cost for the trust funds. And that will probably put us over the defense level as the number one budget item. And that is a great burden that we are passing on to the next generation here.

Now, it is not just a government problem. In other words, the private sector too in recent years has loaded up on debt. I remember being in a meeting with Greg Jones, a former chairman at GE, and he said, let us not just dump on the government here. He said, all of us in the private sector have seen a tremendous increase in debt. And the personal savings rate has gone from 8 percent in the 1970's down to 5 percent.

So then I think we have a very serious problem here if we are not going to pass these problems on to the next generation. In the report that we issued last September which you, Senator Bradley, and Senators Grassley, Exon, and Moynihan had requested, we were asked three questions. One was, how big is the budget deficit? And that is when we said that the reported figure was about $300 billion, but that if you looked at the real figures, it was closer to $400 billion.

The second question was, how long would it take to work this down on a realistic economic basis? We projected about 7 years. We said 6 years after the current year, so that was about 7 years. And we said that the goal should be a 2-percent—of GNP—budget surplus, or a balanced budget if you exclude the trust fund surpluses. And we laid out some options in the defense, domestic, and revenue areas as to how that might be done over that kind of a period.

Now, of course, as we were working on that project last summer for you, the budget summit was going on and they came up with a $400 billion-plus package which we said was a good start. The only problem it seems to me now is that the timing was not so good. In other words, just as they finished putting the budget agreement together, the government was sliding into a war situation and, of

course, into a recession. And I think the war numbers are something that a lot of people do not fully understand.

In order words, the focus now is on the incremental costs of that war, and there is no question I think that if the government can collect on the burden sharing pledges from the other countries, the incremental costs of that war can be covered. But there will be other costs as a result of the war. In other words, as part of the budget agreement last year, the Army was going to come down from 18 divisions to 12. The Air Force was to come down by nine air wings, and the Navy was going to come down by 100 ships to about 450 ships. And so there was an agreed upon plan to come down in the size of our armed forces. And that is really how we were going to achieve the defense savings.

Much of that will not be able to be achieved this year or even get started next year because it just is not going to be easy now to get the force levels that everybody was hoping for. So I think we will have some carryover problem, you might say, related to the budget agreement because of the war situation. And those are real costs to the American taxpayer, costs that will not be covered by other countries.

Now, we also have to point out that of the anticipated savings in the budget agreement, $144 billion has to be enacted in appropriation bills in the next few years. So if you do not get those savings enacted, you do not get those savings. So there is a lot of work still to be done on the budget agreement.

Now, if I could just address the long-term budget situation and what it means to the country's competitive position, I think that America has to become more competitive if we are going to continue to be a world class power in the economic area. And we have got some major problem areas to address—problems which add a great deal of costs to our products.

The health care area is a good example. In other words, our health care program in the United States is at about 11 percent of GNP and it is going up to 15 percent. We spend more money than any other Western country on health care. And we have quite a few problems of access to the system and other things like that. But we have got to get ourselves a health care program that gives access to most of our people within a reasonable cost framework.

Although the Canadian system would not be a perfect system to transport to America, I am sure at the same time it has a lot of features that ought to be looked at. They made some real changes in their health care program about 20 years ago and they have leveled off their cost trend. And so these are some of the things GAO is working on in the health care area.

I think if you look at education, the drug war, or the defense area where we are spending 5 percent versus 3 percent by a lot of other countries—Japan just spent a little over 1 percent—these are areas where we need to examine the levels and priorities for our spending.

And then I think the last one, of course, is the large Federal deficit. I really believe we have got to bring this Federal deficit down. Letting the debt rise to $4 trillion and on up to $5 trillion is a very worrisome situation.

I think we also have un-met needs, like the infrastructure in the transportation area. Ours was a nation that invested heavily over the years in its transportation infrastructure, making it possible to move vast amounts of people and material around. But we now have these large deficits at the Federal level, and similar ones now starting to develop at the State and local levels and in the private sector. As a result, we are just not making the investments that we once did.

Now, one of the things we have recommended is a change in the structure of the budget so that you would have more insight into what is really happening. We believe in the unified budget concept so that economists and others know what is the impact of the Federal Government on the economy and what is the cash flow. But we also think that the budget needs some other features. For example, we are supporters of a break-out between capital investments and operating expenses.

No question, there would be some problems in developing such a breakout but these problems are not insurmountable. I think you need that kind of information and also much better information on our labor costs so that we can make investments. In other words, we are never going to be a productive government if we do not learn to make investments. Along these lines, one of the things that we have done quite a bit of study on in the last couple of years, and are going into ourselves, is this whole total quality management (TQM) approach to management and quality. In the private sector, in some areas, there have been tremendous TQM improvements, but it takes investment. In other words, you have to be willing to make the needed investments.

And in our type of budgeting where every dollar is an equal dollar, if you are going to invest in a major system improvement, all of the cost must be expended in the first year. And so it is much easier from a budget point of view to keep the same old system. I think if you ever go to a service center of the IRS, you will see the best example of this, where they are really using 1950 technology to process all these 200 million IRS returns that the American people send in. And each year as they go through the budget process, first being clipped by Treasury and then OMB and then coming over here to the Congress, it is a tough hurdle race. And it is not easy for them to sell investment. In other words, investment adds to the deficit. The deficit is viewed as something that we do not want to add to and, therefore, the investment starts to fall out in the negotiations.

So I think a better break-out of the budget is needed. We have proposed a six-part budget to show the general trust, and enterprise funds, with these in turn broken into capital and operating parts. It is one of the ways we think that the decisionmakers would have a greater insight into what is really happening here at the Federal Government.

I have also been taken by Herb Stein's ideas. In other words, I am very glad to see that he is on your program here. We should be trying to figure out how much do we want to spend for some of these major areas and then figure out how to split that between the government sector and the private sector and have programs to

really achieve it. And I think that that type of thinking is something that deserves a lot of consideration.

And that is what leads me to my last idea and recommendation for everybody's consideration, and that would be possibly the need for another budget commission. I recommended it to some of the people last year when they were going through the budget summit talks. But in 1967, we did have a budget commission. A lot of people from the private sector and the government sector served on it. And we really have not had anything like that for 25 years.

And I just wonder if it is not about time for another commission, but maybe not this coming year. I think we have got to let the budget agreement work itself out for another year or so. But maybe after the presidential election in 1992, it would be time to have a commission again to see what kind of recommendations they could come up with—and they could consider all of these ideas including the generational accounting and budgeting.

Senator BRADLEY. Thank you very much, Mr. Bowsher, for your testimony. You mentioned Herb Stein's proposal and we are going to hear from him on the next panel.

Tell me, what is it that you like about that proposal?

Mr. BOWSHER. Well, what I like about that proposal is it gives you a greater insight into what you are trying to do in the major segments of your society. I think health care is a good example. What we have really been doing for the last 20 years in health care, is we have been moving costs from the public sector to the private sector. When we think we have got a budget deficit and we ought to get rid of some of these costs, we kind of push it over here into the private sector. And then the private sector starts to run deficits of the hospitals and everything, and they figure that they have to push more of this back to the public sector.

Each time some group is claiming cost savings. In other words, every time people announce that they just achieved some cost savings and eliminated some inefficiencies here or there. But the truth is, all they are doing is pushing the costs around from the public to the private sector or vice versa.

When you look at Herb's thinking, why you would get more long range planning, some thinking about well, what does this sector really need to modernize, and then how much should be done by the government versus the private sector.

Senator BRADLEY. Are you familiar with Jane Gravelle's net private present value work?

Mr. WINTER. Not specifically, unless you can clarify that.

Senator BRADLEY Are you familiar with trying to look at present value for various tax changes? You know, we looked at present value on net in last year's credit budget agreement. This would look over at the tax change area. Are you familiar with that?

Mr. BOWSHER. Well, we are somewhat familiar with that. I am also familiar with the fact that sometimes people like on the S&L crisis want to use present value and only present value as to how much is it going to cost. I think it is dangerous. In other words, I think present value is a good thing to look at, but you also should be looking at cash flow and the accrual of what is the cost all the way out there. So I think the concept of present value is a very useful economic thing. But sometimes people, I think, misuse it too.

Senator BRADLEY. Do you think we need full accrual of liabilities for the Federal Employees Retirement System?

Mr. BOWSHER. I have always felt that the major liabilities should be accrued. I remember serving at the Pentagon in the late 1960's when they used to put up charts and they would show us that our military retirement now is $4 billion, and in a few years we would be up to $20 billion.

Just to put that in perspective, the full budget of any one of the services was just over $20 billion in those times. So what we were seeing in the privacy of that conference room was that this cost was going to zoom because what we really have ended up with here, is we have more Air Force officers on the retired payroll today than we have on the active payroll, see. And it was not booked any place: in the budget process, the accounting process or anything like that. And I remember taking that on as one of the issues. And we finally got that put through some years back.

But those are the kinds of costs that I think the government should realize right up front that they are building up and they should not be kidding themselves by trying to stick with cash accounting. I think cash accounting is good for small organizations, but I think when you get to large organizations, if you do not have your major costs properly accrued, you are kidding yourself for the future.

Senator BRADLEY. Later we are also going to hear from Alan Blinder believes that we should not really be concerned about that part of the budget that is related to inflation, the so-called 100 billion number that Bob Reischauer mentioned before.

What do you think of not worrying about that number?

Mr. WINTER. Senator, are you referring to the question of the interest on the debt?

Senator BRADLEY. Yes. I am referring to the overall inflationary cost inherent in the debt. About $100 billion is what his analysis says.

Mr. WINTER. Well, I think the constant dollar analysis of the economy and of the Federal budget is a very essential supplement to the current dollar analysis that the Congress actually uses. I am not sure that there is a specific policy implication available there in terms of looking at the constant dollars.

Senator BRADLEY. Well, I mean, you know, you assume that payment on the debt is X and inflation is X plus 10. So the point is, just consider X, without considering X plus 10. That is basically the thought.

Mr. WINTER. As I understand Professor Blinder's thought, he would like to change the budgetary treatment of the interest on the debt to recognize the fact that because of the inflation, there is some erosion of the principal amount of the debt going on each year. The country is in a sense being partially released from the burden of that debt in real terms by the fact that there is a continuing inflation.

And he has a proposal for changing the budgetary treatment in a way that would reflect that fact. I think it is an informative proposal. I would haggle with him about some of the details but I do believe that it is an information proposal.

Senator BRADLEY. You think that taking a look at it in that way would be helpful?

Mr. WINTER. Yes.

Mr. BOWSHER. Yes. But I am not sure that I would build it in as the official figures. In other words, I think again it is good to be looking in different ways to see what is really happening to you. But I think you can sometimes kid yourself if you are going to build that in and say, well, that is not going to cost us anything.

Senator BRADLEY. And what about the generational budgeting idea of Professor Kotlikoff?

Mr. BOWSHER. We have just got that in recent days and we are looking at it. But the one thing it seems to me is it does have the advantage of focusing on what is happening to future generations here. And I think by looking at their analysis, it seemed to me that they brought themselves to some of the same concerns that we have about what has happened here in the last 10 years and what we think has to be done in the next few years.

So it seems to me again a useful exercise, but we have not studied it in any great detail or anything like that.

Senator BRADLEY. Do you have any specific suggestions other than the ones that have been mentioned already as to how policymakers might take into consideration the impact on the future of a particular action?

Mr. MATHIASEN. Well, I think there is perhaps some catching up that would be useful which is not nearly as dramatic as generational accounting. But if you recall, sort of during the development of the congressional budget process in the late 1970's, there was more emphasis on the medium term, 3-year numbers and 5-year numbers. And the focus has really shortened a great deal during the last decade. And maybe one of the first things to do is to try and correct that and get back to somewhat more programmatic medium-term analysis. This really is neglected under the new budget agreement because it is expressed in these aggregates that do not have any programmatic details in them. So you do not know anything about R&D or education or infrastructure. You simply have something called domestic discretionary which does not tell you much about the future.

Senator BRADLEY. So you mean disagregating the three categories is the first step?

Mr. MATHIASEN. I think so. Disaggregating and having some hope for reliable estimates; not precise but enough so that at least Federal agencies and State and local governments that rely on Federal grants can begin to plan and have some expectations of what kind of resources they will have over the next 3 or 4 or 5 years.

Senator BRADLEY. In terms of categories, I understand that the three are really too broad. Do you have any number in your mind that would be precise and yet not too detailed?

Mr. MATHIASEN. Well, I think that if you overlay the functional structure that is built into the budget resolution with our six-part budget, you have a manageable and really quite insightful set of numbers. It is not overwhelming but it does give you a pretty good indication of where the budget is taking the country.

Senator BRADLEY. And your numbers would go for how long; your six categories, about 5 years?

Mr. MATHIASEN. That is basically a data question. Yes, you certainly could do it for 5 years.

Senator BRADLEY. Well, do you have any suggestions to policymakers who might want to look at what are the longer term impacts of particular policies?

Mr. BOWSHER. Yes. I would like to say something on that, Senator, and that is that it seems to me on major programs, like the space station, that it would be good to look further out as to what is this really going to cost and I think also what is going to be operating costs?

One day I got a telephone call from the Director of the Bureau of Prisons and he said, Chuck, are you aware that I am in a growth business? We are going from $1 billion to $3 billion over here at the Bureau of Prisons. And he asked me if I would not come over and discuss it. I think one thing I learned when I went over to see him is just how high the operating costs are every time you build a prison. In other words, I think most people think in terms of what the capital cost is; the one time cost to build that prison. But you are buying yourself a very labor intensive situation here.

And so I think lots of times the total cost of what some of these major programs is going to cost is not thought through. On the 5-year limitation, I remember you asking Bob Reischauer about that, I always felt that at the Pentagon we sometimes were not looking far enough out. We got ourselves locked into that 5-year defense program system over there. And I thought we were not looking far enough out.

Another thing, I think it is significant that we do not spend a lot of time on interest costs, except when we are trying to figure out how to get something off budget. In other words, when we were running budget deficits at $3 billion, $4 billion, $5 billion, most of the costs of running the government was being paid by the taxpayer. Today a substantial portion of the cost is interest and when you borrow on more programs on top of that, you are going to have to borrow long-term to finance that. Right now we would never consider that. I mean that is just something the Treasury pays.

And so I know there is great resistance to start adding the interest cost to some of these programs as far as can we afford it. But truly that is what you are going to pay. That is exactly what you are going to pay in the next 10 years.

Senator BRADLEY. Well, let me ask you if I could, the example that you choose which was NASA, how would you actually take that cost out to a longer time horizon?

Mr. BOWSHER. Well, I think you could at least ask the NASA people to give you the estimates of the life cycle costs or something like that for the period over which the space station is going to be used—in other words, what it is really going to cost in total. I think you would have a better idea then, when you considering investing in a space station, just what that future commitment is going to be.

Senator BRADLEY. But how confident do you feel with their estimates?

Mr. BOWSHER. Well, they have to be reviewed because, having worked some of the time with those things at the Pentagon, I know that people have a great tendency not to include all the costs.

Senator BRADLEY. One of the questions—and I think it has emerged already and will through the rest of the hearing—after I read all the testimony is as follow: Is this information, potentially as inaccurate as it might be, worth putting out or is the information so inaccurate and potentially fraught with so many misjudgments because of its inaccuracies that you should not even format it? And where do you come down?

Mr. BOWSHER. Well, on the major programs, even if there is some inaccuracy built into the estimates, I think that lots of times it is worth doing. I do not think it is always worth doing for everything. I think lots of time that is where we fall into the trap.

Senator BRADLEY. Can you give me an example of where, if that had been done, it might have changed a policy decision?

Mr. BOWSHER. Well, I think one of the decisions that was made here 10 years ago—it was a technical decision too—it was the breeder reactor. In other words, should you go on with the breeder reactor which was going to be a multi-billion dollar investment?

We also had in Ohio a big investment in new technology for uranium enrichment and things like that. And I think CBO did some studies and we put some estimates together. I think it did show the decisionmakers what the costs were really mounting up to be. And I think that was helpful in making that decision.

Concerning the space station proposal coming up here now, I think that is a good one to look at and see what it is going to cost.

Senator BRADLEY. But if you take a particular program and you ask how much is it going to cost in the long-run and somebody produces a gigantic number, then what is the principal by which you decide whether that number is worth expending? You cannot do it in isolation.

Mr. BOWSHER. Oh, no.

Senator BRADLEY. It has got to be in relation to the other——

Mr. BOWSHER. It has got to be in relation to the other features of the program. Sure. But what I am just saying is, that I think at that point in time you are starting to see at least the components of all the numbers that revolve around that program decision that you are being asked to make, and what you are locking in the future generations.

Senator BRADLEY. But it is also seen in the context of other government expenditures.

Mr. BOWSHER. Yes.

Senator BRADLEY. And, therefore, since its in relation to other government expenditures, how can you play out one cost for the long-term and not play out other costs for the long-term and have any basis for making a decision to go with this and not to go with that?

Mr. BOWSHER. Well, you would have to on some of the other major programs. I mean in other words, that is why I think you should break your budget down into capital and into operating and start working off a more desegregated set of numbers that would give you more insight into what are the basis costs that line up. Now, if I were comparing major programs, I would be asking for basically the same information on the other programs.

Senator BRADLEY. All right.

Mr. KIRKMAN. May I add something?

Mr. BOWSHER. Yes. Jim, go ahead.

Mr. KIRKMAN. If I may, Senator, I would like to go back a minute or two, when you asked what would we recommend as a major way of getting the government into more farsighted budgeting. I would suggest a couple of things. First of all, begin to look more at the long-term economic effects. It does not have to be 20 or 30 years down the road. Even if we look at the economic effects 5 or 10 years down the road, we · ould make a major step forward in the way we budget.

If you think back about what happened when OBRA was negotiated last September and October, there was the notion that the government should try to save $500 billion or so in budgetary savings over 5 years. Now, you were much closer to the negotiations than we were and we are not privy to all of the economic analysis that went into that $500 billion figure. But our sense is that the $500 billion figure was derived as something that was doable. It was a good sized number—a big number—and was considered doable. But I do not think there was any analysis or understanding that if $500 billion savings were enacted over 5 years, it would have a particular effect on the nation's savings rate; that having that effect on the savings rate would have a certain effect on the country's investments; and that having such an effect on our investments would increase our gross national product by X amount.

So right now the government budgets in terms of raw dollars and not in terms of the effects 5 years from now upon savings, investments, and the gross national product.

Senator BRADLEY. So your argument is the dynamic model?

Mr. KIRKMAN. Yes, a dynamic model. Now along with that, a second point I would make is that having a budget that lets us sort out the Federal investment pieces would be very helpful because Federal investments have long-term productive effects. It would be important to agree upon what is a good Federal investment, maybe an investment in battleships does not have a productive effect, but certainly investments in other activities such as dams, bridges, and certain R&D and human capital, do. And these latter kinds of Federal expenditures are not dis-savings to the economy. But right now we are treating them as dis-savings to the economy.

So if we could have a budget that lets us get at this first point of looking at the economic effects by saying, okay, what parts of the Federal budget do have productive economic effects, then we have taken two steps that let us be more farsighted in our budgeting.

Senator BRADLEY. Then you are not concerned as Mr. Reischauer was earlier that it is very difficult to determine what is an investment and what is not, and political-gainsmanship put into the picture in a way that would surprise everyone?

Mr. KIRKMAN. I think he raises good points and we have acknowledged that in our studies.

Senator BRADLEY. All right.

Mr. BOWSHER. But I would not be dissuaded from doing that because of the problems.

Senator BRADLEY. Right.

Mr. WINTER. We think they are solvable.

Mr. BOWSHER. Yes. We think those are workable and solvable.

Senator BRADLEY. Thank you all very much for coming today and we will look forward to your reports and continued work.

Mr. BOWSHER. Thank you.

Senator BRADLEY. Our next witnesses are a panel consisting of Elmer Staats, Federal Accounting Standards Advisory Board, Prof. Lawrence Kotlikoff from Boston University and Herb Stein of the American Enterprise Institute. Let me welcome you to the subcommittee and I appreciate all three of you taking the time to be here today and share with us your own sets of ideas. And so why not begin on the right with Mr. Staats and then go Mr. Stein and then go Mr. Kotlikoff.

Mr. Staats, welcome to the subcommittee.

STATEMENT OF ELMER B. STAATS, CHAIRMAN, FEDERAL ACCOUNTING STANDARDS ADVISORY BOARD, WASHINGTON DC

Mr. STAATS. Thank you very much. I appear here in a different capacity than the last time I appeared before this committee. I appreciated your inviting me. I have to emphasize that the Financial Accounting Standards Advisory Board is very new. We have had only three meetings. So I am speaking today on my own rather than on behalf of that board.

I might tell you just a little bit about that board. It is a joint project of the GAO, the Treasury and the OMB, and the idea is to try to develop standards which would reflect the interest of all three central financial agencies. So we are advisory. We are not a standard setting body like the Financial Accounting Standards Board or the Government Accounting Standards Board.

The objective is to obtain agreement among the three agencies as to the appropriate accounting and financial reporting requirements for the Federal Government, and to take a fresh look at what can be done to improve existing practices. I emphasize this point. We do not start from scratch. The GAO has had the statutory responsibility for promulgating standards. But there has been disagreement with the executive branch with certain of the GAO standards and the practice among agencies varies a great deal. Our optimistic hope and expectation is that we can over time remove these disagreements.

Second, accounting and financial reporting can help provide information useful for budgeting. But it serves a different function basically. It tends to be retrospective rather than future oriented and this is something we hope to address ourselves to—how we can make it more future oriented.

The emphasis in budgeting is focused on obligational authority and outlays over a 5-year period, but more usually it is less than that; 1 year or 2 years. The underlying concept in accounting, however, is to recognize costs as they occur regardless of when the cash outlays take place.

Accrual accounting was mandated by Congress as long ago as 1921 and reaffirmed in statute since that time, notably, 1956. It is not been fully implemented for a variety of reasons. We will seek to examine these reasons and hopefully find ways to overcome agency objections.

Accrual accounting includes more information on risk and contingencies as well as more current market values of assets and obligations. This is an issue being addressed by the FASB and the GASB with encouragement from the SEC.

With this underlying principle in mind and consistent with the objectives of this hearing, let me mention several specific ways that good accounting may help in longer range budget decision making. Now, these are again my personal opinions but they offer examples of things that we will take a look at it: post-employment benefits; especially post-retirement health care; annual and sick leave accumulation; loans receivable from the public and their condition; net borrowing and from what sources; commitments and contingencies during and beyond the budget period; tax benefits or tax expenditures as more frequently they are called; loan guarantees and interest subsidies; evaluation of physical assets, a very difficult problem in measuring the condition and serviceability of public infrastructure and other physical assets.

Like post-employment benefits, the tendency for budget makers is to defer repairs and maintenance which complicates the problem for the future in the valuation of these assets. Accounting data should be designed to help compare budgeted with actual expenditures. And this is something we cannot do very well right now. Did agencies, for example, overspend or underspend budgeted amounts?

And finally, financial reporting can help identify potential but not readily foreseen costs which can create crises and surprises. I call this early warning or time bombs. Accounting will not reduce these costs but can alert decisionmakers as to what their potentials could cost and over what period of time. The S&L bail out and the current bank difficulties are examples. The deterioration of the infrastructure is another easily understood example.

I conclude by reiterating that good accounting and financial reporting can help by providing information and measures of actual and potential costs. But this conformation needs to be supplemented by the input of other disciplines such as economics and actuarial science. This is particularly true as projections are made on entitlements and post-employment benefits. Experimentation is certainly warranted and our board will, of course, want to evaluate such proposals and maybe even make some of our own.

One experiment which I initiated when I was still in the Budget Bureau was to develop a 10-year projection of budget outlays and revenues based on things which might effect those either up or down. Now this does not give you a mid-point but it does tell you what some of the potentials are; demographic changes, for example; legislation which has just been initiated but which has not yet fully matured.

There are a number of things of this type where you can draw on other disciplines—actuarial science, economics and others to help identify the variables which could affect the long-term budget outlook. This is simply one type of experimentation that I think we ought to take a look at and I hope that we can do that through this board.

Now, I have avoided the term inter-generational equity in these remarks, as you will note. The term has several connotations but failure to reflect costs as they occur is certainly relevant, and fail-

ure to recognize potential costs is also relevant. I have chosen to comment on the term used in your letter, "ways to help policymakers make better long-term decisions" as they relate to governmental accounting.

We would welcome any suggestions that you have as we undertake the work of this board. We have three members from outside of the government, which I am one now. We have six from within government including the Congressional Budget Office, the Defense Department and the Interior Department. And then, of course, we have OMB and GAO and the Treasury on our board. Mr. Ronald Young here is our staff director and he comes with a good background in this field. So we look forward to working with you.

Senator BRADLEY. Thank you very much, Mr. Staats.

[The prepared statement of Mr. Elmer B. Staats appears in the appendix.]

Senator BRADLEY. Mr. Stein?

STATEMENT OF HERBERT STEIN, AMERICAN ENTERPRISE INSTITUTE, WASHINGTON, DC

Mr. STEIN. Thank you, Mr. Chairman. I would like to comment on something you said in your opening remarks about your search for a star to steer by. Let me, having been around here much longer than you, assure you you are not going to find a star to steer by. You will be fortunate if you find 20 stars to steer by, and I think that 20 stars is probably about as many as a member of Congress can be expected to look at at once.

So I think your search for trying to reduce this whole problem to some number, which you can say is either too much or too little, is not going to succeed. Also, I would urge you, and that will be the point of my testimony, to broaden your view beyond the question of, how do we see the long-term effects of budget policy. It would be good if we could see the short-term effects or if we could see the immediate effects of government policies. I think we know very little about that.

In fact, as I think about what we are doing with the $1.5 trillion that we spend and how little we know about what the consequences of any of those decisions are, to say nothing of the decisions on the other side of the budget, and yet at the same time, how well we seem to get along, I conclude either that it is not very important or that some providence is looking after us.

Well, anyway some reference has made earlier to my views of these things and I will repeat them very briefly. My basic point is that budgeting is a process of dividing a given scarce resource among competing uses. What is the given scarce resource the U.S. Government is dividing up? It is not the $1,500 billion that is the total of Federal expenditures. That total is itself a result of the budget process. It is not the given beginning of the process.

What the government is dividing up by its decisions, what it is budgeting, is the total national output. At a minimum, it is dividing the national output between Federal uses and non-Federal uses—private, State and local. But it is doing much more than this minimum. It is strongly influencing the division of the non-Federal part among competing uses. Actions of the Federal government

greatly affect how much of the use of output that we conventionally consider non-Federal goes for investment and how much for consumption, how much for particular kinds of investment, such as pollution control, how much goes for education, how much for health, how much of the consumption is by poor people, and how much by other income classes, and so on. The Federal Government affects these allocations not only through its own expenditures but also through its deficit, its taxes, its mandatory requirement and even, in some cases, through its moral suasion.

These effects of Federal action on the non-Federal uses of the national output are not accidental or unintended. At least at a certain level of generality, these effects are the deliberate objects of policy. The Federal Government wants to reduce its budget deficit, if it does, because it has a preference for a higher rate of private investment. It gives States tied-grants for certain kinds of welfare expenditures because it wants States to spend their money in a particular way. It excuses certain kinds of fringe benefits from the income tax because it wants to encourage certain kinds of private resource use.

In other words, the Federal Government, as the representative and executor of national policy has a preference about the allocation of the whole national output, and not just the part the Federal Government uses directly, among certain categories of uses, and it employs a variety of means to bring about this preferred allocation.

My suggestion is that this process, which is not implicit and hardly recognized, should be made explicit, deliberate and as well-informed as possible. Budget policies, and other Federal policies should be made consistent with a certain understanding of the way in which the national output should be divided among uses. And I then illustrate this point by indicating some possible classification of the total output that might be the basis for thinking about how we want to utilize the influences of government.

I visualize the budget process as starting with an agreement about what the nation's problems and priorities are. From that should be deduced a plan for the reallocation of the national output among relevant uses to solve these problems and serve these priorities. And I emphasize I am talking about the reallocation of the national output, not of the budget. From that should be deduced specific expenditure, tax, borrowing and mandated requirement programs to bring out about the planned reallocation of the national output. And from those decisions would be deduced decisions about specific programs.

For example, I can imagine some future President saying in his budget message that he thinks the urgent national problem is that too many people are poor, too many are badly educated and that per capita output is growing too slowly. He would further say that to correct these problems he wants to increase the share of the national output going to the consumption of the poor by 1 percent of GNP; the proportion going to education by one-half percent and the proportion going to investment by 1½ percent of GNP. Correspondingly, he would propose to reduce the share of GNP going to consumption of the not-poor by 2 percent of GNP and to health care of the not-poor by 1 percent of GNP.

He would then propose specific budget and other policies to bring about these reallocations. For example, to reduce the consumption of the not-poor, he might propose an income tax increase or he might propose to cut Social Security benefits to elderly people who are receiving benefits in excess of their contributions plus interest. And Congress would go through a similar process.

Basically, I am proposing that the budget of the U.S. Government should start with a budget for the U.S. GNP. I have three purposes for making this proposal. First, I want to demythologize talking and thinking about the budget. I want to get away from acting as if deficits and spending and taxing were ends in themselves, about which one could have convictions. I want to get away from dividing people into those who want to raise taxes and those who want to cut expenditures, and make clear that these are different ways of accomplishing the same thing.

I want to bring home the fact that there is a limit to what can be done, and that the budget process involves choices. These choices cannot be evaded by redefining the budget or by increasing the total size of the budget. These things will not change the size of the GNP out of which all choices have to be met. And I want to eliminate the possibility of avoiding budget constraints by recourse to devices like regulation.

When I make this proposal, as I have been doing for several years, I encounter three complaints. First, people say that what I propose is planning and, therefore, illegitimate. I have been around long enough not to be impressed with such labels. I am proposing only that the government does whatever it does more consciously and intelligently.

Second, people say that we do not know enough to do what I propose. And this relates to a question that you asked Mr. Reischauer and several other people. The problem is that if you carry this question too far, you reach the point where you say that since we do not know what we are doing we should not try to find out a little more about what we are doing, but should go on doing it. From an academic standpoint we are always in favor of more research.

I think the real question that is, since we cannot learn everything and cannot learn more about everything, what are the most important things for us to try to learn more about? We should not say that because we will not learn precise answers to these questions, we should not to try to learn something about them. Even imprecise answers are better than not knowing anything in most cases, I believe. That is a hunch I have.

Then third, people say that my proposal may be good economics but it is poor politics. It requires government officials; that is, politicians, to reveal to the public what they are doing, and the politicians will not stand for that. Well, this is not a good place to argue about that.

Senator BRADLEY. You outnumber us.

Mr. STEIN. But in fact, I do not accept that cynicism. Over the past 75 years budget procedures have changed a great deal in the direction of greater rationality, mainly in response to the prodding of "reformers" like me and despite the reluctance of politicians to change.

And I have spelled out these ideas further in a book called, "Governing the $5 Trillion Economy," which I should have called, Governing the $6 Trillion Economy. But anyway, I have made copies available.

Senator BRADLEY. You could do that in the next edition.

Mr. STEIN. If there is one. I am getting beyond that.

Senator BRADLEY. Thank you very, Mr. Stein. Mr. Kotlikoff?

[The prepared statement of Mr. Stein appears in the appendix.]

STATEMENT OF PROF. LAURENCE J. KOTLIKOFF, BOSTON UNIVERSITY, BOSTON, MA

Mr. KOTLIKOFF. Senator, I am honored by this opportunity to present my views concerning U.S. Fiscal accounting and the generational stance of U.S. Fiscal policy. My co-author, colleague, Alan Auerbach, regrets he is not able to be here today. I am submitting written testimony which I will now summarize.

Recent years have witnessed a growing unease with the use of the fiscal deficit to gauge the stance of fiscal policy. Many economists question whether a single number, that relates primarily to the government's current cash flow, is the kind of measure needed to understand the longer term effects of fiscal policy on saving, investment and growth. They also ask whether the deficit can tell us how we are treating different generations, both those currently alive and those yet to come.

Doubts about the deficit have been accentuated by the country's demographic transition. The aging in the U.S. population raises major concerns about the viability of a short run pay-as-you-go approach to fiscal budgeting.

The practice in recent years has been to redefine the deficit to make it more descriptive of our longer term fiscal concerns. This practice has, however, eventuated an plethora of different deficits. In its January, 1991 report, the Congressional Budget Office predicted the values of four different deficits, with the difference between the largest and smallest of these numbers equal to 3 percent of GNP. This is a huge difference. We would have said that 3 percent of GNP was an astronomical deficit 10 or 15 years ago.

So the question of looking at the deficit is really the question of which deficit. There is a huge difference of opinion as to which deficit we should be looking at.

Maybe it is time to step back and ask what question is the deficit suppose to answer and then determine whether the deficit or some other measure is most appropriate to answering that question.

The key economic question associated with fiscal deficits is which generation will pay for what the government spends? The answer to this question is obviously important for assessing generational equity, but it is also central to the issues of saving, investment and growth. Reducing fiscal burdens on current generations at the price of increased burdens on future generations will stimulate consumption of current generations. In addition, policies that redistribute toward older generations will expand current consumption demand because older generations have high propensities to consume then do younger generations.

Now, does the deficit measure which generations pay? Unfortunately, the Federal deficit does not record a great deal of the government's generational policy. Indeed, in my opinion, using the Federal deficit to understand U.S. generational policy is akin to driving in Los Angeles with a map of New York. Take for example, the huge expansion of the "pay-as-you-go" social security system in the 1950's, 1960's and 1970's. This method of financing Social Security transferred great sums of money to the generations who retired in and around the last two decades.

The bill for that transfer is now being visited on the baby boom generation and on future generations to come. Because of the manner in which the government choose to describe social security contributions and benefits payments, this enormous inter-generational redistribution did not show up on the government's book. Had the government historically classified the Social Security contributions we make as loans rather than as taxes, the government's official debt would now be three times larger. The unfunded closed group liabilities reported by the social security actuaries is about $7 trillion.

A second example of generational policy not captured by the deficit is a switch from consumption to income taxation that is "revenue neutral." In other words, a balanced budget change in the structure of taxes. Such changes can shift fiscal burden from one generation on to another. We have had such a shift in the last 30 years. The share of consumption taxes in total revenues has declined from almost one-third to less than a quarter.

A third example is government policy that alters the market value of previously accumulated assets. Since the elderly hold most of these assets, this type of policy redistributes from the elderly to the younger generations who are able to purchase the same physical assets at a lower price. Of course, none of that shows up on the government's books.

A fourth policy that does not show up on the books is balanced budget changes in the structure of transfer payments, such as those which reduce AFDC benefits and increases Social Security benefits. With such policies we keep the budget deficit fixed, but redistribute across generations; not only between those currently alive but through time because we maintain these policies through time.

A fifth example is a preannounced policy that redistributes across generations, such as the 1983 legislation that reduced the baby boomers' Social Security benefits by about one-fifth. That is a very substantial generational policy. It did not show up at all in the 1983 deficit.

These and other examples indicate that as a measure of generational policy, the deficit's problems run much deeper than is commonly believed.

Now how should we measure the government's generational policies? The answer suggested by economic theory is with generational accounts. Generational accounts indicate in present value what the typical member of each generation can expect, on net, to pay now and in the future to the government. A generational account is thus a set of numbers, one for each existing generation,

indicating the average remaining lifetime burden imposed by the government on members of this generation.

Generational accounting—is really what economic theory says we should be doing in trying to understand these problems. It is not really what Alan Auerbach and Larry Kotlikoff think is the right thing to do. It is really what neoclassical economics, the standard economic theory we teach graduate students, says is the way to look at the problem.

Generational accounting automatically deals with each of the major concerns that have been raised by those who think the deficit is conceptually sound but simply needs to be adjusted. It deals with Robert Reischauer's concern with inflation, by measuring all payments and receipts in inflation adjusted dollars. And it nets the government's real assets against its real liabilities. That is the concern voiced by Charles Bowsher, that we need to think about the government's net worth which is ultimately going to be used in generational accounting to help figure out the burden on future generations.

Generational accounting also directly considers the government's implicit liabilities to future transfer payments. And this is the concern that was raised by Martin Feldstein and many others over the years about ignoring implicit liabilities of Social Security and other programs.

It also accounts for State and local as well as Federal government fiscal policy. Some people say we should add the State and local deficit to the Federal deficit. Well, generational accounting does essentially this automatically.

Finally, in projecting transfers, spending, and taxes through time and the implied burden on future generations, generational accounting deals with the question of economic growth including growth associated with demographic change.

There are some tables in the testimony which I will not have time to discuss. I think they are very instructive for understanding the usefulness of the generational accounting approach.

Let me just refer briefly to some of the criticisms that were made here today. I appreciate the very positive remarks that were made by the different panelists today. First of all, it is true that one has to add a little bit more to the standard set of government numbers to produce these accounts. But it is not like there are hundreds of assumptions needed to do generational accounting. Generational accounting basically uses the government's tax and transfer numbers, and also the government's demographic projections to form its answer. So I do not subscribe to the view that this is a very assumption-laden exercise.

It is really very much akin to the Social Security trustees analysis that they put out every year. They publish a 75-year projection. The exercise here is very much similar to that exercise. People have been looking at that report year after year. They look at the intermediate, the high and low assumptions, and they learn something. I think the same thing can be said about generational accounting. As we do it through time, we will see that the lessons we are going to learn are not going to be that sensitive to specific assumptions. But I will stop right there.

[The prepared statement of Mr. Kotlikoff appears in the appendix.]

Senator BRADLEY. Thank you, Mr. Kotlikoff. Each of you has taken a little different approach to the question of how decisions affect our future and how best to proceed. What do each of you think of the other's idea? Mr. Stein?

Mr. STEIN. Well, I will say something about Mr. Kotlikoff's proposal because I think, as I said, you have a question of priorities of what to study and what to look at because you are not going to be able to look at everything. What you have in the budget is an enormous multi-dimensional matrix in which you want to see the consequences of thousands of decisions upon a very great variety of objectives. And you have to decide what you are most interested in.

So I come to my position. When I think about the future, the next generation and the generation after, what I am concerned about is not primarily how taxes and transfers are going to be divided among them in the next generation. I am concerned about whether we are going to have a population that is divided into two alienated and hostile camps, whether we are going to have a generation that is half ignorant and half graduates of Princeton, and whether we are going to have crime-ridden cities.

I think those are the most important things we are affecting for the next generation by the budget or could affect through the budget or should be concerned about what we are doing through the budget. And so I would put concern with those questions ahead of this set of issues that Mr. Kotlikoff raises which I think are very important and would be useful to look at and are good ways of looking at the deficit problem. But you see, I would not put the deficit at the head of my list of problems to be concerned about.

So I would encourage study of Mr. Kotlikoff's problem, but not to give it priority over what I think are more important things that we need to learn about the budget. If we spend more for Medicare, we do not know whether we are going to get more health care in this country or not or whether we are just giving out benefits to middle income people without doing anything about medical care. And we do not know if we have more medical care, whether we are going to live longer or not. We do not know those simple things about what are the consequences of what we are doing, and the simple things seems to be critical things.

With respect to Elmer Staats' proposals, I think they do deal with a certain range of issues. But what is unique about the Federal Government's financial statements is that they cannot ultimately be synthesized to some final number which is net income, which provides a standard of reference by which all financial accounting is governed. You do not have a single standard, final number, bottom line that you are trying to get down to. Your problem is that you have to juggle a whole bunch of incomparable objectives and that is why in the end you just have a lot of information that cannot be synthesized in one set of accounts.

Mr. STAATS. I guess my difficulty with the term inter-generational equity as I have indicated earlier, is that it is a pretty subjective sort of a measure. If you look at accrual accounting in the broadest sense, you are dealing with inter-generational equity be-

cause if you do not pay those costs when they occur or at least reflect them, then you are pushing it on to another generation.

But let me say something though that I think is maybe perhaps more basic here. I spent over 20 years in the budget making business before I went to the GAO. There have been many changes in the budget process over time. For example, I was a member of the President's Commission on Budget Concepts in 1967, which developed the idea of the unified budget which I believe is still a very fine idea.

The budget basically is a combination of objectives set forth by the President. The 1921 statute mandated the President to send up to Congress an annual budget. This budget sets forth his political objectives, his economic objectives, and his program objectives. Now that is his proposal. Congress disposes of that. There is a whole range of issues that involve priorities and what the budget is all about. It is a way of deciding how much you are going to take from the economy in a given year and how much of it you are going to postpone in the way of debt.

I think Herb Stein's idea is certainly one part of that analysis. I think it is an important part. But you also have to recognize that the President has political objectives when he sends a budget to Congress. He has an economic report to be sure; he has revenue proposals which come up. But the budget document is one place where it brings it all together. Now to the extent of which that budget document looks forward to the future in terms of how those priorities are going to play out, in terms of cost on the economy, is an important function of the budget. However, it does not always do this because again, the President has political objectives when he sends the budget up. It is not a document which always analyzes objectively the trade-offs from a purely economic standpoint. That is what I am trying to say.

Senator BRADLEY. Mr. Kotlikoff?

Mr. KOTLIKOFF. Senator, I share many of the co-panelists concerns. But I think that we need to focus the discussion a little more. From an economics perspective, fiscal policy involves four things. There is the issue of how much the government consumes. There is the issue of what incentives the government policy has for certain kinds of behavior like getting an education. There is the issue of which generations are going to pay for this government consumption. And there is the issue of what members within the generation are going to have to pay for government consumption. So I think if we think about policy within that framework, it might be helpful.

Generational policy is one of those four elements and we need to understand what we are doing. We have no systematic way at the moment to understand generational policy. Looking at the official deficit numbers will not tell us what we need to know about how much of a burden we are imposing on future generations and we see this problem increasingly in the debate about how to deal with Social Security.

I think the potential for being confused at a national level about the meaning of the surpluses and the deficit is great, and we may very well, focused on the deficit which is not a meaningful measure

of generational policy, end up indirectly or indirectly dissipating the Social Security trust fund for the baby boom generation.

So we need to really have these kind of generational statements that can keep track for baby boom generations and other generations through time what exactly is happening to them. And yes, projections will change, assumptions will change. But just as the Social Security Administration, changes their assumptions through time when they do their trustees report, but you still learn a great deal by looking at those projections.

Senator BRADLEY. Thank you very much. Mr. Stein, do you think what Professor Kotlikoff said, the idea of generational budgeting is not a lot different than the 75 year projections of the Social Security trust? Do you think that is about right?

Mr. STEIN. I think it is probably right. I mean there is a lot of this that I do not understand but I think it is probably right.

Senator BRADLEY. In your proposal, how accurate would you be able to get information on how much money is spent on transportation or education or how would you actually do that—manage that data?

Mr. STEIN. I think to divide up the GNP in the functional way that I want is not too difficult. It cannot be done precisely because there are some uses which will fall in more than one category. You will have a question whether we should include the training of the armed forces under the head of defense or under the head of education and so on. But those problems will have to be recognized. But I think that part of the problem could be handled in general by asking the Bureau of Economic Analysis which does the gross national product figures to make a further classification of the GNP along these functional lines.

I first got interested in this when I was on the Council of Economic Advisors. And in a 1970 report, we did it as well as we could with the staff of the Council of Economic Advisors, and the Joint Economic Committee did it many years later. It will be crude but it is possible.

I think the big difficulty is to make the connections between the government policy and the change in the national expenditures for a certain purpose. When I was working on this book, I called people at the Department of Health and Human Services. I thought they would certainly be able to tell me, if I increase Medicare expenditures by $10 billion, how much will national health expenditures increase? They did not know that. That was a shock to me. But anyway, that is the kind of thing you have to know, have to discover or estimate as well as you can.

And when I wrote this book with the help of one research assistant, we made the best estimates we could. But I think one point of this proposal is to try to get the decisionmakers to think about those things in terms of their real effects and not in terms of how they look in the budget total.

Senator BRADLEY. So that once the economy was divided among 8, 10, 15 categories, it would include both private and public sector, expenditure or tax, et cetera. A policymaker would then decide how much in education should be public and how much should be private? That is the decisionmaker's decision?

Mr. STEIN. Suppose that the decisionmaker had decided that he thinks the country ought to be spending more on education, he would then decide what is the most efficient and equitable way to go about increasing total expenditures for education. Of course, he would then have to subdivide that. You know, he probably does not want to increase all kinds of education equally. The whole budget process is one of gradual decentralization. You make decisions in terms of something like 15 functional categories, 70 subfunctions, and 1,000 appropriations. Somebody has to subdivide all these things. But I am saying what you should start with is some goal for these big totals and then some goals for a lower level total.

So I can imagine then the President having said we want to increase expenditures on education by 1 percent of GNP. He would say, well, how would I go about doing that? One way to go about doing that is to hold a conference in Charlottesville and urge the States to do that and it might be a successful way. I mean it has to be considered. He might say I am going to hand out vouchers. He might say I am going to aid the States to increase expenditures for education. I am going to give certain tax benefits for education. All those decisions would still remain, but at least he would have decided that I think increasing education is more important than increase in the consumption of the not-poor people or that he would have made these first priority decisions.

Mr. STAATS. Mr. Chairman, the Budget Director and the President when they present a budget have to decide how certain statutes already in being are to be implemented or to recommend changes. This is not really contrary to what Herb Stein is saying, but the President must start with a framework of statutes already on the books and he either has to recommend whether those are to be changed or not.

But the idea of breaking down the—say it was within the education function—subcategories is certainly one that has to be done. But it has to be done within the framework of existing laws.

We need to analyze the costs and benefits of programs over a long-term perspective. The CED, for example, recently estimated that a dollar spent on preschool education would save $6 dollars over the first 10 years of a child's life through reduced crime and dependency. This kind of analysis I think is really very important.

Senator BRADLEY. Well, let me thank all three of you very much for your testimony. I appreciate it. It has been very helpful and enlightening. Thank you for taking the time to be here today.

Our last panel consists of Henry Aaron, the Brookings Institution, Prof. Alan Blinder, Princeton University and Jane Gravelle of the Congressional Research Service. Let me welcome all three of you.

Let us begin with Mr. Aaron, Ms. Gravelle, Mr. Blinder.

STATEMENT OF HENRY J. AARON, THE BROOKINGS INSTITUTION, WASHINGTON, DC

Mr. AARON. Thank you very much, Senator Bradley. It is late in the afternoon and there have been a couple of panels. So maybe it is time for a little flat out disagreement to emerge on these issues.

I devoted all of my written testimony to a commentary on the generational accounts proposal advanced by Alan Auerbach, Larry Kotlikoff and their colleagues in a earlier paper and in their testimony. I am not going to go through any of that testimony. I would submit it for the record and I would like to approach the issues in a slightly different way.

Senator BRADLEY. It will be in the record in full.

[The prepared statement of Mr. Aaron appears in the appendix.]

Mr. AARON. Thank you. After all the adjustments they make, Auerbach and Kotlikoff agree that current budget policy burdens future generations. That is essentially the same conclusion that has been reached by various analyses that look at current budget accounts.

To be sure those accounts are flawed for reasons that have been enumerated already, a failure adequately to take account of accruals and mishandling of loans and loan guarantees. Some of these problems are going to be corrected. Auerbach and Kotlikoff's claimed innovation is that they can show how that burden will be distributed among future generations. I want to focus on that distinction. I believe that claim is simply wrong.

The key question for budget policy is not which future generation will pay for what government now spends. It is instead one of two other questions. How has the scope of government activity changed or how will current policies cause them to change? And what contribution does the government directly make to national saving?

The budget is a flawed document for both questions, but the answer to neither requires generational accounts. Generational accounts do raise interesting and important analytical questions that merit careful study by scholars. But in my view the issues are so inherently ambiguous, judgmental and politically charged, they should not be the occupation of Federal statistical agencies.

All of the examples in the testimony cited by Auerbach and Kotlikoff do reflect changes in the distribution of income among generations from various policies. But the effects of those policies on their estimations are so judgmental, so difficult to pin down and their sources so open to debate that I think attempts officially to prepare such data are pointless.

I would like to focus in my remarks on the 1983 Social Security Amendments which Auerbach and Kotlikoff point out reduced Social Security benefits by about one-fifth. Well, did they? Under the Auerbach and Kotlikoff assumptions, they surely did. Those assumptions are that the tax schedule in effect in 1982 and the benefit schedule too, would remain in effect in perpetuity. That is not a reasonable assumption.

The Social Security System in 1982 was badly out of balance. Congress had made crystal clear for the proceeding 40 years that they would not tolerate sustained, large imbalances between Social Security taxes and social security revenues measured over the long run. Far more certain, far more likely than the continuation of the precise benefit and revenue schedules in effect in 1982 was that Congress would modify those taxes and benefits to restore balance.

Looking back now, we have a hard time detecting any effect of the legislation of 1983 on personal saving or labor supply or any

other form of behavior that might arguably have been affected by a change in the Social Security System. In fact, with the cut in Social Security benefits, one might have expected to see an increase in private saving. In fact, private saving fell.

In addition to taxes, tax schedules and benefit formulas which had changed every couple of years for a generation before 1982, the principle that Social Security should be kept in long-run actuarial balance also prevailed. On that principle, either the tax schedule or the benefit schedule simply had to be changed and, I submit, people knew it. To base generational accounts on a set of revenues and expenditures which could not be sustained and to calculate their effects on the distribution among generations, simply would have made no sense.

We did know with a high order of probability what was happening in 1982 and what was likely to happen in 1983. We also knew that the actuarial projections of what would happen in the year 2000 would not occur. Hence, the 1983 legislation changed some formulas but not anything that had been effectively expressed in private behavior. Furthermore, Congress could have elected to close the paper deficit in Social Security by raising taxes currently or in the future, by lowering benefits currently or in the future or some mix of all of those actions. And when one thinks about the distributional effects across by 5-year cohorts, the effects are radically different depending on which of those courses one might take, none of which arguably was demonstrably clear prior to what Congress actually did, and none of which, in fact, is even demonstrably clear today as we know from the current debates about the financing of Social Security.

In short, Auerbach and Kotlikoff start with the one assumption for 1982 that was simply inconceivable, and then they compare it with another set of assumptions, the currently legislated taxes and benefits that are also quite likely to change. More real than these particular legislative expressions is the underlying commitment to long-run Social Security balance. We know what is being spent, loaned and guaranteed this year. We should try to measure those actions accurately especially making outlay loans and guarantees commensurable.

We need to measure how much government is currently contributing to national savings. But when it comes to predictions to future taxes and outlays and estimates of the effects of government actions on private behavior, we are in the world of analysis, not statistical preparation.

I would like to pose a set of questions that one should think about and have reliable, relatively agreed upon answers if want wants to do these generational accounts. We spend government revenues for a variety of purposes. What is the effect of spending those revenues on acreage allowances, shifting Medicare financing to the DRG system, increasing funding for the National Institutes of Health for biomedical R&D, or cutting national defense? What is the generational burden among cohorts now alive of the personal income tax? Is it me, my kids? How am I affected by the taxes my mother pays? And if that one is hard, what do you do about the corporation income tax? What is the generational effect of that?

Now, as an analyst I can sit down and make assumptions and prepare estimates and I can use the most sophisticated techniques that economic theory has available for me to use. But at root, I am going to have to rely on a set of assumptions about which analysts disagree intensely and about which they disagree very widely. So in the end, I conclude that generational accounts are a useful and technically sophisticated extrapolation of a variety of assumptions that help increase one's sensitivity to the implications of current fiscal policy for future generations.

If I were reviewing this work for publication in a professional journal, I would make a number of criticisms, I would urge a variety of revisions, but I would recommend it for publication without hesitation. For purposes of this testimony, however, I am reviewing this set of accounts from the standpoint of suitability for official use. In that connection and without being facetious, I do not think it is good enough for government work. Thank you.

Senator BRADLEY. Thank you very much Mr. Aaron.

Ms. Gravelle?

STATEMENT OF JANE GRAVELLE, CONGRESSIONAL RESEARCH SERVICE, WASHINGTON, DC

Ms. GRAVELLE. I would like to thank you for the invitation to appear before you today to discuss the Federal budget and methods of improving budgetary analysis to facilitate long-term decision-making. I would like to submit my testimony for the record and to summarize it here.

The fiscal impact of revenue and spending options is currently judged based on examining the budgetary cost over a short time horizon. For proposals which have a stable pattern of costs relative to GNP, this is satisfactory. For others, the initial cost in the first few years may be considerably different from the cost in the future. Thus, we may find ourselves confronted with proposals that are virtually identical in an economic sense, but which are vastly different in a budgetary sense because of timing difference in cash flow cost.

In this current budgetary climate, we may choose the option which costs the least in the short run, even if it is not necessarily the most desirable option. Or we may adopt proposals that appear to have small costs, but which actually cost substantial amounts.

Moreover, we may also be evaluating proposals which are similar in a budgetary cost, but vastly different in an economic sense. For example, we think as a rule of thumb that a dollar of deficit produces a dollar of savings, roughly. And that rule of thumb probably works well for a lot of proposals, but for some proposals it does not work very well. So there may be proposals which have similar effects on the budget which have markedly different effects on savings.

A third problem is that our budgetary calculations often fail to assess the full distributional consequences of policies because they lack a time dimension. While we calculate for many tax and transfer options the distribution of benefits across income classes, we fail to account for the distribution across generations.

There are approaches that could help to make budgetary accounting more consistent and approaches which would help us determine the distributional effects on savings. One simple approach that I would like to discuss is to calculate the budgetary cost as an annualized present value; another is to develop generational accounts; another is to use more sophisticated economic models such as life cycle models to try to estimate the effects of policy changes on savings.

To illustrate my notion of an annualized present value, I would like to turn to a current, fairly important example which there has been considerable discussion of: restoring, in full or in part, Individual Retirement Accounts or IRA's. These were restricted for higher income individuals in the Tax Reform Act of 1986.

The administration has proposed a restoration of these accounts as Family Savings Accounts or FSA's. These FSA's would differ from the current and pre-1986 IRA's, in that they do not allow an up-front deduction, but also do not tax withdrawals. Because of this treatment, they are sometimes termed "back-loaded IRA's," while the current IRA's are termed "front-loaded IRA's." There have been proposals in Congress for restoring old style IRA's or for allowing a choice between a front-loaded or a back-loaded IRA.

The FSA and the IRA provide identical economic treatment. Both effectively exempt interest income from the tax. But the IRA has another element. A large tax savings appears at the contribution time, tax savings is repaid with interest at the time of withdrawal. Individuals can achieve exactly the same retirement income after tax under both plans. But the timing of the budgetary costs is vastly different.

I have calculated some of these costs for a simple FSA/IRA comparison in page 9 of my testimony and it is very striking. The FSA in the first year, per dollar of contribution, costs 2.3 cents. The IRA in the first year, costs 25.3 cents. So in the first year the IRA costs 11 times the FSA. In year 5 these comparative costs rise and in the 5-year average—the budget horizon that we have been talking about using—the FSA costs 7.2 cents and IRA's costs 30.2 cents. So now it is only about four times as big. The FSA reaches a peak at 56 cents and a steady state at that value. The IRA rises to 65 cents and drops to 40 cents.

By the long-run study state, the IRA, instead of costing 11 times the FSA, costs only 70 percent of the FSA. So which one is it? Which one costs the most? Well, because I have set them up to be exactly the same—in fact, in a present value sense they cost exactly the same. And what I have done is just take that present value and turn it into essentially a mortgage payment that keeps pace with GNP. And I found that that mortgage payment would be, per dollar of contribution for the first year, 43.1 cents. So the proposal that we say costs 2 cents in the first year really costs 43 cents.

The FSA/IRA comparison is only an illustration of a very common problem. Indeed, in the President's budget submission we can very quickly find two more instances of this problem. The administration's capital gains tax proposal is estimated by the Joint Tax Committee to raise revenues by $3.7 billion in 1992, but to lose revenues at a rate of $3.4 billion by 1996.

The administration's proposal to include State and local employees in Medicare will raise revenues in a fairly consistent pattern over time. But the increase of benefits to individuals now covered by the changes will be delayed until years largely beyond the budget horizon.

Many types of tax proposals are characterized by uneven revenue costs. Proposals to index capital gains on newly acquired assets would involve a much larger annualized cost than the short-term budgetary cost. Accelerated depreciation is another type of tax change which involves a very uneven revenue loss.

The FSA/IRA comparison also illustrates another problem with evaluating programs by examining budgetary costs. Even if these two proposals have the same present value and should have the same economic effects, the IRA increases the deficit in the short run much more than the FSA. Does this mean that the IRA is likely to decrease savings if the deficit is not made up by increased revenues elsewhere by increased spending? The answer to this question, assuming that individuals have recognized the future tax liabilities associated with their IRA's but not present with FSA's, is no. The FSA may increase or decrease private saving. I think there is reason in economic theory and analysis to believe that private saving is actually likely to fall with an FSA. But the IRA should increase private saving relative to the FSA by the exactly the difference in the annual cash flow budgetary costs. This difference is the amount that individuals need to save to be able to pay their future tax liabilities when they withdraw funds from IRA's. And let us hope they take that into account.

This savings example illustrates a general principle, that future as well as current liabilities and benefits should be taken into account in evaluating the effects of deficits on savings. A dollar of deficit is not always translated into roughly a dollar of reduction in savings. Increasingly, it seems appropriate to turn to life cycle models, which by their nature account for future tax liabilities and benefits, to assess the savings effects of policy changes.

Just to finish quickly, the third issue in which budgetary accounting fails to address is the distributional effects of tax changes in different generations. Transfer programs, for example, tend to benefit the elderly. Increased payroll taxes burden the young relative to the old because older generations receive less of their remaining income through wages. Excise taxes as compared to income taxes are likely to burden older generations more.

Some of the effects of policies can be less than obvious. A corporate tax rate cut, for example, benefits older generations, while an investment credit benefits younger generations.

In order to capture the distributional benefits across the generations, we would need a set of generational accounts, perhaps combined with accounts across income classes.

I believe the common thread in all of the shortcomings of the current budgetary, economic, and distributional evaluation of programs is the need to provide a forward looking approach. As my IRA/FSA example illustrates, in some cases this approach can provide a dramatically different picture of the costs of programs that involve uneven costs over time.

Thank you.

Senator BRADLEY. Thank you, Ms. Gravelle.

[The prepared statement of Ms. Gravelle, appears in the appendix.]

Senator BRADLEY. Professor Blinder?

STATEMENT OF PROF. ALAN S. BLINDER, PRINCETON UNIVERSITY, PRINCETON, NJ

Mr. BLINDER. Thank you, Senator. I want to first, in addition to thanking you for the invitation, apologize for being late—with the usual remark: "It was not my fault." It was the Amtrak's fault. And, as I was sitting there I was pondering how much as I as a taxpayer had paid Amtrak as a subsidy to carry me as a passenger. It was not worth it.

Anyway, I thought my role here was going——

Senator BRADLEY. And how much that subsidy effected the future as opposed to the present.

Mr. BLINDER. And all the future generations. [Laughter.]

I thought my role here was going to be to listen to what everybody else said and try to react. Obviously I cannot do that. Let me make a few remarks, some of which are in the statement which I prepared for the record, and a few of which occurred to me as some other people were speaking in the last half hour or so.

First, I really ought to confess that I do not believe that insufficient budget data is the major factor, or even a major factor, behind what I and many other people think have been inappropriate decisions made by the Congress for many years now.

In my view, Congress is full of very smart people and, if the proper political incentives were in place, they would cut through whatever lousy data they were given from whatever sources and make good decisions anyway. I can assure you that very few institutions in American have worse accounting procedures than universities. And yet I think Princeton University and others make some pretty good budgetary decisions.

I think the problem is that Congress learned two things in the 1980's. The first was taught to them by Ronald Reagan: that the feared political taboo against grossly unbalanced budgets really was a figment of somebody's imagination. Congress people learned that they could spend much more than they taxed, year after year, without paying the political piper; and that is a very seductive idea.

The second thing they learned—and economists were partly at fault for this—is that the chicken little school of the deficit was wrong. The sky did not fall, and it is not falling now. Whatever problems a large deficit causes creep on you gradually—which is, of course, the reason for the long run focus of this hearing. But anything you can do to cure the deficit problem causes immediate political pain; and that I think is the essence of the problem.

I also think we are going to have a very hard time getting Congress to forgot those two lessons. Once learned, I do not think you can go back. And that is in some sense an over-arching point about all of this discussion.

The second point was brought up by Herb Stein a few minutes ago. Like him, I am not against more information. In principle,

more information is always better than less information. So information of the sort Herb Stein was talking about, information of the sort Larry Kotlikoff was talking about, and so on, certainly can do no harm and may do some good. However, it is a fact of life that you cannot keep everything in your head at once. There are only a few things that can be kept front and center on the congressional docket.

And if I was then forced—I am not, of course, but some people are—to be selective about what is going to be front and center, I am not convinced that either generational accounting or the kind of GNP accounting that Herb Stein was advocating—good ideas as they may be—would be the chief candidate.

Now, let me take a couple of minutes to sort of pick on the Auerbach/Kotlikoff proposal. I should perhaps apologize for doing that; but there is a very simple reason. It was the one thing I had in the mail before I got here. So I actually could read it and I know what is in it—unlike most of the rest of the testimony which I missed.

They begin with a premise that I would like to dispute. It says: "the key economic question associated with fiscal deficits is which generation will pay for what the government spends." Like Henry Aaron, I do not really think that is the key question. As I hear the questions Congress men and women ask, and read the things they write on op-ed pages, I do not think that inter-generational redistribution of wealth is the chief thing on their minds. That is the issue addressed by generational accounts.

I think Members of Congress are concerned with stabilization policy issues, as well they should be. And I think they are very much concerned with capital formation and long run growth and real interest rates and what the debt-to-GNP ratio—rather than the deficit, by the way—has to do with all that.

On the other hand, Auerbach and Kotlikoff were certainly right to say that inter-generational redistribution is one of the important issues raised by fiscal deficits, and the new tool they have to offer—generational accounting—is a quite reasonable way to look at it. I have not the slightest quarrel with doing so.

I would, however, like to offer just a few somewhat skeptical, or maybe even curmudgeonly, remarks to temper the enthusiasm that you got from Larry Kotlikoff—as if Henry Aaron has not already severely tempered it enough. The first is a point Henry already made, which is that these calculations are subject to gigantic errors I want to emphasize that. That does not mean Auerbach and Kotlikoff have done a sloppy job. It does mean that the task they set for themselves is exceedingly difficult.

Larry Kotlikoff mentioned, as an example, the Social Security actuaries. Well, as we all know they present a range of forecasts. And when you take these forecasts out some large number of years, this range gets pretty wide. That is not a criticism of them either. It is just very difficult to project what is going to happen on a variety of margins over a 50-year period.

In addition to that, something that has not yet been mentioned is that even the discount rates to be used is a high contentious issue. Auerbach and Kotlikoff use a 6-percent real interest rate in their calculations. That struck me as a little bit high; it is roughly the real rate of return on the stock market. The real long-term govern-

ment bond rate nowadays is in the neighborhood of 3 percent or so. And as you probably know, the OMB mandates a 10-percent real interest rate for discounting the benefits of Federal investment projects, like dams and bridges and things like that—which I think is an absurdly high rate.

But the point is that whether you discount the future at 3 or 6 or 10 makes an enormous difference to the answers you will get in tables such as the ones Kotlikoff and Auerbach have presented.

The second point is that these generational accounts ignore the past and only look at the future. Now, for many purposes that is just what you want because the dead hand of history is dead the past has already happened and, for allocation questions, only the future matters.

But I am quite certain that, if these accounts should ever come into common currency in this town, a major use of them would be to appraise inter-generational equity. Are the young being treated fairly? Are the old being treated fairly? And for that purpose, of course, you need the entire lifetime contributions and receipts of each generation, not just what is going to happen from now forward. Fixing this so, of course, would require only a minor amendation of what they have done.

The third and last point is more substantive. Larry Kotlikoff said that economic theory pushes you to these sorts of calculations. I would like to dispute that somewhat—and very, very briefly given the proximity of the bell.

There is a brand of economic theory that says that only present discounted values matter, and that is the economic theory appealed to by Auerbach and Kotlikoff. According to this theory, if I pay $1,000 in taxes today and get them back with accumulated interest 30 years from now in the form of Social Security benefits, neither of those transactions, neither the paying nor the receiving, should have any effect on my behavior. That is the world view that says you should look only at the net difference between the present value of receipts and the present value of payments. I do not believe, and I should say many economists do not believe, that that is the world we live in. While the naive view that only this year's income matters is most certainly wrong, I would be very reluctant to adopt an accounting procedure that presumed that every American citizen could borrow or lend freely as much as he or she wanted at 6-percent real interest.

Thank you.

[The prepared statement of Mr. Blinder appears in the appendix.]

Senator BRADLEY. Thank you very much, Mr. Blinder.

Let me say all three of you have offered a very strong set of warnings about proceeding dramatically in the direction of generational accounting.

Only Mr. Blinder offered an opinion about Herb Stein's GNP analysis or GNP budget. And I would be interested to know what both Mr. Aaron and Mr. Blinder think of Ms. Gravelle's present value analysis.

Mr. AARON. I would like to comment specifically on the Family Security Account issue which Ms. Gravelle raised because that seems to be a glaring example of how budget procedures have

almost certainly shaped the character of proposed legislation in a way to deceive the public and Congress.

We have a 5-year planning horizon. It turns out you do not get the tax benefit from family security accounts unless you hold this particular kind of security beyond the 5-year planning horizon. Then you can cash in.

No Member of the Senate or the House can intelligently appraise a piece of legislation such as that unless one takes into account the long run effects on the budget along the lines that Jane Gravelle suggested. Now, that does not answer the question of whether taxpayers rationally consider all of those flows in determining their consumption and saving behavior in the short run. On that score I am completely with Alan Blinder.

Your charge is not to formulate a refined prediction of how private behavior is going to be affected, at least it is not solely that. It is also to answer the question of what the effect of your actions is on the long-term fiscal demands of the Federal Government. And for that purpose it seems to me, the procedure she suggested of looking at the piece of legislation, asking what it is all about and using an analytical period appropriate to that piece of legislation is exactly the right thing to do.

Senator BRADLEY. And what about Herb Stein's?

Mr. AARON. I have not seen Herb Stein's proposal in detail and I prefer not to comment on it now.

Senator BRADLEY. Mr. Blinder, what about——

Mr. BLINDER. Yes. I would just like to say a word about the Stein proposal, in about 5 seconds, lest I should be misunderstood. I think it is a very fine way for members of Congress and others to think about what in the world is going on when various sorts of legislation are in front of them and in various committees. But I do not think it is a way to do the budget. It does not obviate the need to do the budget, as indeed he said. It is kind of a first strategic level where we ask: what in the world are we up to? It does not fill out the budget numbers in any way.

Now, as to the present value notion, I think I half agree—maybe more than half agree. I would put it differently. We are not talking about the details of the FSA and the IRA which I did not quite get as they were coming by. I think a key problem for some years now has been that the preoccupation with the deficit has caused a high degree of myopia in the Congress. This myopia works against investment projects which cost money up front and may bring back returns, maybe handsome returns, later. A little bit of that is taken care of by a 5-year horizon, but lots of it is left.

For example, the programs for children at risk that were mentioned a while back by Mr. Staats have very long run and apparently very large paybacks. But there are lots of other examples, like infrastructure, which does not pay back in 5 years.

But the fundamental point that you want to look forward, and not think of these things as 1-year events is indubitably correct and very important.

Senator BRADLEY. Ms. Gravelle, do you have any thought on Herb Stein's proposal?

Ms. GRAVELLE. Well, I also have not had a chance to look at it closely. But it seems to me there are a lot of important things he

seems to be saying there. I gather that part of what he is suggesting is that, for example, when we decide to reduce our payments for Medicare, then somebody else ends up paying for care. We need to think about what is going on in the private sector and we need to look at regulatory policies. So I think those are important issues to look at.

I am not sure how he intends to put this together in a budget. I guess that is not what is very clear to me. I do think that we do need to look at all the things that we do to the economy in direct spending and regulation. Say, if we have mandatory health insurance coverage for employers, that is doing something to the economy. But I guess I am not really sure how you turn that into a budget document. I guess I agree with Alan along that line. I am just not sure what we are headed to.

Senator BRADLEY. Well, as I heard it, it is a formatting issue first. You lay out what the economy spends on X and then you decide whether what the government is spending is appropriate; whether it should be more or less. And then you make taxing decisions to back that up.

Does that sound like an appropriate place to begin when you start to think of a budget? I mean are these relevant in your own mind? If the economy is spending X on transportation, maybe the government does not need to spend more. I mean is that a reasonable way to look at it, Mr. Aaron?

Mr. AARON. As you are characterizing it, Senator Bradley, I think that is exactly the kind of analysis that should be done in the Office of Planning in the retrospective departments or by the congressional staffs that are trying to analyze issues to help guide discussion on them. They will be informative and help people to form views. But then one has to get down to the business of writing up the accounts of what the government is doing, how large its actions are ~~and~~ what the balance is between revenues and expenditures. And for that purpose, it seems to be its background; it is not foreground.

Senator BRADLEY. You know, the real question is, how can we get a budget focused on the longer term as opposed to the short term. And each of these ideas are ways to begin to try to look at the budget a little bit in the longer term—beyond the common sense notions such as if you invest in children, it is obviously an investment in the longer term; or infrastructure, it is an investment in the longer term.

Do you see any value in trying to apply to the layman less common sense notions about what is long term and short term? In other words, we can make the decision on education and children, but what is exactly the long-term impact on the Small Business Administration expenditures or energy investment expenditures? Is it valuable at all to try to begin to assess that?

Mr. AARON. We have just gone through a decade long seminar on the ineffectuality of mechanical rules for closing the deficit. We have been taught that responsible fiscal policy takes political courage and the willingness to sit down and work together to reach a compromise. I think exactly the same thing can be said of increasing our ability to look into the future. Mechanical fixes I think will not suffice to do that

In the end what you are talking about, as Alan Blinker suggested, is the willingness to increase the degree to which the Federal Government directly contributes to, rather than subtracts from, national saving; the willingness of the American public to support taxes to pay for expenditures that will yield benefits, not just next week or next year, but 5, 10, and 20 years in the future. That takes leadership. It is not going to be solved or dealt with by mechanics.

Mr. BLINDER. I think of two things in answer to that question. One, is in terms of focusing on the long run savings investment balance and real interest rates and what is going to be the allocation of the GNP between the present and future, very broadly. The eyeballs should be focused on the debt/GNP ratio: Where is that going; where are the polices we are now promulgating taking us, that is more important than this year's budget deficit, by any measure.

Second, the kinds of issues you were just posing suggests to me capital budgeting, separating the budget into current and capital budgets. Probably something was said about this before I walked in the room. So I will just leave it at that. But that is where that train of thought leads me.

Senator BRADLEY. Do any of you have uneasiness about capital budgeting when you get to deciding what is an investment and what is not an investment?

Mr. BLINDER. Yes. That is exactly the problem. I have a lot of uneasiness as all of us will when you start talking bout human investments and their——

Senator BRADLEY. Human investment?

Mr. BLINDER. Human investment. And they are and should be a big component of public investment. It is very hard to parse that one out, among others.

Senator BRADLEY. Ms. Gravelle?

Ms. GRAVELLE. I have almost lost track of your question now. But let me say something I think is relevant anyway which is that when you say you are concerned about the effect of the government on growth and savings, you are making an inter-generational equity statement right there. And so I really do not see why you do not want to go further—I mean that is just saying, if the capital stock changes, outputs are going to fall in the future; it is going to have all these effects on future output.

It seems to me just as relevant to say: what are the direct set of changes that we are making on different generations of people? And so I think if you are trying to look forward to the future, you need both these kind of things. You need to look at the effect on savings, and that is hard to do but you have to keep trying. And it makes sense to me when you are enacting a policy. For example, from what we think we know, a value added tax is going to fall more heavily on old people than young people. That is one of the ways that it may increase savings.

But that is something that we ought to know and think about so that when we are saying, a value added tax versus a payroll tax, versus an income tax, I think we need to know not only their effect on savings and what is going to happen to long run output, but also is it the 50-year-olds, the 60-year-olds, the 30-year-olds?

I think that is very important. I am not saying that you should substitute this kind of account for our present measures of deficit. But I think it is a very important sort of measure to pursue. Otherwise, why are we concerned about growth if we are not concerned about inter-generational policy?

Senator BRADLEY. Right. So that we do not just use the mechanical approach, but also other bits of information. Now, what happens is, you are in a room and you are trying to decide what to do, and you have information that assists you in making that decision. One bit of information should be, well, what is the impact here on growth?

Reducing the deficit increases savings and enhances possibilities for growth. What are the means to do that? Well, one of the ways you do that is by raising taxes.

Well, if you are going to raise taxes, what are considerations? One consideration is in terms of distribution issues—does it help the wealthy or the poor? Another consideration might be, well, what is its impact on generations? Does this tax mean that it is going to hit people who are older or people who are younger? Is it valuable in that sense?

Mr. AARON. Let me say that I think the way the question is now being posed is far more productive. The way it is being posed now is, what is the difference of X, in this case a value added tax, in its effects on different age groups from say an increase in income taxation.

Senator BRADLEY. Right.

Mr. AARON. That is an analytically interesting and important question which I am certain you as legislators would not be allowed to ignore should you at some time seriously consider a value added tax.

A variety of analytical techniques, tax models, and the techniques that Auerbach and Kotlikoff would cast some light on that question and would be useful.

The distinction I was trying to draw was that between useful analytical studies and official statistics. What they have produced is useful analysis but I think a pitfall riddled path for official statistics.

Senator BRADLEY. Well, maybe I am not sensitive enough to official statistics. But my point is, any time someone proposes a tax change, there is a distributional impact that is produced by the Joint Tax Committee. That distributional impact always addresses rich/poor questions. A distributional impact might also address generational questions that would be produced by the Joint Tax Committee or CBO for consideration by policymakers when they are trying to decide what to do.

And if one could do that for any given tax change proposal or any given spending change, that would be additional information that would help you make your political case one way or the other. What I have heard is the——

Mr. AARON. You can do that now with existing tax models, but you can do it in a different——

Senator BRADLEY. And could you do that for spending decisions? One of the questions raised by Bob Reischauer relates to programs like AFDC, where States control decisions. And if you are trying to

make decisions on a generational basis and it goes out 20 years, you do not have a clue what the States are going to decide to do.

So what I hear is that it is more difficult on the spending side or at least it is limited to certain spending areas in which you have a reasonable set of assumptions that are more or less agreed to at the Federal level, at least that you are in control of. Is that not right?

Mr. BLINDER. I think it is right. I think the big distinction is that it requires projections quite far out into the future. And the further they get out, the more subject to error they become. That is what makes the inter-generational distribution different from the rich/poor income distribution.

But I certainly think as you suggested, it would be a useful thing for Congress to have in front of them when they consider tax legislation like that.

Ms. GRAVELLE. It might also be useful to have tax proposals run through this kind of test when you do them so we can see——

Senator BRADLEY. Something like the Family Savings?

Ms. GRAVELLE. Right. If mean if there was ever an income tax change, today would be like the future, but for others it would not be.

Senator BRADLEY. Or capital gains?

Ms. GRAVELLE. Right. I think that would be very useful.

Senator BRADLEY. Well, let me thank all of you very much for your time today. I appreciate it. And this has been helpful for me and I hope that the committee will also benefit from some of the things that we are developing here.

As I said, this will not be the final hearing on these kind of subjects, but at least it is a beginning and it has been a successful beginning. I thank the witnesses who have been willing to come today and offer their thoughts.

I appreciate it very much. And the subcommittee hearing is adjourned.

[Whereupon, the hearing was adjourned at 4:40 p.m.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED

PREPARED STATEMENT OF HENRY J. AARON [1]

Mr. Chairman: Thank you for the invitation to testify on generational accounts and other issues concerning budget accounts. How statistics on government spending and revenues are presented to the public is important because it shapes public awareness and understanding of the economic effects of government operations. This issue has a long and troubled history, because the issues are complex. Regrettably, incumbent governments on occasion have misused budget accounts to conceal exactly what they were doing and the scope for manipulation is enormous. Furthermore, the presentation of budget accounts can be numbingly dull, which means that few people other than those who want to manipulate the accounts have the stomach for grappling with the technical issues. In the course of my testimony, I shall try to make three major points:

First, official statistics on government operations are important for two distinct reasons: (1) they help the citizenry and elected officials to understand the scope of government operations; and (2) they help the population to understand what the goals of fiscal policy should be. At different times these objectives may be best served by different methods of presenting official accounts.

Second, official statistics can be used by private analysts for a variety of other purposes. The calculation of each generation's payments to and benefits from government is a worthy academic exercise and can be highly informative. But such calculations inevitably depend on assumptions about which reasonable people can and will differ. These differences will usually be large enough to determine the nature of politically sensitive findings. As a result disagreement about statistics will become the battleground for political dispute, an outcome that will obscure the political debate and debase statistics. For this reason, the government should not prepare and publish generational accounts.

Third, the estimates prepared by Auerbach, Gokhale, and Kotlikoff are interesting and revealing. But these estimates rest on a number of assumptions some of which seem to me to be clearly wrong and some of which are no more defensible than alternative assumptions that would alter the results in major ways.

Laurence Kotlikoff has emphasized in many scholarly papers that government accounts employ classifications that obscure the meaning of measures of cash flows to and from the federal government. Private transactions are equally subject to such arbitrary classification. Thus, an investor who sells some assets from a portfolio realizes income and typically has to pay capital gains taxes. But the same investor who borrows against such assets, and may realize the same cash flow, qualifies for a tax-reducing deduction for interest paid. On such knowledge, lucrative legal and accounting careers are built.

The federal budget is full of items that could be classified in various ways. For that reason, the absolute deficit or surplus, and indeed the level of federal spending and revenue are somewhat arbitrary. The President's Commission on Budget Concepts, appointed in 1967 in the wake of dubious budget manipulations by the Johnson administration, grappled with this problem. The major innovations were the inclusion in the official budget of the operations of social security and Medicare and

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[1] Henry J. Aaron is the Director of the Economic Studies Program at the Brookings Institution. The views expressed in this statement do not necessarily reflect those of staff members, officers, or trustees of the Brookings Institution.

prohibition on treating proceeds from borrowing against government assets as revenues.

The 1967 commission conspicuously failed to require any recognition of the contingent liabilities associated with loan guarantees, an omission whose seriousness successive administrations of both parties have demonstrated by freely issuing guarantees and leaving successors to grapple with the consequences. From a budgetary standpoint this practice might be called the Great Savings and Loan Deception, although, of course, the guaranties of the FSLIC predate recent budget conventions.

What are Budget Accounts Good For? The budget can serve two major purposes. First, it is an account of what the government is doing. Some people attach great weight to the absolute size of the federal budget. They focus on the number of dollars spent and collected in revenues, as measured by official accounts. While this practice is widespread, the absolute level of spending and taxation contains little information because, as Kotlikoff has shown, various classifications—the treatment of a receipt as tax revenue or proceeds of borrowing or the use of loans rather than loan guarantees, for example—are arbitrary and affect the apparent size of the public sector.

Most people, however, do not use official statistics this way. Rather they compare spending and revenues in one year with those in another year. Such comparisons are meaningful, despite arbitrary classifications, if the classifications remain constant over time and the relative use of various categories does not change very much. If this condition is satisfied, changes in spending or in revenues give an approximately correct picture of the change in the size of the federal government. By analogy, a thermometer may read 10° too high but correctly register changes in temperature. It is in this connection that the increasing use of loan guarantees led to a seriously misleading picture of the scope of government operations.

Many informed observers, including most of the staff of the Congressional Budget Office and the Office of Management and Budget argue that this function of the budget is the most important one. They hold that the budget should be comprehensive and include all operations of government. Excluding some activities-social security, for example—undermines this function of the budget, according to this perspective. It is this attitude, perhaps, that explains why, despite Congressional action to exclude social security from the budget, both organizations continue to prepare most prominent tabular presentations exactly as they did before Congress spoke.

This OMB-CBO view is understandable, in light of the budgetary chicanery practiced in some nations that exclude from commonly published accounts much of what governments do. Nevertheless, I think that Congress was right to exclude social security from the official budget accounts and that the OMB-CBO view is therefore wrong. For the first three decades of its existence, social security was excluded from the budget accounts commonly reported in the press and featured in presidential budget statements. This exclusion did not disturb the fundamentally conservative management of social security. Nor did it cripple fiscal or monetary policy, because officials in the Treasury, the Federal Reserve, and other agencies charged with administering economic policy, having mastered elementary addition, were fully capable of using the national income and products account budget or other compilations relevant to the particular problems they faced. The current generation of officials is no less capable. Nor did the exclusion of social security from the budget hamper rational decision making on national defense or domestic spending. It will not do so today.

The second major function of the budget is to educate the public on the balance of spending and revenues that will advance long-term economic growth. Given private saving, the United States can achieve sufficient national saving to sustain basic economic growth *only if the federal government runs a surplus on its total operations approximately equal to the excess of social security revenues over social security outlays projected under current law.*

I believe that the most important function of budget accounting is to help achieve the objective of restoring adequate national saving. I suggest that if the goal of an overall budget surplus equal to the annual accumulation of social security reserves makes economic sense, the chances of achieving it are a bit better if social security is excluded from the budget than if all operations of government are reported together. If social security is excluded from the budget, the long run goal is approximate balance on the remaining operations of government. If social security is included in the budget, the public must be persuaded that it should run a persistent annual surplus of a few hundred billion dollars. I believe that most elected officials would find the chances of achieving and sustaining public support for a balance in "the budget" better than the chances of sustaining support for a surplus of a few hundred billion dollars.

It would be silly to exaggerate the importance of budget accounting in reaching this goal. Achieving balance on the overall budget, even with social security included, is proving to be too large a task for our political system. But the target of overall balance retains some heuristic value. The only chance of achieving adequate national saving, short of a dramatic shift in private behavior, will be if the federal government preserves currently projected accumulation of social security reserves and manages approximately to balance the budget for the remaining operations of the federal government.

Are Generational Accounts Useful, and Should the Federal Government Compile Them? My answers to these questions are, respectively, yes and no. Much has been written about generational conflict and the alleged burdens that the baby-boom generation is imposing, or will impose, on other generations. Some have alleged that the baby-boomers have been short changed because public spending and job opportunities have had to be stretched over larger-than-normal cohorts, resulting in fewer benefits and opportunities per person. While demographic shifts cause major changes in many aspects of the economy, one reasonable way of looking at whether any group in the population imposes burdens on others is to calculate whether that cohort consumes more over its life time than in produces. If a group consumes more than it earns, it imposes burdens; otherwise, it does not. This calculation can be split into two parts, for private consumption and public consumption.

Auerbach, Gokhale, and Kotlikoff present an estimate of the balance of public consumption. They ask whether, under current policies the various groups alive at a given date will pay more or less in taxes than the value of public services they receive. Asking whether various age groups are paying their way or not is exactly the right question. Their estimates are interesting and informative. Their results broadly interpreted indicate that older generations alive today are paying less in taxes than they are receiving in public services. As a result, given their assumptions, the authors estimate that younger generations alive today will have to pay more in taxes than they receive in benefits.

Any such calculation must rest on a host of assumptions. Some assumptions are technical in character and experts can agree on them. Others have little effect on the results. For example, one has to decide on whether to treat children as independent units or as part of parental units. However this matter is decided will have little effect on the calculation of the kinds of trends in generational accounts with which the authors are concerned.

But the calculations depend sensitively on many assumptions that reasonable people will dispute. The present value of total future tax payments depends on three critical assumptions: the growth of income against which taxes will be levied, the evolution of tax rates used for computing liabilities, and the discount rate used for reducing the resulting nominal taxes to present values. Since the calculation of generational accounts stretches more than 100 years into the future and the power of compound interest is staggering, the choice of assumptions is critical. Let me illustrate the point. In the past three decades, annual growth of real worker compensation has ranged from 2.0 percent over the period from 1960 through 1978 to −0.3 percent over the period from 1978 through 1990. By the year 2100 wages will be nearly eight times larger if growth returns to 1.9 percent than they will be without growth. I really don't know whether the plausible range of assumptions about the growth of employee compensation is larger or smaller than the historical record over the last three decades. But I would caution that we would smile tolerantly had analysts working during the presidency of Ulysses S. Grant to try to forecast wages of workers in 1990. That time span is the same as the one separating us from the year 2100. Projections based on plausible assumptions can be informative and may be necessary for program purposes. But it is easy to take them too seriously.

Over just the last three decades, the United States has replaced an income tax system lacking any adjustments for inflation with one that contains full indexing for nominal quantities but none for capital transactions. Legislated payroll tax rates rose sharply as the baby boom turned into the birth dearth. Personal and corporation tax rates dropped sharply. Virtually every developed nation other than the United States adopted a value-added tax. To assume continuation of current law is not a neutral assumption, and it is outrageously implausible. We know, for example, that Medicare is drastically out of balance and that Congress will have to either cut Medicare benefits or raise payroll taxes. The one policy that we know cannot persist is current policy. But that is the one Auerbach, Gokhale, and Kotlikoff use. Which of the infinity of possible alternatives is most reasonable? Quite simply, no one knows.

Implicit in the calculation of generational accounts must be a path of wages and a tax system. The choice of alternatives determines whether a given cohort will pay

more or less in taxes than it receives in benefits. The pattern shown in Auerbach, Gokhale, and Kotlikoff's tables 1 and 2 could be reinforced or reversed depending on the assumptions one makes regarding future growth rates of wages and changes of tax laws. To say that these critical quantities cannot be known with certainty is more than understatement. The truth is that we haven't a clue about growth rates of wages or taxes decades into the future.

Whatever nominal tax flows result from these assumptions must be discounted to present value. This choice of a discount rate is critical principally because of social insurance. People typically pay taxes early in their lives and receive benefits late in their lives. If one uses a low discount rate benefits will appear large relative to taxes. If one uses a high discount rate benefits will seem small. But what discount rate should one use? Disregarding inflation, responsible arguments could be advanced for rates as low as 2 percent and as high as 10 percent or more. The effect of this choice is enormous . . .

I have dwelled on the wide range of plausible assumptions regarding wages, taxes, and the discount rate and on the sensitivity of the results to the choice of assumptions. Equally fundamental problems arise with respect to expenditures, the level and composition of which has changed profoundly and will continue to change. To assume that the current level and composition will persist is technically easy to do and utterly without justification.

One additional assumption used by Auerbach, Gokhale, and Kotlikoff deserves to be noted. They assume that cash flows of the government must be balanced within the time period they analyze, except for relatively modest assumed changes in the growth of public debt. That means that most of any difference between outlays and receipts of any one cohort must be offset by an opposite imbalance of some other cohort in their projection period. This assumption is arbitrary. There is no reason to think, for example, that the current federal debt, the result largely of fiscal imbalances incurred during the lives of people now living will every be paid off. Each cohort can receive more than it pays. That would be bad policy, but it can go on forever if national income grows faster than the accumulated debt.

One might reply to my comments by saying that in order to do calculations of generational accounts one has to make some assumption. True enough. The implication of that rejoinder, however, is that calculating generational accounts is a worthy academic activity, but that official agencies should not calculate them. Since there is no way to select rationally among alternative assumptions and the selection of assumptions determines the results, calculation of such accounts would inevitably become the focus of political struggle masquerading as analytical debate. Such an outcome is lethal to the continued acceptance of official statistics as the product of neutral and objective calculation.

Do the Specific Estimates Presented by Auerbach, Gokhale, and Kotlikoff Make Sense? The central finding of the authors, in my view, is that current policies provide people now alive with current benefits from government services far in excess of what they are paying for those services and that someone some day is going to have to pay for that excess. I pretty much knew that from the deficit, even after allowing for the undoubted conceptual flaws in budget accounts. But the projections of who will pay for the current excess and when they payments will be made are not informative. The pattern is highly dependent on assumptions that could reasonably be varied, as I have just indicated. To underscore my criticism, I shall focus on projections of the balance between payroll taxes and the benefits these taxes finance, old-age, survivors and disability insurance (OASDI), hospital insurance (UI), and unemployment insurance (UI). Assuming a discount rate of 6 percent and a growth rate of 0.75 percent, the authors find that males aged 20 in 1989 will pay payroll taxes with a present value of $66,200 and receive in return OASDI benefits worth $9,100, HI benefits worth $2,900, and UI benefits worth $1,100, for a total return of $13,100 and a net loss of $53,100. One has to wonder how 20 year olds can be projected to get back benefits worth one-fifth of the taxes they pay from a system that official actuarial projections indicate will pay out more in benefits than will be collected in revenues. After all, OASDI has a small projected deficit, HI has a huge projected deficit, and nobody even tries to project the balance in UI.

What is going on? The answer is technical, but simple. Auerbach, Gokhale, and Kotlikoff use a 6 percent discount rate; the actuaries use a 2 percent discount rate. The relatively low discount rate of the actuaries necessitates far higher taxes to pay for given benefits than would be required if they used a high interest rate that would make future obligations seem small. The high discount rate used by Auerbach, Gokhale, and Kotlikoff shrinks the present value of legislated benefits, making payroll tax financed systems, widely seen as inadequately funded, seem to be awash in surpluses.

If one accepts this discount rate, one can reach either of two extreme policy recommendations. Either payroll taxes can be cut drastically, because future obligations are far smaller than most of us had supposed; or social security is a monumental rip-off and should be repealed. The obviousness of such inferences, however unwise both may be, guarantees that such technical assumptions would become the battlefield for political wars of great ferocity.

In the end, I conclude that Auerbach, Gokhale, and Kotlikoff have produced a technically sophisticated extrapolation of a variety of assumptions that help increase one's sensitivity to the implications of current fiscal policy for future generations. If I were reviewing their manuscript for publication in a professional journal, I would make a number of criticisms and urge a variety of revisions, but I would commend it for publication without hesitation. But you asked me to review this set of accounts from the standpoint of suitability for official use. Without being facetious, I don't think its good enough for government work.

PREPARED STATEMENT OF ALAN S. BLINDER

The question for this hearing is: How can we provide members of congress with better budgetary information so that they, in turn, can make better *long-term* decisions? It's a good question, and I will address it shortly. But first permit me a few words on how to provide better accounting data for *short-term* budget decisions. After all, the long run is just a sequence of short runs.

The short run to which I refer is the period over which the central fact about fiscal policy is its contribution to total spending, the period of time relevant to stabilization policy. Concretely, that may mean one or two years. The budget deficit as conventionally measured is a terrible indicator of the impact of fiscal policy on the economy for several well-known reasons. Congress would better understand what it was doing if it focused on the *inflation-corrected, structural deficit.* That implies two adjustments:

(1) The structural deficit corrects for the automatic effect of the state of the economy on the budget. The idea is by now a commonplace, so I will not belabor it. One of the best features of the Budget enforcement Act of 1990 is that it implicitly directs attention to the structural deficit, rather than the actual deficit, by making it unnecessary for Congress to cut spending whenever a weak economy reduces revenues. It remains to be seen if this will elevate the nature of congressional debates over the budget. I hope it does.

(2) The correction for inflation is a simple matter of getting our accounting straight in an inflationary world. Without it, inflation distorts the measurement of the deficit, making it look too large when inflation is high. An example will show why.

Suppose the real interest rate is 3%, inflation is zero, and long-term government bonds yield 3%. For each $1 million bond, the government pays $30,000 in interest, which is counted as an expense item in the budget. When the $1 million is repaid, it is not treated as an expenditure but rather as return of principal. This is as it should be.

Now think about how these same transact ions are treated at a 5% inflation rate. Suppose the real interest rate is still 3%, so the nominal interest rate on the bond is 8%. The annual interest payment rises to $80,000, and the deficit rises accordingly—even though nothing real has changed. When the loan is paid back—after a year, say—the $1 million is still treated as return of principal. But that is a another mistake. If there has been 5% inflation in the interim, it takes $1,050,000 to pay the bondholder back in purchasing power terms. So $50,000 of the $80,000 payment should be treated as return of principal, leaving only $30,000 as interest expense.

In sum the proper accounting for interest in an inflationary world is to count only the real component of interest as a budgetary expenditure. Critics will say that this number is hard to know precisely. That is true. But it is easy to estimate tolerably well. We can approximate the inflation-corrected deficit by reducing the official deficit by the product of the inflation rate times the volume of debt outstanding at the start of the year. For fiscal 1991, that would be about:

$2175 billion (debt held outside government) x .05 (inflation rate) = $109 billion

This calculation could easily be off by $10 billion or so. But the number we use now is off by $110 billion!

Having made my pitch for a more sensible annual budget concept, let me turn more directly to long-run decisionmaking. Two obvious uses of long-run debt and deficit numbers occur to me:

(1) Congress may be interested in how indebted the Federal government is becoming to its citizens because it worries that a larger national debt will lead to higher real interest rates, lower investment, and slower growth.

(2) (in deference to Auerbach and Kotlikoff) Since debt is, in a sense, deferred taxation, Congress may care about the relative burdens it is placing on different generations—including unborn generations.

Let me take these one at a time.

CAPITAL FORMATION AND GROWTH

If Congress is worried that the public debt will crowd out private capital, its eyes should be focused squarely on *changes in the ratio of debt to GNP.* The reason is simple. The nominal scale of our economy grows each year both because prices go up and because the economy gets bigger in real terms. It is therefore only natural for every form of debt—household debt, corporate debt, and government debt—to rise from year to year *in nominal dollars,* as they normally do. An obvious quest ion is whether the public debt is growing faster or slower than GNP. If slower, it is becoming a decreasingly important user of capital. If faster, it is becoming increasingly important and presumably "crowding out" other uses.

How large a deficit would keep the ratio of debt/GNP constant? If we ignore the current recess ion (as we should for long—run purposes), the real growth rate of our economy is now ground 2.5% and the inflation rate is around 4.5%, making 7% the "normal" growth rate of nominal GNP in the early 1990s. For the nominal Federal debt to grow 7% this year, the *nominal* (structural) deficit should be around $160 billion. Any higher deficit would make the ratio rise; any lower deficit would make it fall.

Congress, however, might not be content with a stable debt/GNP ratio. After all, the Federal debt climbed from about 23% in 1980 to about 42% today. Many people think that is too high. So Congress might want to see a lower debt/GNP ratio in the long run. For example (and still ignoring the recession), suppose Congress wants the ratio to drop by 2 percentage points a year. If so, the permissible deficit shrinks by about $110 billion (2% of GNP), that is, from $160 billion to $50 billion.

Regardless of whether we decide to shoot for $160 billion or $50 bill ion, two further points should be kept in mind.

(1) If long-run crowding out is our concern, we should be looking at the Federal government's net indebtedness. When the government borrows in order to lend, it is acting as a financial intermediary, not "using up" capital. If the government lends money at below-market rates, as it often does, only the net subsidy should count as a current expenditure.

(2) In principle, we should also deduct the government's assets to arrive at an estimate of government *net worth.* That is the basic logic that drives us toward a separate capital budget: Bonds issued to build government capital do not erode the government's net worth.

In practice, it is devilishly hard to put market values on many government assets. However, one small step in this direction is easy to take: Receipts from asset sales should not be counted as revenues. The net worth perspective shows why: If the government sells off $10 billion in, say, student loans and uses the funds to retire bonds, its *liabilities* fall by $10 billion but so do its *assets. Its net claim on the capital market does not change. Nowadays, the main application of this point is to the operations of the Resolution Trust Corporation. That is why RTC purchases and sales are properly treated as "off budget."*

GENERATIONAL ACCOUNTING

Auerbach and Kotlikoff would presumably disagree with most of what I have just said. In their view, neither the annual deficit nor the accumulated debt is a meaningful number because either could be changed dramatically by adopting different accounting conventions. They claim that "The key economic question associated with fiscal deficits is: Which generation will pay for what the government spends?"

I don't agree with that. Based on what members of Congress say and write, and the questions they ask at hearings, I doubt that their primary concern is the intergenerational redistribution of wealth. In fact, I have just discussed several "key economic questions" that, I think, worry Congress more. However, Auerbach and Kotlikoff are surely right that intergenerational redistribution is one of the important issues raised by fiscal deficits. And the new tool they offer—generational accounting—is a fine way to look at it.

I have not the slightest quarrel with using something like their generational accounts as a supplement to the budget, and think the numbers it showed would be of

genuine interest. However, I would like to offer a few curmudgeonly remarks to temper their enthusiasm.

First, the calculations they make are subject to huge errors. That does not mean that Auerbach and Kotlikoff are sloppy, only that the task they set for themselves is exceedingly difficult. For each generation, they must estimate the annual flow of taxes it will pay and benefits it will receive under current law for each year of its remaining life. Then they must discount these flows to the present. The difficulties of making projections out 50 years or more are perhaps self evident. But even the discount rate is a matter of intense debate. Auerbach and Kotlikoff use a 6% real interest rate in their calculations. Earlier in this statement, I noted that the real rate on long-term government bonds is about 3%. And OMB prescribes a 10% real rate for valuing Federal investment projects. Whether you discount the future at 3%, 6%, or 10% makes a *huge* difference to the answers you get. Auerbach and Kotlikoff's choice is approximately equal to the long-run real return on the stock market. That strikes me as too high. Are the flows of taxes and transfers really as risky as equity returns?

Second, the generational accounts they develop consider only the future, ignoring the past. For many purposes, that is exactly what you want; after all, the dead hand of history is dead. But, if generational accounts ever become widely used, I am sure they will be scrutinized for at least one purpose for which the past cannot be ignored: appraising intergenerational equity. For this purpose, we want to know what each generation will pay over its lifetime, not what each will pay *from today forward.* This, however, requires only a minor extension of their procedures.

The third and last point is more substantive. The theory that underlies these numbers assumes that only present values matter. If I pay $1000 in taxes today, and get those taxes back (with accumulated interest) as social security benefits 30 years from now, the transaction is not supposed to affect my behavior in any way. That is the world view that justifies ignoring annual flows and looking only at the *net* difference between the *present values* of lifetime benefits received and lifetime taxes paid. But that is not the world we live in. While the naive view that only current income matters is also wrong, I am most reluctant to adopt an accounting procedure that assumes that every American citizen can borrow or lend freely and without limit at a 6% real interest rate.

I close with a confession that should perhaps have been made at the outset: I do not believe that inadequate budget data are a major factor behind inappropriate budget decisions. The Congress is full of smart people and, if the proper political incentives were in place, they would cut through the lousy data and make good decisions anyway. I can assure you, for example, that few institutions have worse accounting procedures than universities. Yet I think Princeton University usually makes pretty good budgetary decisions.

The problem, I think, is that Congress learned two things in the 1980s. First, Ronald Reagan taught them that the feared political taboo against grossly unbalanced budgets was a figment of their imagination. They learned that they could spend much more than they taxed, year after year, without paying the political piper. Second, they learned that the Chicken Little school of thought on the deficit was wrong: the sky did not fall. Whatever problems a large deficit causes creep up on you gradually. But the cure causes immediate pain. With two-year political time horizons, that creates an all-but-irresistible temptation to temporize.

Now that Congress has learned these two lessons, we voters are going to have a devil of a time putting the deficit genie back into its bottle.

PREPARED STATEMENT OF CHARLES A. BOWSHER

Mr. Chairman and Members of the Subcommittee:

I am pleased to have this opportunity to appear before you today to discuss a subject that does not receive the attention it deserves—the effect of today's budget decisions on our future economic well being and that of our descendents.

Our budget policies today are among the most important elements that will determine the national standard of living in the twenty-first century. Without sufficient investment in new factories, highways, research, education and all of the other factors that determine the productivity of our labor force, the United States will not be competitive in the future world economy. Unless we save today in order to provide for that investment, our children and grandchildren may find they cannot sustain a high standard of living while also supporting an increasingly large retired population. Without increased savings and investment, our standard of living may fall

behind that of other industrial nations, and the United States may very well lose the preeminent position it holds today in the world economic order.

Unfortunately, our budget policies of the last decade have short-sightedly promoted consumption at the expense of our future economic well-being. Huge Federal deficits have drained private savings that could have been devoted to new plants, equipment, and other productive private investments. At the same time, the budget has provided inadequate funding for highways, education, research and other public investments.

The Congressional Budget Office estimates that the total Federal budget deficit will be a record $309 billion this year. As bad as that sounds, however, the situation is actually worse. Trust fund (Social Security, Medicare, Federal retirement and others) surpluses totalling $120 billion partially mask a general fund deficit of over $400 billion. By the end of this fiscal year gross Federal debt will probably grow to more than $3.6 trillion. This level of debt will require annual interest payments of almost $300 billion, about 19 percent of gross Federal outlays. The Congressional Budget Office estimates that interest payments will exceed defense spending in fiscal year 1992, becoming the largest item in the Federal budget.

The standing of the United States as a world superpower, as well as the future standard of living for us and our descendants, depends on our willingness to assume responsibility for the economic future by reversing our budget policies and providing for investment in that future.

NOT JUST A GOVERNMENT PROBLEM

It is important to point out that this kind of economic short-sightedness is not confined to the government. Our whole society seems beset by an increasingly short-run focus. Many observers decry the extent to which American business managers seem to be driven by short-run profits at the expense of the long-term health and growth of their companies. Businesses that emphasize a long-term view are sufficiently rare as to prompt major news stories in the financial press. Meanwhile, the personal savings rate has declined from an average of 8 percent of disposable income in the 1970s to just over 5 percent in the 1980s. There is even evidence that many citizens believe that personal saving is bad for the economy—that consumption is all that keeps unemployment down and incomes up.

I believe we all need to work to change these attitudes and to instill in our society a greater sense of responsibility to provide for a better future, but my testimony today is about what the Federal Government can do directly to improve the long-term economic outlook.

DEFICIT REDUCTION

The first, and most important, thing that the Federal government should do is to take additional steps to reduce the Federal budget deficit. A key issue here is the effects of our deficits on investment levels.

Our future economic well-being depends on investments in both physical and human capital that increase our ability to produce goods and services in the future. Funds for these investments come from national savings and capital from abroad. Since foreign investment leads to future flows of income from the United States to foreigners, our future standard of living will be enhanced to the extent we finance investment through our own national savings.

National savings is simply the sum of private savings and the total governmental (state and local governments as well as the Federal government) deficit or surplus. Everything else being equal, an increase in the Federal deficit reduces national savings. As you know, the Federal deficit has increased dramatically in recent years, doubling every decade since 1950. In the 1950s the Federal deficit averaged less than a half percent of GNP. In the 1980s it averaged more than 4 percent of GNP. The Congressional Budget Office estimates that the deficit will equal 5.5 percent of GNP this year.

But, in fact, everything else has not been equal. As I mentioned earlier, at the same time that the Federal deficit has skyrocketed, the private saving rate has fallen significantly. The Federal Government should certainly consider whether there are steps that could be taken to increase the private saving rate. But the surest means of increasing national savings is to cut the Federal deficit.

Last September GAO issued a report[1] that called for Federal deficit reduction of approximately $1 trillion over the six years from fiscal year 1992 through 1997.

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[1] *The Budget Deficit: Outlook, Implications, and Choices* (GAO/OCG-90-5, September 12, 1990).

Using then current budget projections we calculated that deficit reduction of that amount would produce a total budget surplus equal to about 2 percent of GNP by 1997. This would bring the general fund (excluding Social Security and other trust funds) close to balance and, if private savings rates remain constant, would restore the national savings rate to the pre-1980s post-World War II level needed to sustain long-term growth and ensure steady increases in our standard of living.

Last year's deficit reduction agreement was a step toward the goal, but fell somewhat short. The deficit reduction contained in the Omnibus Budget Reconciliation Act of 1990 and required under the Budget Enforcement Act of 1990 will total approximately $482 billion through fiscal year 1995, if fully implemented. However, the promised savings fall short of the deficit reduction called for in our report last September, and achieving even those promised savings is not certain. Funding for emergencies is excluded from the discretionary spending limits of the Budget Enforcement Act, and history indicates that we should expect at least some emergencies requiring additional expenditures over the next four years. Any additional spending required to resolve savings and loan or bank failures would also erode the anticipated savings. In addition, $144 billion of the anticipated savings depends on legislation yet to be enacted—that is the appropriation bills for fiscal years 1992 through 1995. Achieving the required discretionary savings in the defense area could be especially difficult since the anticipated military force reduction has been at least delayed by the Persian Gulf War. Finally, the deterioration of the economy since last September makes it likely that even deficit reduction in the amount we called for would not produce a 2 percent surplus by the late 1990s.

Thus, while a good start was made last year toward eliminating the deficit drag on our economy, more deficit reduction needs to be achieved as soon as we have recovered from the recession.

ASSESSING LONG-TERM ECONOMIC EFFECTS

A second important step is for decision-makers to pay more attention to the long-term economic consequences of budget decisions. Some progress has been made in this regard recently, as seen from the debate over the need to ensure that the current Social Security surplus contributes to our ability to meet the high benefit payments that will be required as the baby boom generation retires. However, it is striking how little explicit consideration is given to economic goals and outcomes during most of the debate on the budget. Last year, when the Congress and the President were considering the deficit reduction package, the level of the deficit that would result from that package was discussed extensively (although most of the estimates were exceedingly optimistic), but the effects of the package on future economic growth or income were virtually ignored.

Many people talk at length about the importance of deficit reduction, but not enough has been done to demonstrate the actual economic effects of such reduction and to convince the American people that it is worth sacrificing now in order to bring the deficits down.

Those effects are demonstrated, however, in a recent study from the Federal Reserve Bank of New York.[2] That study provides quantitative estimates of the adverse effects of low savings in the 1980s, and the benefits that would derive from a restoration of the saving rate to the average level of 1950-1979. These estimates show 1989 GNP at least 5 percent lower than it would have been if savings had not fallen. By next year, the output loss may have grown to the point where we will not only be saving less, but also consuming less, than if we had maintained the higher saving rate. All the fun of the binge will be over, and there will be only the bills to pay. If the saving rate remains depressed, the annual GNP losses continue to increase into the early decades of the next century, when the retirement of the baby boom generation will put additional pressure on living standards.

The policy suggested in the New York bank's study—to achieve a unified budget surplus of about 2 percent of GNP late in this decade—closely conforms to our recommendation of last September. The study calculates that the first five years of this recovery policy add an average of a half percentage point to annual GNP growth, with larger gains thereafter. Higher savings will give us a brighter economic future, but the process takes time. It is not the path of instant gratification.

In addition to paying more attention to the kind of economic analysis in the New York bank's study, we also need to consider more systematically the long-term economic effects of a whole range of policies that are crucial to our ability to compete

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[2] Harris, Ethan S. and Charles Steindel. "The Decline in U.S. Saving and Its Implications for Economic Growth." *FRBNY Quarterly Review*, Winter 1991, pp. 1-19.

in the international market. Additional investments in plant and equipment will not keep the United States competitive if we continue to fall behind other nations in the quality of the education that we provide to our future work force. Drug use diverts resources from productive investments and makes workers less productive. Escalating health care costs soak up a greater percentage of national resources while many citizens continue to receive inadequate health care, making them less productive and likely to require more expensive care later. Inadequate investment in the transportation infrastructure threatens gridlock on the ground and in the skies, with resulting economic paralysis. Disarray in the banking system and capital markets threatens U.S. leadership in these areas.

In all of these areas, and in many others as well, it is important to look beyond the immediate Federal budget costs of policies and consider their long-term consequences. I should add in this regard that the ideas of Herb Stein about "budgeting the GNP" through a multi-year plan [3] are interesting and worthy of consideration. As he points out, the government should also evaluate its tax, expenditure, and regulatory decisions in terms of their future effects on the allocation of the nation's total economic output, private and governmental, among such activities as national security, private investment, public investment, health care, consumption by the poor, etc. We must understand this total allocation, not simply the government's share, if we are to fully understand the impact of governmental decisions on current and future generations.

IMPROVED BUDGET PRACTICES

Of course, better analysis of the long-term effects of budget decisions is not enough. That information must be integrated into the budget decision-making and enforcement system in order to focus attention on those effects and to provide incentives to deal with them. This involves structuring the budget in an appropriate way, accurately accounting for long-term effects in the budget, and assuring the achievement of long-term goals on which agreement has been reached.

GAO has pointed out many areas where such improvements would be desirable. GAO's recommendations have already been at least partially adopted in a number of areas, such as the budgetary treatment of Federal credit programs, accrual of military retirement benefits, and multi-year congressional budget resolutions and Budget Act enforcement.

One GAO proposal not yet adopted that would help illuminate the long-term economic effects of budget policies is the proposal for a six-part budget.

Six-part Budget

Although GAO strongly supports a unified budget, we believe that the present budget structure, with its exclusive focus on a bottom-line cash deficit, obscures important differences among programs, making it difficult for the public and many officials to understand what is actually going on in the government's finances. For example, looking only at a total budget deficit that nets out trust fund surpluses provides a misleading picture of the status of the government's financial affairs. In addition, large business-type operations such as the Postal Service are unable to plan and operate efficiently if they are subject to short-term spending controls more appropriate for programs financed from the general fund. Finally, critical capital investments for nuclear weapons plant modernization, bridge repair, and other purposes are postponed because the budget treats the purchase of long-term assets the same as the purchase of paper, pencils, and other consumables that are used up immediately.

GAO believes that the unified budget should be retained in order to reflect the government's total financial operations, but it should be divided into three major components—general, trust, and enterprise funds—with each component subdivided to distinguish between operating and capital expenditures. (See attachment showing the fiscal year 1992 budget displayed in the six-part format.)

The Congress has addressed certain aspects of the trust fund and enterprise fund issue by moving Social Security and the Postal Service off budget. We do not believe that this is an appropriate solution to the problems because it creates confusion about the fiscal effect of total government operations and because it does not provide for consistent treatment of all trust funds and government public enterprise activities. In addition, history has shown that agencies that are moved off budget are moved back on at some point.

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[3] Stein, Herbert. *Governing the $5 Trillion Economy*. New York: Oxford University Press, 1989.

The earlier discussion of the need to increase national investment highlights the importance of dividing government spending between operating and capital expenditures. If we want to accurately measure the impact of the budget on national savings and investment, we should not assume, as does our current budget accounting, that all government expenditures represent consumption. We need to recognize that government expenditures for long-term assets do represent an investment in our economic future. We are aware that many people in the budget community fear that a separate capital budget within the unified budget could provide greater opportunities for gaming the budget process and avoiding controls on spending. We understand that some modification of our capital budget proposal may be necessary to allay these fears. We are eager to explore ways in which an appropriate treatment of capital expenditures can be achieved without jeopardizing appropriate controls on spending.

Other Possible Improvements

GAO has identified other areas in which improvements might be made: full accrual of liabilities for Federal civilian employee retirement and other employment benefits and, possibly, accrual of liabilities for Social Security and other entitlement benefits; budget treatment of contingent liabilities such as deposit insurance; recognition of possible Federal financial exposure in connection with Government-sponsored enterprises; and consideration of future costs resulting from Federal government responsibilities in areas such as the clean-up of nuclear weapons facilities. We are continuing our work on these issues and will be happy to discuss our views on them today or in detail at some future date.

One other area of concern is our dependence on the baseline in analyzing whether our policies achieve the desired results in the outyears. The baseline is intended to show what the budget would be in the outyears if direct spending and tax policy do not change and discretionary spending is increased to keep up with inflation (or is at the levels set by statute, as in the case of the Budget Enforcement Act discretionary spending limits).

Something like the present baseline is probably an essential starting point for debating budget choices. Unfortunately, however, it can lull us into a sense of complacency. It is easy to think that we have the deficit problem well under control if the estimates of economic growth are high enough, or the estimates of the costs of programs such as Medicare are low enough. In addition to the problem that baseline estimates can be overly optimistic (and there are many who think that they generally are), the current baseline concept is not intended to capture spending increases resulting from the need eventually to clean up DOE's nuclear weapons facilities, rebuild America's infrastructure, fight an AIDs epidemic, or fight a Persian Gulf War. We all know that the government has unmet obligations and that we can expect bad things to happen occasionally, but the baseline simply does not reflect this knowledge.

When we use the baseline to judge our budget accomplishments, we should be aware of these shortcomings and adjust our evaluations accordingly. It would be wise for us to tend toward pessimism in our budgetary decision-making so that we will not continually come up short in our attempts to eliminate the Federal deficit and increase our investment in the national economy.

In addition, the use of the baseline can sometimes cause confusion. For instance, the baseline level for Medicare is the level of spending estimated to occur if current law is not changed. If the law is changed so that estimated spending is less than that baseline level, this is considered as savings even though total Medicare costs may be higher than the year before. This allows decision-makers to separate out the effects of policy decisions from the effects of such factors as growth in the Medicare eligible population. It also recognizes the fact that restrictions on Medicare services certainly seem like cuts to beneficiaries even if total program costs go up. However, it is difficult to explain to decision-makers themselves, let alone the public, how we can cut Medicare year after year and yet Medicare costs are dramatically higher than they were a few years ago.

BUDGET STUDY COMMISSION

We recognize that these matters raise many policy and technical issues. Not all elected officials and budget experts would agree with our understanding of the problems and our prescribed solutions. Furthermore, there are other budgeting proposals that raise even more fundamental questions, such as proposals for line-item veto authority for the President.

Considering the importance of reaching consensus on how to improve our budgeting practices, I think that the Congress should consider establishing a high-level,

bipartisan budget study commission similar to the 1967 President's Commission on Budget Concepts. I would probably wait a year or more before establishing such a commission, so as not to divert attention from the main task at hand—enforcing the current deficit reduction plan and enacting additional reductions. But the time will eventually come, I am sure, when such a body could make a major contribution. I also would think that one of the main objectives of such a commission would be an examination of how the Federal Government can better budget for the future.

CONCLUSION

We have made a start toward eliminating the deficit, but much remains to be done, both in dealing with the deficit itself and integrating the consideration of long-term economic effects into the budget process. Perhaps most importantly, we need to mount an all-out effort to convince both decision-makers and the American public that today's budget is a crucial factor in determining tomorrow's economic well-being. GAO will certainly continue its efforts in this regard.

This concludes my statement. I will be happy to answer any questions.

Attachment.

PRESIDENT'S FISCAL YEAR 1992 BUDGET RESTRUCTURED ACCORDING TO GAO PROPOSAL

[Dollars in billions]

	Total	General	Trust	Enterprise
Operating surplus/deficit (—)	—250	—402	146	6
Capital financing requirements	—31	—33	8	—6
Unified budget financing requirements	—281	—435	154	1

Numbers may not add due to rounding

PREPARED STATEMENT OF JANE G. GRAVELLE

Mr. Chairman and Members of the Committee, I would like to thank you for the invitation to appear before you today to discuss the Federal budget and methods of improving budgetary analysis to facilitate long-term decision making.

The fiscal impact of revenue and spending options is currently judged based on examining the budgetary cost over a short time horizon. Thus, estimates of the resources needed to effectuate a change which has repercussions far into the future may rest on numbers which capture only a few years of the cost. For proposals which have a stable pattern of cost relative to GNP, this is a satisfactory way of considering the magnitude of resources devoted to the proposal. For others, the initial cost in the first few years may be considerably different from the cost in the future. Thus, we may find ourselves confronted with proposals which are virtually identical in an economic sense, but which are vastly different in a budgetary sense because of timing differences in the cash flow costs. In the current budgetary climate, we may choose the option which costs the least in the short run, even if it is not necessarily the most desirable option. Or we may adopt proposals which appear to have small costs, but which actually cost substantial amounts.

Moreover, while we may be evaluating proposals which are identical in an economic sense, but vastly different in our conventional measures of budgetary cost, we may also be evaluating proposals which are similar in a budgetary cost but vastly different in an economic sense. For example, we think as a rule of thumb that a dollar of deficit reduction produces roughly a dollar of increased savings as the government reduces its claim on capital markets. This rule of thumb probably works well for many types of revenue and spending options. But the consequences for overall savings depend on the effect on private savings as well. That effect depends on what sort of expectations of future taxes and benefits are associated with the proposal, how individuals respond to both prospective and current costs, and which groups receive these taxes and benefits. Thus, proposals which have similar effects on the budget may have markedly different effects on savings.

A third problem is that our budgetary calculations often fail to assess the full distributional consequences of policies because they lack a time dimension. While we calculate for many tax and transfer options the distribution of benefits across income classes, we fail to account for the distribution across generations.

Because of the short-term focus, traditional budgeting and budgetary analysis may provide poor, or even misleading, information about the true costs, the effects on savings, and the distributional consequences of programs. There are approaches which could help to make budgetary accounting more consistent and approaches which would help us determine the distributional effects and savings. One simple approach which I would like to discuss is to calculate the budgetary cost as an annualized present value. Another is to develop distributional models which account for not only tax burdens and benefits across income classes but also across generations—generational accounts. This measure, as suggested by Auerbach, Gokhale, and Kotlikoff, provide information about the distribution across generations as well as calculating consistent cost figures.[1] Another is to use more sophisticated economic models, such as life cycle models, to try to estimate the effects of policy changes on savings.

To illustrate the first issue—that short term budgetary costs can provide very misleading information and that identical proposals (in an economic sense) can have vastly different short term costs associated with them, I want to take an example from tax policy, where these types of timing problems frequently occur. There has been considerable discussion of restoring in part or in full, or even expanding on, Individual Retirement Accounts, or IRAs. Prior to 1986, IRA provisions allowed all taxpayers a deduction for amounts deposited into retirement accounts up to $2000. These funds can be withdrawn in retirement. At that time, all withdrawn funds, whether principal or interest, are taxed. IRAs were restricted for higher income people by the 1986 Tax Reform Act in order to meet revenue and distributional objectives.

The Administration has proposed a restoration of these accounts, with somewhat more generous limits and more flexibility, as Family Savings Accounts, or FSAs. These FSAs would differ from the pre-1986 IRAs in that they do not allow an up-front deduction; but also do not tax withdrawals. Because of this treatment they are sometimes termed "back-loaded IRAs," while the current IRAs are termed "front-loaded IRAs." The FSA treatment is, however, identical to the treatment of a tax exempt bond—interest is not included in taxable income. There have been proposals in the Congress for restoring old style IRAs or allowing a choice between a front-loaded or a back-loaded treatment.

Aside from differences in limits (and other differences not considered here), the FSA and the IRA provide identical economic treatment—both effectively exempt interest income from tax.[2] The IRA also has another element—a large tax savings appears at the contribution time, but the tax saving is repaid, with interest, at the time of withdrawal. Individuals can achieve exactly the same retirement income after tax under both plans. But, the timing of the budgetary costs is vastly different.

The first few years' cost of the FSA will be small relative to the long run costs as the accounts build up in size. The effects of a deductible IRA show a completely different pattern. Costs are much larger in the short run, they rise to a higher peak, but then decline as individuals begin to withdraw funds from their IRAs and pay tax on the withdrawals. I would like to illustrate this pattern of budgetary costs for a simple FSA versus IRA program which assumes that annual contributions keep pace with GNP. This example assumes that the average IRA account is invested for fifteen years and then withdrawn as an annuity over ten years. I assume a tax rate of 23 percent, and an interest rate of ten percent. (These numbers are also reported in the attached Table 1).

The first year budgetary cost of the FSA per dollar invested is straightforward—2.3 cents, which is simply 23 percent of the ten cents interest on the dollar in the first year. The first year cost for the IRA is, however, much higher. In addition to the 2.3 cents of foregone taxes on interest, the contribution itself is deducted for an additional cost of 23 cents, for a total of 25.3 cents. For the first year, the budgetary cost of an IRA is much larger than the FSA—eleven times as large.

Moving to a 5 year budget horizon narrows relative costs of the two approaches. Because of the growing amount in the accounts, the cost of both proposals is rising; at five years the cost for the FSA is 12.2 cents and the cost for the IRA is 35.2 cents.[3] At The average cost over five years for the FSA is 7.2 cents; the average cost

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[1] This approach is outline in Alan Auerbach, Jagadeesh Gokhale, and Laurence Kotlikoff, Generational Accounting: A Meaningful Alternative to Deficit Accounting, National Bureau of economic Research working Paper 3589, January 1991.

[2] The IRA results in a zero effective tax rate assuming the tax rate does not change between deposit and withdrawal. If the tax rate is lower on withdrawal, the effective tax rate is negative; if it is higher the effective tax rate is positive.

[3] All calculations are measured at first year levels of income.

for the IRA is 30.2 cents. Over this somewhat longer horizon, the cost of the IRA is slightly over four times as great as the FSA.

But, if we look further into the future, we find that these comparisons continue to change. The cost of the FSA continues to rise until it reaches a steady state, and a peak, after twenty five years—when the cost has now become 56.1 cents. The IRA reaches a peak earlier, at 15 years, when the cost is 65.2 cents. Then as individuals begin to withdraw taxable sums, the cost begins to fall until it reaches a steady state value of 40.3 cents. In the long run, therefore, the annual cost of the IRA is only about seventy percent of the cost of the FSA.

Does the IRA cost eleven times the FSA, or does it cost only seventy percent as much? In fact, because these proposals have been chosen to be identical, they cost exactly the same in present value, assuming that individuals respond to them rationally. One way to measure this cost on an annual basis is to calculate the present value and then annualize it. That is, we ask what is the amount of annual cost which is a constant percentage of GNP which will produce the same discounted cost as these proposals. That calculation tells us that the true cost of these proposals is 43.1 cents.

If we return to our initial costs, we find that the first year cost of the FSA is only 5 percent of the true cost, and even the five year cost is only 17 percent of the true cost. Thus, even with a five year budget horizon, the true cost is six times the initial costs. The initial costs of the IRA are closer—59 percent in the first year and 70 percent over five years. But even the IRA revenue cost understates the true cost in this example.

This FSA/IRA comparison is only an illustration of a common problem. Indeed, in the President's budget proposals we can quickly find two more instances of this problem.

—The Administration's capital gains tax proposal is estimated by the Joint Tax Committee to raise revenues by $3.7 billion in 1992, but to lose revenues at a rate of $3.4 billion by 1996. If we assume that the realizations responses used by the JCT are correct (the actual cost could be as high as $17 billion in the fifth year in the absence of a realizations response), the first year revenue effect is actually of a different sign from the following four years because of the assumed short run realizations response. Even a five year horizon misrepresents the true long run cost because of the overstated influence of the large first year revenue gain.

—The Administration's proposal to include State and local employees in Medicare will raise revenues in a fairly consistent pattern over time. Increased benefits to individuals now covered by the changes will, however, be delayed until future years largely beyond the budget horizon.

Many types of tax proposals are characterized by uneven revenue costs. Proposals to index capital gains on newly acquired assets would involve a much larger annualized cost than the short term budgetary cost. In this case, not only is there a realizations response which might raise revenue initially, but there is also a slow build-up in the accumulated inflation because the proposal is restricted to new assets. Accelerated depreciation is another type of tax change which involves very uneven patterns of revenue loss.

One straightforward approach, therefore, to accounting for costs is to calculate the annualized present value, which takes into account the expected pattern of revenue losses over time.

The FSA/IRA comparison also illustrates another problem with evaluating programs by examining budgetary costs. Even if these two proposals have the same present value and should have the same economic effects, the IRA creases the deficit in the short run much more than the FSA. Does this mean that the IRA will be less likely to increase savings if the deficit is not made up by increased revenues elsewhere or reduced spending? The answer to that question, assuming that individuals recognize the future tax liabilities associated with IRAs but not present with FSAs, is no. The FSA may increase or decrease private saving, although there is reason in economic theory to believe that private saving is likely to fall. But the IRA should increase private saving relative to the FSA by the difference in the annual cash flow budgetary costs. This difference in budgetary costs is the amount individuals should save so as to be able to pay their future tax liabilities when they withdraw funds from IRAs.

This savings example illustrates a general principle: that future as well as current liabilities and benefits should be taken into account in evaluating the effects of deficits on savings—a dollar of deficit is not always translated into roughly a dollar of reduction in savings. Assessing these deficit differences is often complex and un-

certain, particularly since individuals may not always recognize the cost of future tax liabilities. Indeed, one of the disadvantages of proposals such as which create future tax liabilities in exchange for current deductions is the possibility that taxpayers may not take these future tax liabilities into account. Increasingly, it seems appropriate to turn to life cycle models, which by their nature account for future tax liabilities and benefits, to assess the savings effects of policy changes.

The third issue which current budgetary accounting fails to address is the distributional consequences of tax changes. We have some notion of how different tax and spending proposals affect individuals across the income distribution. For example, income taxes tend to be progressive, so that proportional increases in income taxes reduce the incomes of high income individuals proportionally more than lower income individuals. Excise taxes, by contrast tend to reduce incomes of lower income individuals more relative to higher income individuals. Most transfer programs proportionally benefit lower income individuals. Payroll taxes tend to be first progressive, then regressive, rising and falling as a share of income.

One distributional aspect of budgetary changes which is not addressed in many distributional tables, however, is the effects on different generations. Transfer programs tend to benefit the elderly in many cases. Increased payroll taxes, however, burden young and future generations relative to older ones, because older generations receive less of their remaining income through wages. Excise taxes as compared to income taxes are likely to burden older generations more, where spending is a higher proportion of income, relative to younger generations. Some of the effects of policies can be less than obvious. A corporate tax rate cut, for example, tends to benefit older generations who have already accumulated capital; an investment credit, even though it affects capital income, tends to benefit younger generations rather than older ones because it is available only for new investment.

In order to capture the distributional effects across the generations, we would need a set of generational accounts, as discussed earlier. Such accounts can tell us the percentage change in incomes of individuals in different age groups as well as calculating the present value of tax changes. And, of course, a complete set of distributional analyses would combine both traditional income distribution and generational distribution, so that the effects of policies on individuals with different lifetime incomes and of different ages can be determined.

The common thread in all of these shortcomings of the current budgetary, economic, and distributional evaluation of programs is the need to provide a forward looking approach. I have illustrated one fairly simple mechanism for dealing with the measurement of the costs of programs with uneven revenue patterns over time, by using an annualized present value concept. Such an approach would have little effect on the cost of relatively constant cost changes, such as income tax rate increases or ongoing spending programs which tend to rise with income. But they could provide a dramatically different measure of the cost of programs which involve uneven costs over time.

Table 1.—REVENUE COSTS (CENTS PER INITIAL DOLLAR OF CONTRIBUTION), FOR A FAMILY SAVINGS ACCOUNT (FSA) AND AN INDIVIDUAL RETIREMENT ACCOUNT (IRA)

	FSA	IRA
Year 1	2.3	25.3
Year 5	12.2	35.2
Five Year Average	7.2	30.2
Peak	56.1	65.2
Long-Run Steady State	56.1	40.3
Annualized Present Value	43.1	43.1

Source: Congressional Research Service. All amounts are in first year income levels, contributions are assumed to grow with GNP.

APPENDIX: CALCULATION OF FSA/IRA COSTS

The first year cost of the FSA is equal to R times t, where R is the interest rate and t is the tax rate. For the calculations, r is set to .10 and t is set to .23. In the case of the IRA, the first year cost is (1+R) times t. The cost of the FSA in year 5, denoted C_5 is:

$$(1) \quad C_5 = Rt\,[(1+x)^5 - 1]/x$$

where x is (1+R)/(1+G), and G is the growth rate, set at 7 percent.

The average cost for the first five years is

(2) $Rt[(1+x)C_5/5 - 1]/x$

In both cases, the cost of the IRA is found by adding t to the cost for the FSA.

The long run steady state value for the FSA (and the peak value) is:

(3) $Rt\{[(1+x)^{25} - 1]/x - [(1+x)^{25} - (1+x)^{15}]/[x(1 - 1/(1+R)^{10})] + [(1+x)^{24}/G][(1+G)^{10} - 1]/[(1+R)^{10} - 1]\}$

The peak value for the IRA is:

(4) $Rt[(1+x)^{15} - 1]/x + t$

And the long run steady state for the IRA is:

(5) $Rt\{[(1+x)^{25} - 1]/x - [(1+x)^{25} - (1+x)^{15}]/[x(1 - 1/(1+R)^{10})]\} + t$

The annualized present value for both proposals is:

(6) $Rt\{25 - 10/[1 - 1/(1+R)^{10}] - 1/R\}$

PREPARED STATEMENT OF LAURENCE J. KOTLIKOFF

Mr. Chairman and Members of the Subcommittee. We are honored by this opportunity to present our views concerning U.S. fiscal accounting and the generational stance of U.S. fiscal policy. Recent years have witnessed a growing unease with the use of the fiscal deficit to gauge the stance of fiscal policy. Many economists question whether a single number, that relates primarily to the government's current cash flow, is the kind of measure needed to understand the longer term effects of fiscal policy on saving, investment, and growth. They also ask whether the deficit can tell us how we are treating different generations, both those currently alive and those yet to come. Economists and policy makers have long criticized the deficit for failing to account for inflation, economic growth, government assets, and implicit liabilities. Doubts about the deficit have been accentuated by the country's demographic transition; the aging of the U.S. population, with its attendant increase in the number of nonworkers dependent on workers, raises major concerns about the viability of a short run, pay-as-you-go approach to fiscal budgeting.

In recognition of these concerns about the demographic transition, the U.S. Federal Government decided in 1983 to accumulate a very large social security trust fund to help finance the "baby boom" generation's social security benefits. This decision represented a remarkable and highly praiseworthy break with short term budgeting. The decision has, however, simply increased doubts about the appropriateness of balancing the unified Federal budget which includes social security. If funds for future needs are to be accumulated, shouldn't we start running a unified Federal budget surplus? And if so, how large should the surplus be? And will such surpluses reduce aggregate demand and depress the economy?

One response to the problem of using the short term budget deficit as an instrument for long term planning is to exclude social security from the Federal deficit. This redefinition of the deficit has formally occurred, but has not precluded the continued calculation of the unified budget deficit. In its January 1991 report on the FY91 deficit, the Congressional Budget Office predicted the values of four different deficits, the total deficit of $360 billion (which excludes social security, but includes the S&L bailout), the Gramm-Rudman deficit of $256 billion (which excludes social security and the S&L bailout, the National Income and Product Accounts (NIPA) deficit of $298 billion (which includes social security and the S&L bailout), and the non-S&L NIPA deficit of $194 (which includes social security and excludes the S&L bailout). The $166 billion difference between the largest and smallest of these numbers is roughly 3 percent of predicted 1991 GNP!

The proliferation of deficits has taken its toll on public confidence in Federal budgeting. In a Time/CNN poll administered during the 1990 budget debate, 500 adult Americans were asked "If the Bush Administration and Congress reach agreement on a deficit plan, do you expect A) one that avoids the real issues or B) a meaningful accord?" Fully 70 percent of respondents chose A.

WHAT QUESTION IS THE DEFICIT SUPPOSED TO ANSWER?

The key economic question associated with fiscal deficits is: Which generation will pay for what the government spends? The answer to this question is obviously important for assessing generational equity, but it is also central to the issues of national saving, investment, and growth. Letting those of us currently alive off the

hook in paying the government's bills permits us to consume more, which lowers national saving. Reduced national saving translates into reduced domestic investment, which translates into slower growth in capital per worker, which ultimately means slower growth in real wages. Reduced national saving also leads to trade deficits as foreign savers fill in for Americans in investing in the U.S.

Knowing which generations pay is also critical for stabilization policy. Reducing fiscal burdens on current generations at the price of increased burdens on future generations will stimulate consumption of current generations. In addition, policies that redistribute toward older generations will expand current consumption demand. The reason is that older generations, because they have fewer years left to live, have higher propensities to consume their available resources than do younger generations.

DOES THE DEFICIT MEASURE WHICH GENERATION PAYS?

Unfortunately, the Federal deficit does not record a great deal of the government's generational policy. Take, for example, the huge expansion of the "pay-as-you-go" social security system in the 1960s and 1970s. As is well known, this method of financing social security has transferred great sums of money to those generations who retired in and around those two decades. Much of the bill for that transfer was handed to young and middle age workers in the form of higher payroll taxes. The rest of the bill will be paid by future generations who will most likely face even higher payroll taxes. Because of the manner in which the government choose to describe (label) social security contributions and benefit payments, this enormous intergenerational redistribution had no effect on the government's deficit. Had the government historically chosen to account for social security differently, by including the growth of the system's implicit liabilities in the deficit, official U.S. debt would be more than three times its current value.

Another example of generational policy not captured by the deficit is a switch from consumption to income taxation that is "revenue neutral." Such a policy can redistribute substantial sums to current old generations from both current young and future generations. The reason is that compared with a consumption tax, the current elderly will pay much less in taxes to the government than under an income tax. If the current elderly pay less and the government's consumption spending is not altered, other generations will have to pay more. This type of structural tax change is not purely hypothetical. Between 1960 and 1990 the share of consumption taxes in combined Federal, state, and local taxes declined from almost one third to less than a quarter.[1]

A third example is government policy that alters the market value of previously accumulated assets. Take the case of an investment incentive that lowers the market value of existing capital. Since the elderly hold most of the existing capital, this policy redistributes from the elderly to middle age, young, and future generations who are able to purchase the same physical existing capital stock, but at a lower price. Again, this redistribution does not show up on the government's books.

A fourth example of generational policy missed by the deficit is a balanced budget change in the structure of government transfer payments that pays for increased (reduced) transfer payments to the elderly, by reducing (increasing) transfer payments to the young and middle age.

A fifth example is preannounced policies which redistribute across generations. An example here is the 1983 U.S. legislation that reduced the prospective social security benefits of baby boomers by about one fifth. While this piece of legislation had no impact on the 1983 deficit, it certainly represented very significant generational policy.

These and other examples indicate that, as a measure of generational policy, the deficit's problems run much deeper than is commonly believed. One could correct the Federal deficit for many things—inflation, growth, the business cycle, government assets, and state and local surpluses—and still end up with a measure of fiscal policy that misses "pay-as-you-go" social security schemes, "revenue neutral" changes in the tax and transfer structure, policies that redistribute through asset markets, and policies that are preannounced.

USING GENERATIONAL ACCOUNTS TO MEASURE GENERATIONAL POLICY?

How should we measure the government's generational policies? The answer suggested by economic theory is with generational accounts. Generational accounts indicate in present value what the typical member of each generation can expect, on net, to pay now and in the future to the government. A generational account is thus a set of numbers, one for each existing generation, indicating the average remaining

lifetime burden imposed by the government on members of the generation. The proper use of these accounts leads to an assessment of generational policy that is independent of the words the government uses to label its receipts and payments.

Generational accounts indicate not only what existing generations will pay, but also the likely payments required of future generations. The burden on future generations is determined by working through the government's intertemporal budget constraint. This constraint says that the present value of the government's spending on goods and services cannot exceed the sum of three terms: (1) the government's net wealth, (2) the present value of net payments by current generations (the sum of the generational accounts multiplied by the number of people in each generation), and (3) the present value of net payments of future generations. In other words, the government must ultimately pay for its spending with its current assets or with resources obtained from current and future generations. At any point in time we can project the present value of the government's spending and also estimate terms (1) and (2). By subtracting (1) and (2) from the present value of government spending we can determine the aggregate present value burden on future generations.

How will the total burden on all future generations be spread over the particular generations showing up in the future? No one knows for sure. But let's assume the burden is spread smoothly across all future generations, such that each new generation's burden keeps pace with the economy's rate of productivity growth. Then knowing the total amount future generations will pay and projecting the number of people showing up in the future, one can determine the growth-adjusted burden (generational account) on the average Americans who will be born in the future.

GENERATIONAL ACCOUNTS—AN ILLUSTRATION

The attached tables draw on our paper "Generational Accounts—A Meaningful Alternative To Deficit Accounting," (National Bureau of Economic Research Working Paper no. 3589, January 1991) which we co-authored with Dr. Jagadeesh Gokhale of the Federal Reserve Bank of Cleveland. As discussed in the paper the receipts and payments underlying generational accounts are derived in a manner that is consistent with Federal, state, and local government deficits as reported in the National Income and Product Accounts.

Tables 1 and 2 indicate the generational accounts for males and females, respectively, based on policy as of 1989; i.e., they do not take into account the 1990 budget agreement. Tables 3 and 4 repeat Tables 1 and 2 except they incorporate the 1990 budget deal, which we assume will be in effect for five years.

The tables indicate three things. First, they specify each age-sex group's generational account. This is the present value net payment that members of each age-sex group can expect to pay, on net, to the government over their remaining lifetimes. Second, the tables provide a decomposition of each age-sex group's generational account into the different present value payments and receipts that are netted against each other to form the generational account. Third, the tables indicate the implied burden on future generations based on our illustrative assumption that policy toward future generations remains unchanged and the lifetime bill facing each new generation after 1989 is identical except for an adjustment for growth. 2 As discussed below, there are certainly other ways to use the accounts to document the imbalance in generational policy.

The usefulness of these accounts is in (1) comparing their values with and without a particular policy change and (2) comparing the burden on future generations (the last row in the tables) with the burden on the youngest members of current generations, namely newborns. These comparisons, rather than the initial level of the accounts, should be the focus of attention. One should also bear in mind that these accounts are forward-looking and, as such, do not describe the past treatment of different generations; while it is tempting to compare the level of the accounts of existing generations, the fact that 40 year old males can expect, in present value, to pay more in the future than they receive, while the reverse is true for 65 year old males, does not necessarily mean the government is treating 40 year old males unfairly. Males who are now 65 years old paid considerable taxes when they were younger, and those past taxes are not included in this analysis.

A second reason to focus on policy-induced changes in the accounts and on comparisons of future generations with current newborns is that such analyses are not sensitive to the choice of labels attached to government receipts and payments. In contrast, the initial level of the accounts (with the exception of the accounts for newborns and future generations) are sensitive to the choice of accounting labels. An example of an accounting label is the decision to characterize social security contributions as "taxes" rather than as a "loan" from workers to the government.

Tables 1 and 2 indicate that prior to 1990 budget agreement U.S. fiscal policy was out of generational balance in the sense that the burden on future generations was 21 percent larger than that on 1989 newborns. The 1990 budget agreement substantially lowered that differential treatment; according to Tables 3 and 4 the difference in treatment of future generations and 1990 newborns is 12 percent. By comparing Tables 1 and 3 and Tables 2 and 4 one can learn the impact of the budget agreement on current generations. For example, 40 year old males lost, on average, an estimated $900 in present value as a result of the budget agreement, while 20 year old females lost only $400 in present value.

THE COST TO CURRENT AMERICANS OF CORRECTING THE GENERATIONAL IMBALANCE IN POLICY

What would it cost Americans now alive to keep future Americans from paying a bigger share of their lifetime incomes to the government than the share current newborns are scheduled to pay? One way to answer this question is to calculate the size of the immediate and permanent increase in income or other tax rates that would equalize the burden on current and future newborns. An immediate increase in, for example, consumption tax rates would make almost everyone who is currently alive pay more, not only those who have just been born.

If the U.S. chose to raise immediately and permanently income tax rates, the required increase in the average rate would be 5.3 percent, which would raise the average rate from 14.5 percent to 15.3 percent.[3] This assumes that state and local income taxes would be increased as well as Federal income taxes. Simply raising Federal income taxes to equalize generational burdens necessitates a 6.5 percent increase in the average Federal income tax rate.[4]

If instead, the U.S. eliminated the extra burden on future generations by immediately and permanently raising payroll taxes, they'd have to rise by 7.8 percent, with the 12.8 percent average tax rate increasing to 13.8 percent.[5] Alternatively, average sales/excise tax rates could be immediately and permanently increased by 10.2 percent, from a rate of 13.2 percent to a rate of 14.5 percent.[6] Finally, if the U.S. chose to immediately and permanently raise capital income taxes, the average capital income tax rate would climb by 14.3 percent, from a rate of 25.1 percent to a rate of 28.7 percent.[7]

Each of these different methods of achieving generational balance produces different tax receipts and different deficits this year and through time. This is just one more indication that generational balance and budget balance bear no intrinsic relation. The largest increase in immediate annual revenue—$37 billion—would arise in the case of payroll taxation, the smallest increase—$33 billion—would occur if one used capital income taxation.[8]

Permanently raising average tax rates, regardless of which ones, means that future generations will pay these higher taxes as well. If income taxes are raised to equalize the accounts of current and future newborns, the equalizing value is $76,089. It is $76,350 for the payroll tax, $76,576 for the sales/excise tax, and $75,641 for the capital income tax. Even the largest of these four figures is only 4 percent larger than the $73,716 today's newborns will pay under current policy. Hence, if current Americans pay a bit more now, one can eliminate the need for future Americans to pay a lot more later.

Table 5 indicates how much more existing and subsequent generations will pay under the four different approaches to equalizing generational burdens. The numbers are present values and are in thousands of dollars. The required payments aren't staggeringly large, but they aren't trivial. Take the case of an increase in the income tax. For a middle age female the increase in her generational account is about $2,500. For middle age males the additional present value bill averages about $5,300. With the exception of the very old, who pay only a couple of hundred dollars more, raising the income tax would represent a goodly loss to those currently alive, with the biggest absolute burden falling on baby boomers. However, compared with the costs to current generations, the gains to future generations are quite substantial. By paying for more of the government's spending, current generations would, in the case of an income tax increase, lower the projected burdens on future males (females) by a growth-adjusted $13,500 ($6,600).

Which tax is increased makes a big difference for which generation will be hit the hardest. For example, under the payroll tax increase males age 70 pay only $300 more on average, while under the capital income tax increase, they pay an additional $2,700. The choice of taxes also determines how the burden is split between males and females. If the sales/excise tax is increased, the additional bills faced by current females of a particular age will be as large or almost as large as those faced by cur-

rent males of the same age. The reason is that U.S. females pay proportionately more in sales and excise taxes than they do in income and payroll taxes.

USING GENERATIONAL ACCOUNTING TO DETECT GENERATIONAL POLICY

Table 6 considers three hypothetical policies, each of which has a significant impact on the U.S. generational distribution of fiscal burdens. Only the first of these policies alters the U.S. Federal deficit. This policy (reported in Column 1) is a five year, 20 percent reduction in the average Federal income tax rate. At the end of the tax cut, the tax rate is increased above its initial value in order to maintain constant the ratio of U.S. debt (including the newly accumulated government debt) to GNP; i.e., the tax rate increase is sufficient to cover the product of the interest rate less the growth rate, times the additional accumulated stock of government debt.

The second policy, reported in Column 2, is an immediate and permanent 20 percent increase in social security retirement and disability benefits financed on a pay-as-you-go basis by increases in payroll taxes. The third policy, reported in Column 3, involves an equal revenue switch in the tax structure. Specifically, payroll taxes are reduced immediately and permanently by 30 percent, and the reduced revenue is made up by increases in consumption taxes, which, in the U.S. context, means increases in sales and excise taxes. The fourth policy, reported in Column 4, involves the elimination of U.S. investment incentives.[9]

There are several points to make about the results of these policy experiments. First, the magnitude and pattern of intergenerational redistribution bears no necessary relation to the reported deficit. The tax cut policy of Column 1 generates over three quarters of a trillion dollars of official debt, but does substantially less damage to the young and future generations than the pay-as-you-go social security benefit increase in Column 2, which leads to zero increase in official I.O.U.s. For instance, under the tax cut policy males age 20 lose, on average, $1,700 in present value. Under the social security benefit increase policy, they lose $5,300, which is over three times as much.

Second, some policies that redistribute to current older generations do so primarily to the detriment of current young generations, rather than future generations. Column 4, involving the elimination of investment incentives, illustrates this point. This policy does most of its damage to generations who are now young; the increased payment required of future males is only $200, while 20 year old males lose $2,300. Of course, policies that just redistribute from the current young to the current old could end up hurting future generations as well if these policies are reactivated during the years such generations are young.

Third, by using generational policies that don't show up in the official deficit, one can easily offset the generational impact of policies that do. For example, one could overcome the generational impacts of the tax cut of Column 1 by running the reverse of the policy in Column 4, i.e., by increasing, rather than decreasing investment incentives and, thereby, reversing the sign of all the numbers in Column 4.

Fourth, since changes in a generation's consumption decisions depend, according to economic theory, on changes in each generation's total projected lifetime payments, generational accounting, such as that in Tables 5 and 6, indicates the true stimulus to aggregate demand of policy changes. In contrast, as the examples in Table 6 show, the deficit need bear no relationship to the underlying stimulus to consumption. Thus, generational accounting provides a better guide than the deficit to stabilizing the economy and assessing the impact of policy on saving.

ADVANTAGES OF GENERATIONAL ACCOUNTING

Generational accounting automatically deals with each of the major concerns raised by those who think the deficit is conceptually sound, but simply needs to be adjusted. It deals with inflation by measuring all payments and receipts in inflation-adjusted (constant) dollars. It nets all the government's real assets against all its real liabilities (including liabilities like the S&L bailout) to form the value of government net worth which is ultimately used to help determine the burden on future generations. It directly considers the government's implicit obligations to future transfer payments (e.g., on welfare benefits) and future spending (e.g., on national parks) and the public's implicit obligations to pay future taxes. It accounts for state and local as well as Federal Government fiscal policy. Finally, in projecting transfers, spending, and taxes through time and the implied burden on future generations, generational accounting deals with the question of economic growth, including growth associated with demographic change.

Much recent work by government economists has focused on different components of the total present value fiscal bill we hand future generations as well as the value

of the government's assets on hand to help finance government consumption spending. This work can be directly utilized to improve the accuracy of generational accounting. To a large extent generational accounting should be understood as a method for dealing systematically and comprehensively with a range of important questions about the government's fiscal policy that have been examined in separate studies by government and academic economists.

ENDNOTES

(1) An opposite switch in the tax structure occurred in the U.S. during the period 1981 through 1986. During these years the Accelerated Cost Recovery System of depreciation moved the effective tax structure away from income taxation toward consumption taxation. The 1986 reversal of these provisions then moved the tax structure back toward income taxation.

(2) The terms r and g in the tables stand, respectively, for the assumed pre-tax real rate of discount and the growth rate.

(3) The average rate here is defined as all Federal, state, and local income taxes divided by NNP. The data are from 1989.

(4) The average Federal income tax rate is 11.8 percent for 1989. It is measured as Federal income taxes divided by NNP.

(5) The average payroll tax rate is defined as total Federal, state, and local payroll taxes divided by total U.S. labor income. The data are from 1989.

(6) The average sales/excise tax is defined as total Federal, state, and local indirect business taxes divided by U.S. personal consumption expenditure. All data used in the calculation are from 1989.

(7) The average capital income tax rate is measured as our estimate of total Federal, state, and local capital income tax revenue divided by total U.S. capital income. All data are from 1989.

(8) Compared with increasing payroll taxes, increasing capital income taxes makes the current elderly also pay to help correct the generational policy imbalance. For a given amount of additional annual revenue, the present value of the payments of all current generations combined is larger under the capital income tax than under the payroll tax; raising the capital income tax raises the current elderly's present value of projected net tax payments, but also the projected present value net payments of the current young and middle age, who will pay these higher capital income taxes in the future. Thus one can collect fewer dollars from the capital income tax and still equalize generational burdens because each dollar raised under the capital income tax does double duty in raising the present value of net payments of those currently alive.

(9) To understand how this policy alters the generation accounts, we need to clarify our treatment of investment incentives in our generational accounting. Specifically, the reduction in the market value of existing capital arising from investment incentives is treated as a one time tax paid by the owners of this capital; i.e., rather than value this capital at market prices, we valued it at replacement cost less a tax discount. The elimination of investment incentives is then treated as the elimination of this one time tax discount (as opposed to treating it/labeling it as a capital gain). In addition, we treat the increase in the effective capital income tax rate as an increase in aggregate capital income taxes equal to the product of the interest rate less the growth rate times the initial tax discount on existing capital. This is the first year increase in capital income taxes. Subsequent year increases in capital income taxes equal the first year increase times the appropriate growth factor.

Table 1.—THE COMPOSITION OF MALE GENERATIONAL ACCOUNTS (r=.06, g=.00075), PRESENT VALUES OF RECEIPTS AND PAYMENTS

[Thousands of dollars]

Generation's age in 1989	Net payment	Payments						Receipts					
		Labor income taxes	FICA taxes	Excise taxes	Capital income taxes	Seignorage	Property taxes	OASDI	HI	Welfare AFDC	Welfare general	UI	Food stamps
0	73.7	24.8	26.5	22.9	9.5	0.0	1.6	4.5	1.1	0.3	4.4	1.0	0.3
5	93.2	31.8	34.0	26.3	12.2	0.1	2.0	5.5	1.5	0.4	4.3	1.2	0.4
10	116.8	40.8	43.6	29.8	15.6	0.1	2.6	6.7	1.9	0.5	4.6	1.6	0.5
15	145.3	52.2	55.8	32.8	20.0	0.1	3.3	8.1	2.4	0.6	5.1	2.0	0.7

Table 1.—THE COMPOSITION OF MALE GENERATIONAL ACCOUNTS (r=.06, g=.00075), PRESENT VALUES OF RECEIPTS AND PAYMENTS—Continued

[Thousands of dollars]

Generation's age in 1989	Net payment	Payments						Receipts					
		Labor income taxes	FICA taxes	Excise taxes	Capital income taxes	Seignorage	Property taxes	OASDI	HI	Welfare AFDC	Welfare general	UI	Food stamps
20	169.1	61.9	66.2	33.9	24.8	0.1	4.1	9.5	2.9	0.7	5.3	2.4	0.8
25	193.0	70.3	75.1	35.8	32.4	0.1	5.3	12.0	3.8	0.9	5.6	2.6	0.9
30	194.5	69.6	74.4	34.2	38.4	0.1	6.1	14.3	4.6	0.8	5.4	2.3	0.9
35	186.0	65.2	69.7	32.0	43.8	0.0	6.9	17.2	5.7	0.6	5.2	2.0	0.8
40	176.2	60.9	65.1	30.5	49.8	0.0	7.6	21.9	7.4	0.5	5.3	1.8	0.7
45	155.4	54.4	58.1	28.7	54.2	0.0	7.8	29.8	10.0	0.4	5.5	1.5	0.6
50	114.1	42.1	45.0	24.4	52.1	0.0	7.1	37.1	12.4	0.3	5.4	1.1	0.5
55	69.7	31.0	33.2	20.8	48.7	0.0	6.6	47.9	16.0	0.2	5.4	0.7	0.4
60	18.9	20.2	21.5	17.9	44.1	0.0	6.1	62.6	22.0	0.1	5.6	0.3	0.3
65	−31.8	9.1	9.7	14.7	37.0	0.0	5.4	71.2	30.7	0.0	5.6	0.0	0.2
70	−42.7	4.0	4.3	11.9	29.3	0.0	4.5	61.9	29.6	0.0	4.9	0.0	0.2
75	−41.5	1.8	2.0	9.5	22.5	0.0	3.7	48.9	27.9	0.0	4.1	0.0	0.1
80	−35.6	0.6	0.6	7.5	17.2	0.0	3.0	36.9	24.4	0.0	3.0	0.0	0.1
85	−28.2	0.0	0.0	6.1	14.3	0.0	2.4	28.2	20.9	0.0	1.8	0.0	0.1
90	−1.5	0.0	0.0	1.2	6.7	0.0	0.5	5.4	4.2	0.0	0.2	0.0	0.0
Future generations	89.5												

Table 2.—THE COMPOSITION OF FEMALE GENERATIONAL ACCOUNTS (r=.06, g=.0075), PRESENT VALUES OF RECEIPTS AND PAYMENTS

[Thousands of dollars]

Generation's age in 1989	Net payment	Payments						Receipts					
		Labor income taxes	FICA taxes	Excise taxes	Capital income taxes	Seignorage	Property taxes	OASDI	HI	Welfare AFDC	Welfare general	UI	Food stamps
0	36.4	14.0	14.9	20.2	3.5	0.0	2.1	5.0	1.5	2.3	7.8	0.4	1.3
5	46.5	17.7	18.9	23.0	4.5	0.0	2.6	6.1	1.9	2.9	7.2	0.6	1.7
10	60.4	23.3	24.9	27.2	5.9	0.1	3.5	7.5	2.5	3.8	7.8	0.7	2.2
15	70.7	28.1	30.1	29.0	7.2	0.1	4.2	8.6	3.0	4.6	8.2	0.9	2.6
20	85.5	34.8	37.2	32.2	9.3	0.0	5.4	10.9	3.9	5.2	9.2	1.1	3.3
25	91.0	36.3	38.8	33.2	11.7	0.0	6.5	13.1	4.8	4.5	9.0	1.1	3.0
30	90.9	35.1	37.5	33.1	14.9	0.0	7.4	15.7	6.1	3.5	8.5	1.0	2.4
35	86.9	32.9	35.2	32.1	18.3	0.0	8.1	18.6	7.7	2.5	8.2	0.9	1.9
40	78.2	29.7	31.7	30.1	21.4	0.0	8.6	21.9	9.8	1.7	7.8	0.7	1.4
45	62.9	25.4	27.2	27.4	23.8	0.0	8.9	27.0	12.6	1.0	7.6	0.6	1.0
50	41.0	20.4	21.8	24.2	25.0	0.0	8.9	34.0	16.3	0.6	7.3	0.4	0.7
55	11.7	14.9	15.9	20.8	24.9	0.0	8.7	43.9	21.3	0.2	7.2	0.3	0.5
60	−22.5	9.3	9.9	17.4	23.4	0.0	8.2	55.1	27.8	0.0	7.2	0.2	0.4
65	−53.7	4.8	5.1	14.2	20.8	0.0	7.6	61.2	37.4	0.0	7.2	0.1	0.4
70	−60.2	2.0	2.2	11.5	17.3	0.0	6.9	56.5	36.8	0.0	6.5	0.0	0.3
75	−57.9	0.7	0.7	9.1	13.2	0.0	6.0	47.4	34.5	0.0	5.5	0.0	0.3
80	−50.8	0.0	0.0	7.2	8.8	0.0	5.1	37.4	29.9	0.0	4.5	0.0	0.2
85	−42.7	0.0	0.0	5.8	4.5	0.0	4.2	28.7	24.7	0.0	3.6	0.0	0.2
90	−7.4	0.0	0.0	1.0	0.4	0.0	0.7	4.7	4.2	0.0	0.6	0.0	0.0
Future generations	44.2												

Table 3.—THE COMPOSITION OF MALE GENERATIONAL ACCOUNTS (r=.06, g=.0075), PRESENT VALUES OF RECEIPTS AND PAYMENTS, THE 1990 BUDGET AGREEMENT, ALL CHANGES TEMPORARY (CASE C)

[Thousands of dollars]

Generation's age in 1989	Net payment	Payments						Receipts					
		Labor income taxes	FICA taxes	Excise taxes	Capital income taxes	Seignorage	Property taxes	OASDI	HI	Welfare AFDC	Welfare general	UI	Food stamps
0	73.8	24.8	26.5	23.0	9.5	0.0	1.6	4.5	1.1	0.3	4.4	1.0	0.3
5	93.3	31.8	34.0	26.4	12.2	0.1	2.0	5.5	1.5	0.4	4.3	1.2	0.4
10	117.0	40.8	43.6	30.0	15.6	0.1	2.6	6.7	1.9	0.5	4.6	1.6	0.5
15	145.6	52.2	55.8	33.0	20.0	0.1	3.3	8.1	2.4	0.6	5.1	2.0	0.7
20	169.6	62.0	66.3	34.1	24.8	0.1	4.1	9.5	2.9	0.7	5.3	2.4	0.8
25	193.8	70.4	75.4	36.1	32.4	0.1	5.3	12.0	3.8	0.9	5.6	2.6	0.9
30	195.4	69.8	74.7	34.6	38.5	0.1	6.1	14.3	4.6	0.8	5.4	2.3	0.9
35	186.9	65.4	70.0	32.3	43.9	0.0	6.9	17.2	5.7	0.6	5.2	2.0	0.8
40	177.1	61.1	65.4	30.9	49.9	0.0	7.6	21.9	7.4	0.5	5.3	1.8	0.7
45	156.4	54.5	58.4	29.1	54.3	0.0	7.8	29.8	10.0	0.4	5.5	1.5	0.6
50	115.0	42.3	45.3	24.7	52.3	0.0	7.1	37.1	12.4	0.3	5.4	1.1	0.5
55	70.5	31.2	33.4	21.1	48.8	0.0	6.6	47.9	16.0	0.2	5.4	0.7	0.4
60	20.0	20.2	21.7	18.1	44.3	0.0	6.1	62.6	21.6	0.1	5.6	0.3	0.3
65	−30.6	9.1	9.8	15.0	37.1	0.0	5.4	71.2	29.9	0.0	5.6	0.0	0.2
70	−41.5	4.0	4.3	12.1	29.4	0.0	4.5	61.9	28.8	0.0	4.9	0.0	0.2
75	−40.3	1.9	2.0	9.7	22.6	0.0	3.7	48.9	27.0	0.0	4.1	0.0	0.1
80	−34.6	0.6	0.6	7.6	17.2	0.0	3.0	36.9	23.6	0.0	3.0	0.0	0.1
85	−26.9	0.0	0.0	6.2	14.4	0.0	2.4	28.2	19.8	0.0	1.8	0.0	0.1
90	−1.5	0.0	0.0	1.2	6.7	0.0	0.5	5.4	4.2	0.0	0.2	0.0	0.0
Future generations	83.1												

Table 4.—THE COMPOSITION OF FEMALE GENERATIONAL ACCOUNTS (r=.06, g=.0075), PRESENT VALUES OF RECEIPTS AND PAYMENTS, THE 1990 BUDGET AGREEMENT, ALL CHANGES TEMPORARY (CASE C)

[Thousands of dollars]

Generation's age in 1989	Net payment	Payments						Receipts					
		Labor income taxes	FICA taxes	Excise taxes	Capital income taxes	Seignorage	Property taxes	OASDI	HI	Welfare AFDC	Welfare general	UI	Food stamps
0	36.5	14.0	14.9	20.3	3.5	0.0	2.1	5.0	1.5	2.3	7.8	0.4	1.3
5	46.6	17.7	18.9	23.1	4.5	0.0	2.6	6.1	1.9	2.9	7.2	0.6	1.7
10	60.6	23.3	24.9	27.4	5.9	0.1	3.3	7.5	2.5	3.8	7.8	0.7	2.2
15	71.0	28.2	30.1	29.1	7.2	0.1	4.2	8.6	3.0	4.6	8.2	0.9	2.6
20	85.9	34.9	37.3	32.4	9.3	0.0	5.4	10.9	3.9	5.2	9.2	1.1	3.3
25	91.5	36.4	38.9	33.5	11.7	0.0	6.5	13.1	4.8	4.5	9.0	1.1	3.0
30	91.4	35.2	37.7	33.5	14.9	0.0	7.4	15.7	6.1	3.5	8.5	1.0	2.4
35	87.5	33.0	35.4	32.4	18.3	0.0	8.1	18.6	7.7	2.5	8.2	0.9	1.9
40	78.8	29.8	31.9	30.4	21.4	0.0	8.6	21.9	9.8	1.7	7.8	0.7	1.4
45	63.5	25.5	27.3	27.7	23.8	0.0	8.9	27.0	12.6	1.0	7.6	0.6	1.0
50	41.6	20.5	21.9	24.5	25.1	0.0	8.9	34.0	16.3	0.6	7.3	0.4	0.7
55	12.2	14.9	16.0	21.1	25.0	0.0	8.7	43.9	21.3	0.2	7.2	0.3	0.5
60	−21.7	9.3	10.0	17.6	23.5	0.0	8.2	55.1	27.4	0.0	7.2	0.2	0.4
65	−52.5	4.8	5.2	14.4	20.8	0.0	7.6	61.2	36.5	0.0	7.2	0.1	0.4
70	−58.9	2.1	2.2	11.7	17.3	0.0	6.9	56.5	35.8	0.0	6.5	0.0	0.3
75	−56.6	0.7	0.7	9.3	13.2	0.0	6.0	47.4	33.4	0.0	5.5	0.0	0.3
80	−49.6	0.0	0.0	7.3	8.9	0.0	5.1	37.4	28.9	0.0	4.5	0.0	0.2
85	−41.1	0.0	0.0	5.9	4.5	0.0	4.2	28.7	23.3	0.0	3.6	0.0	0.2
90	−7.4	0.0	0.0	1.0	0.4	0.0	0.7	4.7	4.2	0.0	0.6	0.0	0.0

Table 4.—THE COMPOSITION OF FEMALE GENERATIONAL ACCOUNTS (r=.06, g=.0075), PRESENT VALUES OF RECEIPTS AND PAYMENTS, THE 1990 BUDGET AGREEMENT, ALL CHANGES TEMPORARY (CASE C)—Continued

[Thousands of dollars]

Generation's age in 1989	Net payment	Payments						Receipts					
		Labor income taxes	FICA taxes	Excise taxes	Capital income taxes	Seignorage	Property taxes	OASDI	HI	Welfare AFDC	Welfare general	UI	Food stamps
Future generations...	41.1												

Table 5.—ADDITIONAL PRESENT VALUE OF NET PAYMENTS NEEDED TO EQUALIZE GENERATIONAL BURDENS

[Thousands of dollars]

	Tax to be increased			Capital income tax
	Income tax	Payroll tax	Sales/Excise tax	
Males				
Ages:				
0	1.8	2.1	2.3	1.4
10	3.0	3.4	3.0	2.3
20	4.5	5.0	3.3	3.5
30	5.4	5.5	3.3	5.1
40	5.2	4.7	2.9	6.1
50	4.2	3.2	2.3	5.9
60	2.6	1.4	1.7	4.6
70	1.2	.3	1.1	2.7
80	.5	0	.6	1.4
Future Generations	−13.5	−13.1	−12.9	−13.9
Females				
Ages:				
0	1.0	1.2	2.1	.5
10	1.6	2.0	2.7	.9
20	2.2	2.8	3.1	1.3
30	2.5	2.7	3.2	1.8
40	2.5	2.3	2.9	2.0
50	2.1	1.5	2.3	3.0
60	1.3	.6	1.6	2.5
70	.7	.2	1.1	1.1
80	2	0	.6	.6
Future generations	−6.6	−6.3	−5.5	−7.0

Table 6 —CHANGES IN GENERATIONAL ACCOUNTS ARISING FROM FOUR HYPOTHETICAL POLICIES

[Thousands of dollars]

	5 year tax cut	20 percent Social Security benefit increase	Shifting from payroll to sales and excise taxes	Eliminating investment incentives
Males				
Ages:				
0	1.6	2.7	.8	.9
10	2.6	3.9	−1.7	1.5
20	1.7	5.3	−6.6	2.3
30	.3	4.8	−8.4	2.1
40	−2.2	2.0	−6.8	.2

Table 6.—CHANGES IN GENERATIONAL ACCOUNTS ARISING FROM FOUR HYPOTHETICAL POLICIES—Continued

[Thousands of dollars]

	5 year tax cut	20 percent Social Security benefit increase	Shifting from payroll to sales and excise taxes	Eliminating investment incentives
50	−3.5	−3.1	−3.2	−2.5
60	−3.8	−10.4	1.1	−4.7
70	−2.0	−10.5	3.1	−5.0
80	−1.2	−6.0	2.3	−4.0
Future generations	1.5	3.1	.5	.2
Females				
Ages:				
0	.8	1.0	3.3	.2
10	1.4	1.5	3.0	.6
20	.4	1.8	1.3	.8
30	.2	.7	1.8	1.2
40	−.8	−1.2	2.3	.6
50	−1.5	−4.7	3.0	−.5
60	−1.6	−10.0	3.7	−1.8
70	−1.1	−10.0	3.6	−2.4
80	−.7	−6.4	2.4	−2.9
Future generations	.8	1.1	3.7	.1

PREPARED STATEMENT OF ROBERT D. REISCHAUER

Mr. Chairman, I appreciate this opportunity to discuss developing and using Federal budget information to improve long-range decisionmaking. The Federal budget serves a number of important planning purposes: it can be used to affect economic growth, to allocate scarce public resources, and to address concerns about income distribution, including the distribution of income among generations. The Congressional Budget Office (CBO) and others have been working on ways to improve the budget as a source of information for decisionmakers. Important strides have been made, such as credit reform, but much remains to be done.

My statement today will focus on the following topics:

- The budget outlook over the next five years under current policies;
- The effect of the budget on national saving and longer-run economic growth;
- Budgetary issues involving the allocation of resources, particularly the government's contingent liabilities; and
- Distributional issues and the generational accounting framework.

THE BUDGET OUTLOOK THROUGH 1996

Some major temporary factors will push the Federal deficit to around $300 billion in 1991, but the budgetary situation should improve markedly after 1992. The main reason for such improvement is that the temporary factors—the recession and the debacle in the savings and loan industry—begin to fade, and the savings from last year's budget agreement grow. The Omnibus Budget Reconciliation Act of 1990 will reduce Federal borrowing over the next five years by nearly $500 billion, and sharply reduce the annual deficit both in dollars and in relation to gross national product (GNP). By 1995, assuming that the new legal limits on spending are maintained, CBO projects that the total Federal deficit will fall below $100 billion for the first time in 15 years and below 1 percent of GNP for the first time in 20 years (see Table).

Two other measures of the Federal deficit are frequently used for analyzing policy. One is the deficit excluding deposit insurance. Outlays for deposit insurance to resolve failed institutions do not have significant effects on the economy or on interest rates. Federal outlays to close or subsidize the sale of insolvent savings and loan institutions and banks will total about $100 billion in 1991 and again in 1992. After that, however, these outlays will decline sharply, and turn negative in 1995 and 1996—in part because of the return of working capital. Excluding deposit insur-

ance, CBO estimates that the Federal deficit will decline gradually from about $200 billion in 1991 to about $100 billion in 1996.

CBO PROJECTIONS OF FEDERAL REVENUES, OUTLAYS, AND DEFICITS

[By fiscal year]

	1991	1992	1993	1994	1995	1996
In Billions of Dollars						
Totals Assuming Discretionary Caps [1]						
Revenues	1,093	1,169	1,251	1,331	1,415	1,495
Outlays	1,402	1,463	1,472	1,501	1,484	1,561
Deficit	309	294	221	169	69	66
Deficit Excluding Deposit Insurance	205	197	174	145	116	108
On-Budget Deficit (Excluding Social Security and Postal Service)	369	364	301	266	181	194
As a Percentage of GNP						
Totals Assuming Discretionary Caps [1]						
Revenues	19.4	19.5	19.5	19.5	19.5	19.4
Outlays	24.9	24.4	23.0	22.0	20.5	20.3
Deficit	5.5	4.9	3.5	2.5	0.9	0.9
Deficit Excluding Deposit Insurance	3.7	3.3	2.7	2.1	1.6	1.4
On-Budget Deficit (Excluding Social Security and Postal Service)	6.6	6.1	4.7	3.9	2.5	2.5
Memorandum:						
Gross National Product (In billions of dollars)	5,624	6,003	6,405	6,813	7,246	7,705

[1] The discretionary spending caps apply only through 1995. The 1996 figure is an extrapolation.
Source: Congressional Budget Office

The other deficit that receives considerable attention is the on-budget deficit, which excludes the receipts and outlays of the Postal Service and the main Social Security trust funds (Old-Age, Survivors and Disability Insurance). Because Social Security is projected to ran substantial surpluses for a number of years, the on-budget deficit is considerably higher than the total deficit. The on-budget deficit, projected at $369 billion in 1991, declines to, $194 billion in 1996.

THE EFFECT OF THE BUDGET ON NATIONAL SAVING AND ON ECONOMIC GROWTH

The budget deficit is one important, though imperfect, summary measure of the government's effects on national saving and economic growth. The deficit reflects the rate at which the government reduces prospects for growth by absorbing private saving that would otherwise be used to expand the private sector's capital stock, and with it the future size of the economy. That is the primary reason for concern about sustained large budget deficits.

For all its faults, the budget deficit gives a clear message about the implications of current budget policies for long-run growth. The substantial increase in government dissaving during the 1980s will make later generations worse off because it will leave the economy with a smaller capital stock. CBO and others have spelled out that message recently with the help of growth models, which quantify the relationship between changes in the budget deficit, national saving, and economic growth.

Some analysts, particularly Robert Eisner of Northwestern University, argue that the current measures overstate the budget deficit and that it is smaller than most people realize. Among the more frequent criticisms are that the budget deficit is not adjusted for inflation or for net governmental investment. For the most part, adjustments for these factors can be made.

However, such attempts at refining the measure of the budget deficit do not change the overall conclusion that CBO and many other analysts have reached over the last decade: that the government has absorbed far more of the nation's saving than in earlier periods and that the future standard of living is likely to be lower as a result.

CBO explored these measurement issues in a recent report, which provides more detailed analysis.[1] Here, I will only briefly discuss why the adjustments for inflation

[1] Congressional Budget Office, *The Federal Deficit: Does It Measure the Government's Effect on National Saving? (March 1990).*

and for government investment make little difference in conventional conclusions about fiscal policy. Economists often argue that inflation partially invalidates the usual measure of the Federal deficit. Inflation reduces the real value of the government debt. Part of net interest on the Federal debt, which increases budget outlays and the deficit, merely compensates bondholders for inflation. As a result, Eisner and others have argued that the deficit should be adjusted by subtracting the amount by which inflation cuts the real value of the outstanding debt in any year. But adjusting the budget deficit for the effects of inflation on the government debt does not change the conventional conclusion that deficits have risen sharply in recent years. As a result, the conclusions about the importance of reducing the deficit are unaffected.

As it turns out, adjusting the budget deficit for Federal net investment also does not make much difference. Eisner and others argue, correctly, that to the extent that the government spends money for infrastructure, human capital, and other purposes that represent public investments, such spending does not divert saving to current consumption. They therefore propose subtracting Federal investment in order to arrive at a more illuminating measure of the deficit.

Even after this adjustment is made, the deficit turns out to have grown sharply in the 1980s, reducing prospects for economic growth. First, the scale of the government's nonmilitary investment relative to the size of the economy has not increased compared with the 1960–1979 period. Second, the amount of Federal nonmilitary investment net of depreciation is relatively small. Gross investment by government is not small, but the estimated amount of depreciation on government capital is nearly as large.

Proposals for a Capital Budget

A number of analysts in the private sector, as well as the General Accounting Office, have advocated that the Federal Government adopt a capital budget. Doing so would mean removing Federal investment outlays from the conventional budget and accounting for them separately. Only the deficit in the remaining budgetary accounts, usually called the "operating budget" (which includes depreciation), would then be viewed as reducing national saving and reducing economic growth.

Capital budgeting has a number of limitations. Since it is difficult to determine which programs should be considered investments, political pressures would inevitably arise to classify more and more types of spending as investments in order to protect those programs from cuts intended to reduce the operating deficit. Health and nutrition programs are examples of expenditures that would be hard to classify: should they be included, and what about education programs?

Second, depreciation on government capital is extremely difficult to estimate. Because in many cases no market exists for the asset, its decline in value depreciation—must be estimated. The problem is difficult for physical assets, and much more so for investments in human resource, or intangible investments in research and development. And yet depreciation would play a critical role in a capital budget. The operating budget would include depreciation of capital assets as an outlay, while the capital budget would include depreciation on capital as a revenue source.

Third, and perhaps most important, maintenance of a dual capital-operating budget makes it less likely that the full resource costs will be taken into account when decisions are made. Fundamentally, the budget is about setting priorities and budgeting scarce resources. For budgetary control, there is an advantage in recognizing the full cost of a decision to acquire an asset, when the decision is made to allocate resources irrevocably to a particular use. Since decisionmakers would be likely to focus only on the operating budget, where only the current year's depreciation on Federal investments would appear, they may well ignore the full resource costs of investments.

Because of such limitations, analysts do not agree about the desirability of capital budgeting. For instance, more than 20 years ago the President's Commission on Budget Concepts considered capital budgeting but rejected it. In an effort to provide useful information, the Office of Management and Budget (OMB) routinely prepares a special analysis of the budget on Federal government investment, including projections. Since this arrangement highlights Federal investment—which is important for achieving long-term goals—it is perhaps the best available compromise.

How Productive is Federal Investment?

Some recent analyses, such as work done by David Aschauer of Bates College, have attributed very high returns to Federal investments in infrastructure (roads, sewers, and airports). Overall, however, the evidence suggests that government investment in such infrastructure, while productive, is not generally and significantly

more productive than private investment. This overall conclusion seems to fit other broad categories of government investment as well. Some programs and projects offer the prospect of reasonable returns on the investments, but it is very difficult to generalize. In that sense, the recent controversy over Aschauer's work illustrates a possible fallacy of capital budgeting—namely, that because an outlay is classified as an investment it is automatically promoting economic growth.

A case-by-case approach is necessary to assess the economic returns from government investments, including benefit-cost analysis of particular projects and programs. Benefit-cost analysis seeks to measure the streams of benefits and costs associated with an investment project, and to discount these flows so that they can be compared. A benefit-cost ratio of greater than one means that the project passes an important economic test: the investment pays at least as high a return as the average alternative use of the same resources. This is an appropriate criterion for decisions.

More Far-Reaching Critiques of Measuring the Budget Deficit

Some analysts have gone farther in their criticism of the Federal deficit as a measure of the Federal budget's effect on national saving. In particular, Alan Auerbach of the University of Pennsylvania and Laurence Kotlikoff of Boston University argue that current measures of the Federal deficit are economically arbitrary. For example, they contend that some programs that effect the conventional deficit could arbitrarily be reclassified as loans that would not have an impact on the deficit.

Such reclassification would change the measured deficit substantially without affecting the economic impact of fiscal policy. In particular, Auerbach and Kotlikoff argue that one could view at least part of the payments and receipts to the Social Security system as 'borrowing" and later as Joan repayments plus interest" rather than as "receipts" and "outlays" under the current terminology. Under one set of definitions, an increase in payments to the Social Security system would reduce the deficit. At the same time, under the alternative procedure, the payment would be borrowing, just like issuance of Treasury bonds, with no effect on the deficit. For reasons like these, Auerbach and Kotlikoff propose to deemphasize the conventional Federal deficit measure in favor of a comprehensive system of financial flows for each age group in the population.

Auerbach and Kotlikoff have a point, but there is room for disagreement about the seriousness of this limitation to the conventional deficit measure and whether their alternative is better. Individuals whose spending is limited by the size of their paycheck are unlikely to view payroll taxes as equivalent to a financial investment. For them, it is primarily a tax and not an act of voluntary lending. As discussed below, because most available budget data convey very little information about the future, a system of generational accounts, or an alternative analytic framework, may be a constructive addition even if one does not fully subscribe to Auerbach and Kotlikoff's criticism of the Federal budget.

RESOURCE ALLOCATION: THE GOVERNMENT'S CONTINGENT LIABILITIES

In addition to economic growth, the budget helps policymakers make decisions about allocating resources among different uses in the public and private sectors. Last year, the Omnibus Budget Reconciliation Act significantly improved the guidance that the budget offers regarding the longer-term consequences of Federal credit programs for allocating resources. Now, CBO and others are working on similar changes in the budgetary treatment of another Federal contingent liability program—deposit insurance.

Credit Reform

Analysts have long recognized that the conventional unified budget did not adequately treat the government's loan and loan guarantee programs, and the Omnibus Budget Reconciliation Act of 1990 provided for credit reform starting with fiscal year 1992. Before reform, government direct loans and loan guarantees providing comparable subsidies had very different effects on budgetary totals. For a direct loan program, the entire amount of the loan was shown as an outlay in the year in which it was disbursed. Repayment of a loan showed up as an offset to budget outlays in later years. In contrast, the impact of a loan guarantee typically would not show up at all in the budget until future years, when defaults occurred.

Still more important, the old budgetary treatment completely concealed the subsidies that beneficiaries of both direct Federal loans and loan guarantees draw from these programs over the long run. Federal credit programs carry subsidies by making credit available to their recipients on easier terms than would be available

in the private sector. These subsidies represent the true impact of Federal credit programs on the economy and on the allocation of resources.

Under credit reform in the recent Budget Enforcement Act, all direct government loans and loan guarantees will be analyzed to determine the present value of the government's subsidy over the entire life of the loan. The subsidy will be included as an outlay in the year in which the loans are disbursed. All other cash flows resulting from the credit programs will not affect the budget deficit.

This treatment for the government's loan and loan guarantee programs will be an improvement both in terms of the timing of their economic effects and in terms of budgetary control. The economic effects of these programs are more closely associated with providing subsidies than with the cash flows as they occur over long periods. In addition, from a budgeting or financial control standpoint, it is appropriate to register the outlay when the loan is disbursed rather than when the secondary cash flows transpire. Finally, credit reform places both types of credit programs on a more comparable basis—a basis that also makes it more feasible to compare credit assistance with other programs or approaches.

Mandating credit reform and actually carrying it out are two different things, however. Credit reform stands a reasonable chance of succeeding. But in some cases, it will be difficult to estimate the subsidy, and plausible alternative methods may yield substantially different results. The new outlay estimates, however, should be far more appropriate than the old ones.

Deposit Insurance

The current budgetary treatment of Federal deposit insurance suffers from many of the shortcomings of the old accounting for direct loans and guarantees. Federal contingent liabilities for deposit insurance typically arise much earlier than when cash payments are made—and long before the cost is first recognized in the budget. The Federal liability to resolve a given insolvent bank or thrift institution accrues when that institution first goes under—not when the government's cash payment resolving that institution is finally made. Moreover, many of the effects on allocating resources and the macroeconomy are felt when the public and financial institutions respond to the incentives deposit insurance provides.

The failure of cost to appear in the budget in a more timely manner has sometimes created the misleading impression that little or no cost was being incurred during certain periods, such as the mid-1980s. Now, the sudden appearance of bailout outlays, including funds for working capital, distorts the budget as a measure of the cost of current activities and events, and of the economic effects of the budget. That is the reason deposit insurance is excluded in one of the alternative definitions of the deficit in the budget outlook that I discussed earlier in my statement.

The Budget Enforcement Act of 1990 requires that both CBO and OMB do studies of the budgetary treatment of deposit insurance, in particular to consider whether "the accounting for Federal deposit insurance programs should be on a cash basis, on the same basis as loan guarantees, or on a different basis." There are some parallels between loan guarantees and deposit insurance, but there are significant differences as well. Thus far, it is unclear whether a change in accounting for deposit insurance on the order of credit reform might be feasible and useful to budgeting. CBO is currently working on a proposal for the budgetary treatment of deposit insurance, and expects that it will be included in the report which is due by the end of May.

Government-Sponsored Enterprises

The Budget Enforcement Act also calls on both CBO and the Treasury to complete by April 30th studies of the extent to which the Federal Government is exposed to loss from government-sponsored enterprises (GSEs), such as Fannie Mae, Freddie Mac, and FCS (Farm Credit System). Even though outstanding GSE obligations total over $950 billion at the end of calendar year 1990, our preliminary assessment suggests that the government's exposure is currently quite low, especially outside of the Farm Credit System. Nonetheless, it would be desirable to monitor the government's exposure to GSE risk, if only to give early warning of impending losses.

Social Security

Social Security (Old-Age, Survivors, and Disability Insurance) is in some respects a contingent budget liability. It is an entitlement program—anyone who meets the criteria for eligibility is entitled to benefits. Although future benefits are not "contractual," in the sense of being legally binding, it is useful to think of each year that passes as having created a claim on future government resources.

Isolating the Operations of the Social Security Trust Funds. The Budget Enforcement Act excludes the receipts and spending of the Social Security trust funds (as well as the Postal Service) from all calculations under the Balanced Budget Act; in one respect, this separation clarifies the longer-run situation. (The deficit after these exclusions and assuming the discretionary caps on spending is referred to as the "on-budget deficit.") Under current policies, the receipts to the Social Security trust fund plus interest on trust fund balances will significantly exceed the outlays for pensions until approximately 2020, after which the reverse will occur, and the trust fund balances will be exhausted around the middle of the century.

From the standpoint of economic policy, however, the on-budget deficit is not meaningful because the flows in Social Security (and the Postal Service) affect economic activity and the allocation of resources in the same way as the flows in other government accounts. The total government deficit, including Social Security, determines the government's drain on credit markets, and the amount of saving that it diverts from uses that promote growth in living standards. Therefore, CBO continues to present projections for the total deficit and the total deficit less deposit insurance, as well as for the "on-budget" deficit.

Long-Term Social Security Projections. For a number of years, the Social Security Administration has routinely made 75-year projections of Social Security contributions and expenditures. It has also estimated the present value of contributions and expenditures. The estimates of present value are useful in assessing whether the system is approximately self-financing over the 75-year horizon.

Long-Run Social Security Issues. The availability of long-term Social Security projections has dovetailed effectively with the development and use of long-run macroeconomic models. CBO now uses these budgetary data along with several long-run models to analyze the effects of policy changes particularly on economic growth.

I would like to indicate the kinds of Social Security issues that can be analyzed within this framework, and the advantages and limitations of this analysis. Many of the current proposals involving Social Security would lower the burden of the payroll tax on current wage earners while raising the burden on wage earners in the twenty-first century, when the ratio of retirees to workers will have increased substantially. Enacting such proposals would eliminate the surplus in the Social Security accounts that is being generated under current law. With the help of long-run economic models, long-term Social Security projections help answer the basic question: what is the effect of having a large surplus in the system now, and how will things be changed if the buildup in the trust fund does not take place?

The most important channel through which these changes in funding would affect the overall economy is through their effects on the total budget deficit and thereby on national saving. Our techniques for long-run analysis tell ins that if the current Social Security payroll tax rate were reduced by roughly two percentage points, and if no changes in other programs were made to keep the overall deficit the same, real GNP would he perhaps one-half percent lower around the turn of the century than it otherwise would be. This result stems from the reduced national saving and investment caused by the payroll tax reduction. If the changes in the deficit caused by modification in the funding of Social Security were offset by adjustments in other taxes or changes in government expenditures, however, the overall macroeconomic effects would be slight.

Analyzing such changes in Social Security policy also raises a number of important equity issues. Questions of equity among generations arise prominently since currently working generations would gain at the expense of later generations if the payroll tax were first reduced and then raised later as the retirement burden grows. In addition, issues of equity among classes of current taxpayers arise, since Social Security taxes are more regressive than most other major Federal taxes.

DISTRIBUTIONAL ISSUES: GENERATIONAL ACCOUNTING

In addition to economic growth and the allocation of resources, the budget helps policymakers make decisions concerning the distribution of income among different groups. We are all aware of the intense interest that sometimes attaches to questions about the impact of the budget or the tax system on the fortunes of people at different points on the income spectrum. More recently, however, interest has begun to focus on another aspect—the budget's impact on the well-being of different generations.

Much of the anxiety that attaches to the budget deficit is motivated by a vague concern that it represents a burden on later generations. In recent years, economists have been developing several models that are useful in analyzing this kind of issue. For instance, Don Fullerton of the University of Virginia and Diane Rogers of Pennsylvania State University have developed a long-run model that focuses on key

microeconomic behavior such as saving, investment, and work—a type of model referred to as a "dynamic general equilibrium model." Alan Auerbach and Laurence Kotlikoff have developed another approach called "generational accounting." I will focus my discussion on this latter approach because you have requested that CBO examine it.

The system of generational accounts, proposed by Auerbach and Kotlikoff (A-K), is intended to be explicit and precise about the net burdens that government policies, if extended indefinitely, impose on different age groups, including the unborn. Generational accounts indicate, in terms of present value, the net amount that current and future generations are projected to pay to the government now and in the future. This system would also provide a framework for evaluating the effects on different generations of particular fiscal measures, such as last fall's landmark budget agreement.

I will not go into a detailed explanation of the system or comment extensively on its advantages and disadvantages, since the architects of that system are scheduled to appear before the Subcommittee and CBO is in the midst of a detailed analysis of the A-K model. As you requested in your letter of February 19, CBO is assessing the possibilities of carrying out a system of generational accounts of the kind proposed by Auerbach and Kotlikoff. This type of undertaking is complex and detailed, and will take some time to complete. We are currently getting A-K's computer program, running it, and learning its nuts and bolts. Among the aspects that we are examining is the sensitivity of the results to different assumptions that are needed for the model. The A-K framework requires a relatively large number of assumptions about the distant future. Moreover, to a large extent, the results of the analysis are only as good as the assumptions. Thus, it is crucial to learn more about the sensitivity of the results to alternative assumptions. Particularly in the early stages of this work, it will be important not to attach too much weight to the results simply because they are quantitative and have the appearance of precision.

One of the problems in settling the question of what kind of burden current government policies impose on future taxpayers is deciding exactly what is the current policy commitment to future spending. Social Security is the easiest case because the benefits to be paid in the future are spelled out in a formula in the law. But in the case of food stamps, for example, it is not so clear what current policy implies for the future. A plausible case could be made for projecting expenditures on food stamps based on the program's current formula adjusted for inflation only, or for holding food stamps as a constant share of the incomes of the poverty population, and so on. We suspect that these plausible interpretations of current law would produce very different answers, but we have not done the detailed work yet. Similar vexing questions about the meaning of current policy in the context of long-run projections arise on the tax side of the ledger as well.

In addition, the generational accounting approach in and of itself does not include some important feedbacks between fiscal policy and national economic growth. For example, the recent fiscal actions taken in the Budget Act of 1990 to reduce the government's dissaving and increase national saving should increase long-run economic growth, but that type of feedback is not incorporated in A-K's current framework.

Generational accounting and related work are useful supplements to more conventional budget measures in some cases, but questions arise about how extensively they can be used. Distributional analysis of this kind seems unlikely to become a routine part of the budget analysis for typical hills because it involves time-consuming analysis of large volumes of detailed information, along with many somewhat arbitrary assumptions. Providing timely estimates of budget impacts that can be explained and defended is often a key consideration. In addition, the distributional consequences of some policy proposals may be trivial relative to other considerations, or to the errors that are inherent in the estimates. Moreover, the type of distributional analysis of interest to policymakers tends to vary with the program or issue. For instance, primary concern for some issues in tax policy may center on the impacts on income distribution of the current generation, such as between income groups or between wage earners and other taxpayers. But generational analysis would shed no new light on these conventional issues of income distribution.

Finally, it may be difficult to interpret the results of generational accounting. Traditionally, it has been argued that it may be all right to do some shifting of burdens from present to future generations because future generations benefit from economic growth. But how much shifting is too much? This is basically a question of politics, not economics.

CONCLUSION

Considerable progress has been made in developing budget information for longer-run decisionmaking, but major problems and limitations of existing information remain. Providing information about the medium-run implications of policies on the budget was one of the main reasons for establishing CBO. However, more information on the longer-run implications of programs and policies and on their comprehensive effects on different groups might be useful.

The Federal deficit, imperfect as it is, conveys important information about the long-run effects of budget policies on national saving and economic growth. As with any simplified measure of complex phenomena, one can make a number of adjustments to the deficit, such as for the effects of inflation on the real value of the national debt. However, such adjustments are often not critical to the interpretation. In other words, the adjusted deficit series usually tells the same story as the unadjusted deficit series.

In contrast, conventional budget data convey little information about some other long-run issues, and that has proved to be critical in the case of the government's contingent liabilities. Contingent liabilities have been, and will remain, the focus of much work at CBO and elsewhere. Credit reform promises to be a major advance in making available budget information about the longer-run consequences of policies. However, serious problems in the treatment of deposit insurance remain.

Comprehensive and forward-looking frameworks, such as generational accounting and other long-range models, might fill an important type of information gap that currently exists, and these approaches merit careful consideration. CBO is now in the process of examining thoroughly the Auerbach-Kotlikoff model, and will report the results to you as soon as we can. We expect this to be part of our ongoing analysis of alternative methods of assessing the long-run consequences of fiscal policy.

RESPONSES OF MR. REISCHAUER TO QUESTIONS SUBMITTED BY SENATOR GRASSLEY

Question No. 1. The recent CBO study regarding the Social Security payroll tax cut raises a number of questions. The study almost immediately makes the point that national savings, including private savings, will be reduced. of course, the study assumes nothing eke will be done to spur private savings, which appears to be an unrealistic approach. In fact, the study says that the results should be "interpreted with caution" and that assumptions the study is based on are highly implausible."

Question No. 1A. With this in mind, to what extent, if any, does the study add to the overall debate on the payroll tax cut?

Answer. The study adds substantially to the overall debate by shedding tight on the likely long run effects of cutting the payroll tax. The implausible assumptions that are referred to in the study are quite limited in their scope: these are the baseline assumptions that there would be no change in Social Security financing in the future even when the long run balance in the trust funds deteriorated. These assumptions primarily undermine the study's conclusion that a switch to pay-as-you-go financing of Social Security could lead to higher levels of GNP toward the middle part of the next century. The more consequential results of the study—that the cut in the payroll tax could *reduce* GNP over the first few decades of the next century—are substantially unaffected by the assumptions under discussion.

The wording of the question reflects a possible misunderstanding about the study and its results. The study does not say that private saving will be reduced by a cut in the payroll tax. In fact, private saving increases in response to the change in payroll taxes in two of the three economic models that CBO used. However, the increase is not enough to offset the rise in the Federal deficit that results from cutting payroll taxes and thereby keep national saving from falling. The main economic results in the study stem from changes in national saving—the sum of saving by households, businesses, and government—that are implied by the cut in payroll taxes. During the first several decades, the payroll cut reduces national saving by increasing the Federal deficit, not by causing households' saving to fall.

The question also suggests that it is unrealistic for CBO's study to assume that nothing will be done to spur private saving. If CBO had assumed that significant increases in private saving would occur as a result of measures other than the cut in Social Security taxes, they would have formed part of the study's baseline, not part of the policy change being analyzed. They would, therefore, not have affected conclusions about the effects of cutting the payroll tax. The effects of changes in the payroll tax would have been presented in isolation.

Question No. 1B. On what evidence do you base the conclusion that people will only spend rather than save or invest if the payroll tax is cut? Are these just assumptions?

Answer. The study does not conclude that people will only spend the payroll tax cut. Instead, the models used in the CBO study assume that out of every additional dollar of disposable income, part of it is saved and part of it is used for consumption. These models have been carefully developed to track actual behavior in the economy. Thus, we believe that the models yield results that are reasonable approximations to what would actually happen from such a policy change.

Question No. 2. In December, CBO projected deficits for fiscal years 1991-1995 at levels that are $290 billion less than the CBO baseline deficit projections used by the Senate Budget Committee in its mark-up of the first concurrent budget resolution for fiscal year 1992.

Question No. 2A. What are the specific causes of this huge disparity? To the extent possible, please account for this discrepancy by revenue and spending categories, as opposed to simply "technical estimates," "economic assumptions," or "policy assumptions."

Answer. The following tables detail the differences between CBO's December 1990 interim baseline budget projections and CBO's baseline of February 1991.

The December projections were based on an informal economic forecast prepared by CBO in October, when it became apparent that the Gulf crisis and other developments had rendered CBO's official June forecast too optimistic. For the most part, as the tables show, the October forecast was similar in its budgetary impact to the CBO's winter forecast.

Except for deposit insurance, however, the December projections did not include any revisions to CBO's June technical estimating assumptions. Subsequent technical changes have increased the projected deficits by an average of $50 billion per year. Faster growth in Medicare, Medicaid, and other major benefit programs is projected to increase spending by $11 billion in 1991, $13 billion in 1992, and $27 billion in 1995 over the December interim baseline. Debt service estimates have been raised by $3 billion in 1991, $8 billion in 1992, and $20 billion in 1995. The remaining technical reestimates are spread over a wide variety of revenue sources and spending programs.

SUMMARY OF CHANGES IN CBO BASELINE BUDGET PROJECTIONS, NOVEMBER 1990 TO FEBRUARY 1991

[By fiscal year, in billions of dollars]

	1991	1992	1993	1994	1995	1991-1995 total
CBO December interim baseline [1]						
Revenues	1,110	1,185	1,258	1,344	1,429	.....
Outlays	1,363	1,447	1,428	1,400	1,458	.....
Deficit	253	262	170	56	29	.....
Economic changes						
Revenues	−9	−10	−4	−10	−17	−49
Outlays	1	−2	−1	−2	−2	−6
Deficit	10	8	3	8	15	43
Technical changes						
Revenues	−8	−6	−3	−3	3	−17
Outlays						
Deposit insurance	8	−19	6	53	−31	17
Medicare, Medicaid, and other major benefit programs	11	13	17	21	27	89
Desert Storm placeholder	8	5	1	0	0	14
Debt service	3	8	12	17	20	60
All other	8	12	10	11	12	52
Subtotal, outlays	37	19	45	102	27	231
Deficit	46	24	48	105	24	248
Total changes						
Revenues	−17	−16	−7	−12	−14	−66
Outlays	38	16	44	100	26	225
Deficit	55	32	51	113	40	291
CBO February baseline [1]						
Revenues	1,093	1,169	1,251	1,331	1,415	.....
Outlays	1,402	1,463	1,472	1,501	1,484	.....
Deficit	309	294	221	169	69	.....

[1] The projections assume compliance with the discretionary spending caps in the Budget Enforcement Act.
SOURCE: Congressional Budget Office.
NOTE: The projections include Social Security and the Postal Service, which are off-budget.

SUMMARY OF CHANGES IN CBO BASELINE BUDGET PROJECTIONS, DECEMBER 1990 TO FEBRUARY 1991

[By fiscal year, in billions of dollars]

	1991	1992	1993	1994	1995	1991–1995 total
CBO December interim baseline [1]						
Revenues	1,110	1,185	1,258	1,344	1,429	.....
Outlays	1,363	1,447	1,428	1,400	1,458	.....
Deficit	253	262	170	56	29	.....
Changes:						
Revenues						
Individual income	−12	−11	−9	−12	−8	−52
Corporate income	−1	3	4	2	−4	4
Social insurance	−5	−7	−2	−2	−2	−18
Other	0	−1	−0	−0	0	−1
Subtotal	−17	−16	−7	−12	−14	−66
Outlays						
Deposit insurance	8	−19	6	53	−31	17
Medicare, Medicaid, and other major benefit programs	13	13	15	17	20	78
Desert Storm placeholder	8	5	1	0	0	14
Debt service	2	8	16	25	34	85
All other	8	10	6	4	3	31
Subtotal, outlays	38	16	44	100	26	225
Total changes	55	32	51	113	40	291
CBO February baseline [1]						
Revenues	1,093	1,169	1,251	1,331	1,415	.....
Outlays	1,402	1,463	1,472	1,501	1,484	.....
Deficit	309	294	221	169	69	.....

[1] The projections assume compliance with the discretionary spending caps in the Budget Enforcement Act
SOURCE Congressional Budget Office
NOTE The projections include Social Security and the Postal Service, which are off-budget

Question No. 2B. What is CBO doing to improve its estimating capabilities to avoid such large discrepancies in the areas of technical estimates and economic assumptions?

Answer. Deposit insurance is now the single largest source of variation in the budget projections. There are large year-to-year swings and rapid changes in the pace of spending. For this reason, CBO is devoting more staff and other resources to improving its deposit insurance estimates. CBO has recently begun using data on individual banks and savings-and-loan associations to help estimate the long-run obligations of the deposit insurance funds. In fact, CBO has not significantly revised its estimates of total thrift losses or of the expected return on the assets of failed thrifts since last summer, nor has CBO's estimate of total deposit insurance outlays over the 1991–1995 period changed significantly. The surge of activity by the Resolution Trust Corporation (RTC) in late 1990, however, suggests that the specific institutions the regulators choose to close, as well as the pace of closures, remains very uncertain.

Estimating Medicare and Medicaid costs also continues to be particularly challenging, in part, because of almost constant changes in the programs. CBO has increased the number of health analysts and is working with the Health Care Financing Administration to obtain more detailed and more recent data. It is hoped that a more detailed appraisal of past claims will contribute to better projections of future program costs. CBO is conducting a more thorough analysis of states' projections of Medicaid costs.

CBO's efforts to improve our macroeconornic projections are focusing on three areas: (i) better use of current data, (ii) improved understanding of the effects of foreign developments, and (iii) enhanced methodology for making medium-term projec-

tions. With respect to the first area, we have devoted more resources to monitoring and analyzing monthly data and to anticipating revisions to published data for recent quarters. Our experience indicates that one of the best ways to improve our short-run forecast is to get a better handle on where the economy is currently. This type of analysis is especially important in forecasting the path of the economy in the current downturn.

With respect to the second area, it has become commonplace to observe that our domestic economy is increasingly affected by foreign developments—but it is true nonetheless. Consequently, we have devoted substantial efforts to monitoring foreign developments and to enhancing our analytical capability through the use of the most advanced multi-country models available.

Third, CBO has been devoting resources to improving our methodology for making medium-run (five-year) economic projections. In particular, we have been considering ways to estimate better the effects of changes in net national saving and investment on the long-run, or potential, growth rate of the economy. This work is especially important given the large changes in fiscal policy embodied in the Omnibus Budget Reconciliation Act of 1990 and the extended time horizons used by the Congress in recent policy debates.

Question No. 2C. In recent years, CBO has provided, in its annual report, data and analysis to examine discrepancies between projected deficits and actual deficits. Such information was excluded from the January 1991 report. Please explain why this information was omitted. Does CBO plan to resume reporting this information in future years?

Answer. Because of the significant changes in the budget process enacted late last year, CBO was not able to complete its analysis of the year 1990 budget resolution in time for inclusion in its January 1991 annual report. The analysis has since been completed and is summarized on the following table. CBO intends to resume publication of our analyses of Congressional budget resolution estimates in future reports.

SOURCES OF DIFFERENCES BETWEEN ACTUAL BUDGET TOTALS AND FIRST BUDGET RESOLUTION ESTIMATES FOR FISCAL YEARS 1980–1990

[In billions of dollars]

	Assumptions			Total
	Policy	Economic	Technical	
Revenues				
1980	6 2	8 4	- 3 5	11 1
1981	3 7	5 0	12 6	11.2
1982	13 0	51 9	1 1	40 0
1983	4 6	58 0	2 7	- 65 3
1984	13 7	4 5	- 3 9	13.1
1985	0 2	- 20 0	3 3	- 16 8
1986	1 5	- 23 0	2 1	- - 26 6
1987	22 1	- 27 0	6 7	1 7
1988	10 9	3 6	- 16 5	- - 23 8
1989	0 7	33 5	- 7 8	26 4
1990	7 0	- 36 5	9 4	- 34 0
Average	0 0	- - 14 7	- - 2.8	- - 17.4
Absolute average	7 6	24 7	6 3	24.6
Outlays				
1980	19 6	12 4	15 6	47 6
1981	24 5	6 4	16 0	46.9
1982	1 2	24 1	7 7	32 9
1983	17 6	0 5	8 1	26 2
1984	1 5	7 1	- - 18 0	- - 9 4
1985	22 8	- - 5 2	- - 12 9	4 8
1986	14 2	- - 12 1	20 1	22 2
1987	6 8	- 11 9	13 0	7 9
1988	- - 2 0	11 7	12 0	21.7
1989	17 5	13 9	11.8	43.2
1990	13.0	13.0	59.0	85 0

SOURCES OF DIFFERENCES BETWEEN ACTUAL BUDGET TOTALS AND FIRST BUDGET RESOLUTION ESTIMATES FOR FISCAL YEARS 1980–1990—Continued

[In billions of dollars]

	Assumptions			Total
	Policy	Economic	Technical	
Average	12.4	5.5	12.0	29.9
Absolute average	12.8	10.8	17.7	31.6
Deficit				
1980	13.4	4.0	19.1	36.6
1981	28.2	1.4	28.6	58.1
1982	−11.8	76.0	8.8	73.0
1983	22.2	58.5	10.8	91.5
1984	15.2	2.7	−14.1	3.7
1985	23.0	14.8	−16.2	21.6
1986	15.7	10.9	22.2	48.8
1987	−15.3	15.1	6.2	6.2
1988	8.9	8.1	28.5	45.5
1989	16.8	−19.7	19.6	16.8
1990	20.0	49.5	49.6	119.1
Average	12.4	20.1	14.8	47.3
Absolute average	17.3	23.7	20.4	47.3

April 15, 1991

Prepared Statement of Elmer B. Staats

INTRODUCTION

Mr. Chairman and Members of the Subcommittee: I appreciate the opportunity to speak briefly about the role of the Federal Accounting Standards Advisory Board and about the subject of generational accounting. My comments today are my own, and do not necessarily reflect the views of the other members of the Board. Today's topic is an important subject, worthy of careful consideration. As you know, I am an economist by training, and have had a long career with the Federal Government, as Deputy Director of the Budget, as Comptroller General, as a member of the Governmental Accounting Standards Board, and now as Chairman of the Federal Accounting Standards Advisory Board. Over the years, I have been concerned about the need for better information and for a longer-term perspective in making decisions about governmental activities. Accrual accounting can help to provide better information. Accrual accounting attempts to recognize the financial effects of transactions or events when they occur, regardless of when cash changes hands. As is noted in a typical accounting textbook

> Accrual accounting is as advantageous to managers as it is to investors. Both groups use financial reports to assess organizational performance of the past to predict and make plans for the future. Accrual accounting, inasmuch as it reports on inflows and outflows of all types of resources, not exclusively cash, generally provides a superior match of efforts to accomplishments.[1]

BACKGROUND ON THE BOARD

The Secretary of the Treasury, the Director of the Office of Management and Budget, and the Comptroller General recently created the Federal Accounting Standards Advisory Board. The Board has nine members, including six from various Federal agencies. The Board met for the first time in January. After research, deliberation and public comment, the Board will recommend to its three sponsors improved accounting standards for Federal agencies. The Board will be considering a wide variety of accounting issues, possibly including proper accounting for:

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[1] *Financial Accounting: Principles and Issues*, 3rd. edition, by Michael H. Granof, page 124. Prentice-Hall, Inc., 1985.

- contingencies
- interest subsidies
- Social Security and other actuarial liabilities
- use, depreciation and consumption of infrastructure and other capital assets
- human capital
- how to measure the deficit for accounting purposes, and how that accounting measure relates to budgetary or economic measures.

I don't mean to imply that the Board will be able to conclude its research on all these topics during the next two years, or that these are the only topics of concern. I do hope that we can at least make substantial progress.

There have long been difficulties in coordinating the accounting and reporting practices of the different branches of the Federal government. This Board presents an opportunity to improve that coordination, and to improve Federal accounting and financial reporting. Our task is different from the task of the Financial Accounting Standards Board (FASB) and the Governmental Accounting standards Board (GASB). They set financial reporting standards to be followed by the thousands of corporations, not-for-profit entities, and state and local governments when they are reporting to external parties such as creditors and investors. Our Board, on the other hand, will make recommendations for a single entity, the Federal Government.

The Federal Government does not need to be as concerned about accounting to investors as are other kinds of borrowers, because investors are not so concerned about the government's ability to repay. There are, however, other important reasons for good accounting. I believe that improving the coordination between the branches of government regarding accounting, while respecting the discrete needs of each branch, can contribute to improved planning, execution, and oversight of Federal activities.

It is sometimes convenient to categorize the objectives of accounting under two headings: accountability and decision usefulness. Both kinds of objectives are important, and both are reflected in the Mission Statement adopted by the Board. (A copy of the Mission statement is attached.) The Board has begun a program of deliberation that should lead to recommendations for improvements regarding both objectives.

The Board members all believe that Federal financial reports should provide relevant, reliable and understandable information about the financial position, activities and results of operations of the government. We also believe that Federal accounting standards should foster effective internal control. This will help to provide reasonable assurance that governmental activities are conducted economically, efficiently, effectively, and in compliance with laws and regulations.

Like the FASB and the GASB, the Federal Accounting Standards Advisory Board believes that accounting reports should be useful. For this reason the Board's first research project will be a study of the information needs of the primary users of Federal accounting and of the objectives of financial reports. These users include both the members of Congress and the managers of executive branch agencies, as well as citizens.

THE ROLE OF ACCOUNTING

Historically, accountants were concerned primarily with keeping track of assets and obligations and transactions: they were record keepers. From that beginning evolved concern with accounting and information systems. Those concerns with assets, obligations, transactions and systems are still basic to the profession. They are fundamental prerequisites to accountability and to effective management in any organization.

Accountants have increasingly become more concerned with the specific uses and usefulness of the information that their systems generate. This may lead them away from exclusive reliance on the traditional accounting model based on historical cost that is employed for record keeping purposes. Accrual-basis financial statements now include more information about risks and contingencies as well as current market values of assets and of obligations. Both the FASB and the GASB have required certain disclosures about financial instruments, and the FASB is currently exposing other proposed standard that would require more disclosures about the market value of financial instruments. Our Board may consider similar issues.

Accrual accounting recognizes the importance of information about future resources before an existing asset is legally controlled by the reporting entity. This is accrual-basis recognition of revenue. Likewise, accrual accounting provides information about material obligations that may exist in substance, though there is not yet

a legally enforceable liability. For example, the FASB recently mandated a significant advance in accrual accounting standards by publishing its Statement No. 106. This requires employers to recognize during the years that employees work the cost associated with the employer's promise to provide health care to those employees after they retire.

Some members of the FASB noted that "people tend to manage what they measure." Some observers believe that health care programs and promises have not been managed well, in part because the cost of such programs have not been measured well. I expect that our Board will soon be considering whether similar-accrual-basis recognition of the cost of post-retirement health core would be appropriate in Federal financial reports. den before that, we will be considering the accounting aspects of the credit reform legislation, which embodied this fundamental accrual notion.

In state and local government, accountants increasingly recognize the importance of reporting information about service efforts end accomplishments and other aspects of performance (such as economy, efficiency and program results) for some kinds of governmental activities. The Chief Financial Officer's Act, passed in October 1990 and now being implemented, similarly recognizes the need for reports on performance of Federal activities. For many of these activities the accountant's traditional approach to measuring performance is of limited usefulness.

GASB is now experimenting with new forms of reporting on service efforts and accomplishments for some common state and local governmental activities. The Federal government engages in different kinds of activities, and needs different kinds of reports, but we may find some useful ideas in the GASB's work. Traditional notions of how to measure the financial position of an entity in the private sector also need to be enhanced to reflect meaningfully the financial condition of governmental entities

GENERATIONAL ACCOUNTING AND INTERPERIOD EQUITY

I am aware that Senator Bradley has expressed interest in the work of economists Alan Auerbach and Larry Kotlikoff on what they call "generational accounting." They have proposed a interesting approach to assessing some aspects of fiscal policy. They believe that it would reduce the short-sightedness and fiscal illusion that can sometimes afflict public decision making.

Although I have not reviewed their work in detail, I believe that there may be considerable merit in what professors Auerbach and Kotlikoff propose, at least as an *additional* way to analyze fiscal policy. Probably no one indicator is sufficient for an issue so large and complex. Different, carefully defined indicators, for different purposes, are likely to be a part of the Federal financial reporting model, as well as of budgetary and fiscal analysis.

I believe that CBO and others should experiment with the Auerbach and Kotlikoff proposal. I suspect that there remain some difficult questions before such a tool could be used in practice. It will take time to build a consensus about whether it should be used, as well as about how to use it.

The Board has expressly noted its need to consider the information requirements of those who make decisions about the budget. Although accounting and budgeting are different endeavors, they are interrelated. They share many common concerns, including the need for better information about the future as well as the past. Our Board will follow those experiments with interest, and may even want to be actively involved with such research.

I would not expect the Board soon to make any recommendations on the Auerbach and Kotlikoff proposal. Almost certainly, however, the Board will be dealing with some related ideas. In GASB'S Concepts statement No. 1, *Ojectives of Financial Reporting*, that Board asserted:

> The Board believes the intent of balanced budget laws is that the current generation of citizens should not be able to shift the burden of paying for current-year services to future-year taxpayers. Recently, the term *intergenerational equity* has been used to express this concept. However, because a generation is defined as approximately 30 years and because the term *intergenerational equity* has implications that go beyond financial reporting, the Board believes the term interperiod equity may be more appropriate [for accounting], expressing the concept of yearly balance.
>
> The Board believes that interperiod equity is a significant part of accountability and is fundamental to public administration. It therefore needs to be considered when establishing financial reporting objectives. In short, financial reporting should users assess whether current-year revenues are

sufficient to pay for the services provided that year and whether future taxpayers will be required to assume burdens for services previously provided.[2]

In this passage, GASB was addressing financial reporting by state and local governments. The Federal Government has different traditions, constraints, and objectives, but some of our Board may believe that "interperiod equity" has a place in the conceptual framework for Federal accounting. If it is to be useful in our deliberations and communications, we will need to define it carefully. I will admit that the term, as used by GASB, remains somewhat ambiguous. It may mean different things to different accountants. It may properly have a different meaning for national governments than for subordinate entities. We will need to remember that other disciplines, including economists and actuaries, have important things to say about related ideas.

There are at least as many questions about the meaning and usefulness of the idea of "interperiod equity" as there are about the ideas of professors Auerbach and Kotlikoff. For example: what criteria should be used to distinguish between governmental consumption and governmental investment? Making such a distinction between spending on current operating activities and on programs that are essentially investments in the future is an essential part of most attempts to measure interperiod equity. The extent to which it is possible quantitatively to measure interperiod equity may be open to question. Whether the accountant's definition has any consistent relation to that of Auerbach and Kotlikoff is another question.

These are some of the questions our Board will be discussing. There is no question, however, that improved Federal accounting and financial reporting can make a contribution to enhanced accountability and to improved decision making in the Federal government. Accounting and economics are different disciplines, but it will be useful for us to have continuing communication. If nothing else, we must be clear about what we mean when we use similar terms, possibly with very different definitions. It takes no great leap of faith to believe that better informed decisions by officials and by citizens are likely to be more equitable, more prudent, and more conducive to enhanced social welfare in the long run.

This concludes my prepared remarks. I appreciate the opportunity to appear here today. I have attached a copy of my remarks to the Washington International Financial Management Forum last October; these remarks discuss in more detail how accounting can help the Federal government.

Mission Statement, Federal Accounting Standards Advisory Board

The General Accounting Office, the Department of the Treasury, and the Office of Management and Budget established the Joint Financial Management Improvement Program (JFMIP), to conduct a continuous program for improving accounting and financial reporting in the Federal Government. To complement the JFMIP, the Comptroller General, the Secretary of the Treasury, and the Director of the Office of Management and Budget (the JFMIP principals) established the Federal Accounting Standards Advisory Board (FASAB) to consider and recommend accounting standards and principles for the Federal Government.

MISSION STATEMENT

The mission of the FASAB is to recommend accounting standards to the JFMIP principals after considering the financial and budgetary information needs of congressional oversight groups, executive agencies, and the needs of other users of Federal financial information.

Accounting and financial reporting standards are essential for public accountability and for an efficient and effective functioning of our democratic system of government. Thus, Federal accounting standards and financial reporting play a major role in fulfilling the government's duty to be publicly accountable and can be used to (1) assess the government's accountability and its efficiency and effectiveness, and (2) contribute to the understanding of the economic, political, and social consequences of the allocation and various uses of Federal resources.

Accounting standards should:

- Result in the Federal Government and its agencies providing users of financial reports with understandable, relevant, and reliable information about the financial

[2] *Objectives of Financial reporting*, paragraphs 60 and 61, by the Governmental Accounting standards Board, 1987, emphasis added.

position, activities, and results of operations of the United States government and its component units; and

• Foster the improvement of accounting systems and effective internal controls that will help provide reasonable assurance that governmental activities can be conducted economically, efficiently, and effectively, and in compliance with applicable laws and regulations.

HOW THE MISSION IS ACCOMPLISHED

To accomplish its mission, the FASAB acts to:

• Determine the primary users of Federal financial information and their needs;

• Recommend accounting standards and principles that improve the usefulness of financial reports based on the needs of users and on the primary characteristics of understandability, relevance, and reliability;

• Provide advice to central financial agencies on implementing the standards;

• Improve the common understanding of information contained in financial reports;

• Recommend standards and principles that take into account expected benefits and perceived costs;

• Review the effects of current standards and recommend amendments or new standards when appropriate;

• Use a thoughtful, open, neutral, and fair deliberative process and consider the accountability and decision-making needs of users;

• Develop rules of procedures designed to permit timely, thorough, and open study of financial accounting and reporting issues and to encourage broad public participation in all phases of the accounting standard-setting process; and

• Be objective and neutral and ensure, as much as possible, that the information resulting from its proposed standards is a faithful representation of the effects of Federal Government activities. Objective and neutral mean free from bias, precluding the FASAB from placing any particular interest above the interests of the many who rely on the information contained in financial reports.

The FASAB recognizes that general acceptance of its recommendations is enhanced by demonstrating that the comments received in due process are considered carefully.

How Can Accounting Help in Controlling the Cost of Government

[By ELMER B STAATS, WASHINGTON INTERNATIONAL FINANCIAL MANAGEMENT FORUM, WASHINGTON, D.C., October 4, 1990]

As the first Honorary Co-Chairman and now Honorary Chairman Emeritus of the International Consortium on Governmental Financial Management, I have noted with satisfaction the contribution which it has made to public financial administration. Its progress and contribution has been especially pleasing to me since officials of the U.S. General Accounting Office played an active part in its establishment during my term as Comptroller General. Jim Wesberry and Morton Dittenhofer have both contributed much to its success. And I certainly don't want to overlook the major contribution of Audrey Dysland in arranging these luncheons and in many other ways.

The Consortium's objective has been to bring together public officials concerned with all aspects of financial administration—budget, financial reporting, accounting, debt management, revenue administration, and planning. It works side by side and in cooperation with two other important organizations—the International Organization of Supreme Audit Institutions and the International Federation of Accountants. The Public Sector Committee of IFAC is chaired by Kenneth Dye, Auditor General of Canada, Honorary Co-Chairman of the Consortium. He and Comptroller General Bowsher, your other Honorary Co-Chairman, are members of the Governing Board of INTOSAI.

The work of the Consortium is illustrative of the value of exchanging views and information on an international basis on ways to improve the way we manage public finances in our respective countries. Our systems of government differ but our problems and objectives are common to all. Certainly control of the cost of government is an objective shared by every nation.

Few issues have a higher priority in the U.S. Congress than the budget deficit which has tripled the national debt in just eight years. That debt is now equivalent to nearly 60 percent of our gross national product. Interest costs on that debt are now the second largest part of the Federal budget—next to the national defense. It has been more than twenty years since the Federal budget has been in balance.

Under renewed pressure to achieve a balanced budget by 1993, we have resorted to questionable devices to conceal the full amount of the deficit, such as taking certain costs out of the budget calculations and using receipts from trust funds for operating purposes. Some call this "creative accounting" others say we are engaging in plain gimmickry. I could recite a list of such devices but I fear that this would make remarks much too long!

Our huge Federal deficits have kept interest rates high, have reduced resources needed for investment, and have passed on to future generations costs which should be borne by current taxpayers. A recent GAO report offers considerable testimony as to the adverse impact of the deficit on the economy.

Accountants in government have an important role to play in efforts to control expenditures. That is the subject of my remarks today—why good accounting provides essential information needed for expenditure control. It is a subject certainly worthy of the best efforts of the Consortium.

I cite the serious fiscal problem in the United States not because I think we are unique. On the contrary, most industrialized countries face pressures to increase spending and counter pressures to avoid tax increases. If the legislators and the taxpayers can intelligently decide between these objectives, they must have the kind of information that good accounting and financial reporting can provide. More specifically how can accounting help in controlling the costs of government?

I address this subject from my perspective of a long background in the U.S. Bureau of the Budget (now renamed Office of Management and Budget) where I served as its deputy director under four presidents and from 1966 to 1981 as the U.S. Comptroller General and head of the U.S. General Accounting Office. In this latter capacity, I was responsible for establishing accounting principles and standards for the Federal Government and auditing programs for economy and efficiency and program effectiveness (referred to in some countries as auditing for "Value for Money"). From 1984 to 1990, I served as a member of the Governmental accounting Standards Board, a non-government organization, which establishes accounting and financial reporting standards for state and local government.

Budgeting and accounting have been closely linked in the United States. The Budget and Accounting Act of 1921 and the Budget and accounting Procedures Act of 1950 established the basic framework for fiscal control in the Federal Government and we continue to recognize this close linkage. In Section 106 of the 1921 Act, the head of each executive agency is required

> "to take whatever action may be necessary to achieve, insofar as possible, (1) consistency in accounting and budget classifications, (2) synchronization between accounting and budget classifications And organizational structure, and (3) support of the budget justifications by information on performance and program costs by organizational unit."

Responsibility for prescribing "appropriation and fund accounting in the several departments and agencies" was placed in the Comptroller General of the United States. He is head of the U.S. General Accounting Office, an agency located in the legislative branch. The maintenance of these systems and the preparation of financial reports, however, were made a responsibility of the executive branch. Thus, the Congress wanted to preserve authority in the legislative branch for determining

> "the extent to which accounting and related financial reporting fulfill the purposes specified, financial transactions have been consummated in accordance with laws, regulations or other legal requirements, and adequate internal financial control over operations is exercised . . . "

Pursuant to requirements of the Comptroller General, each agency must establish and maintain systems of

> "reliable accounting results to serve as the basis for preparation and support of the agency's budget requests, for controlling the execution of the budgets and for providing financial information required by the Bureau of the Budget, responsible for assisting the President in preparing and executing the Federal budget. These systems are required to be maintained on an accrual basis to show the resources, liabilities, and costs of operations of such agency with a view to facilitating the preparation of cost-based budgets"

to be used by all departments and agencies in the preparation of their budgets.

I will return to the subject of accrual accounting and cost-based budgets later but I should note at this point that this provision has not been fully implemented after

nearly seventy years of debate and non-acceptance of this requirement in executive preparation or congressional consideration of appropriation requests.

In some respects. accounting is retrospective and historical. It tells us where we have been and is designed to give the budget preparer an up-to-date and accurate picture of financial performance. It provides accountability for funds previously appropriated and a point of departure for future budgets. It lends credence to the old adage: "You don't know where you are going if you don't know where you have been!

This same division of responsibility prevails in our fifty States, although responsibility for standards at the local level vary considerably, depending on provisions of State laws and constitutions. A major challenge, therefore, has been agreement on common standards and objectives. This responsibility currently is placed in the Governmental Accounting Standards. Board which began operating in 1984. This five-member board serves under a common board of trustees with the Financial Accounting Standards Board which has a similar responsibility for the private sector.

The GASB—relevant to my remarks today—strongly embraces the concept of accrual accounting, or, in its words, the "flow of financial resources." Among other objectives, accounting should show "whether revenues were raised in an amount sufficient to pay for the services provided" in the fiscal period and demonstrate "adherence to budgetary authorizations and limitations." An important objective of accrual accounting is that "current-year citizens should not be able to shift the burden of paying for current-year services to future-year taxpayers." in other words, the principle is one of interperiod or intergenerational equity. On a larger scale, the large deficits and the increasing Federal debt in the United States pose an issue of intergenerational equity of major proportions—a issue of nothing less than one of national ethics and morality.

The Governmental Accounting Standards Board, in its statement "Objectives of Financial Reporting," places major emphasis on accountability and interperiod equity:

> "Accountability is the cornerstone of all financial reporting in government . . ."
>
> "Accountability requires governments to answer to the citizenry—to justify the raising of public resources and the purposes for which they are used . . . applying the broad concept of public accountability to financial reporting by state and local governments creates the potential to extend reporting beyond current practice. If being accountable means being obliged to explain one's actions, what are the limits of disclosure? How does one balance the cost of providing information against the value of the public's 'right to know'?"

With this question as a point of departure. I turn now to several specific questions or issues.

1. First are the traditional financial statements adequate to act the needs of those responsible for expenditure control? In the United States, the President's budget contains much historical and factual information and trend analyses. It summarizes current and proposed outlays for such programs as education, health, research and development, and trust funds. All of this is valuable; some say it is essential. But is it enough? I think not.

Our Treasury Department, in cooperation with the General Accounting Office and the Office of Management and Budget has for several years developed a prototype "Consolidated Financial Statements of the United States Government" which includes much information beyond the balance sheet and operating statement. It includes, for example, a statement of loans receivable from the public, net borrowing and from what sources, commitments, and contingencies, tax benefits and subsidies, and other relevant information for the public and the Congress.

In the private sector there are indications of the value of similar information. It is becoming increasingly evident that the traditional financial statements are not adequate to provide investors and other users with the information they need to base important decisions. At least one major public accounting firm is well advanced in preparing a set of financial statements—an "information model "—to meet this need.

2. Second, how can accounting provide data needed to improve the evaluation of the performance of governmental programs? Much progress has been made but more needs to be done.

The statement of "Government Auditing Standards" by the U.S General Accounting Office, originally issued in 1972, has provided a stimulus for increased emphasis on performance audits embracing audits for economy, efficiency, and compliance with laws and regulations. "Value For Money" Audits in Canada and the United Kingdom have similar objectives. Our Congress has mandated audits with this objective in numerous statutes.

State and local governments have felt a similar need to seek information and analyses beyond traditional financial reports. The Governmental Accounting Standards Board has a current project to determine the feasibility of measuring government services to encourage state and local governments to develop indicators of performance in their financial reports. Twelve areas such as public health, economic development, education, fire and police protection, and sanitation are included.

Accounting data can help, for example, in measuring performance by comparing the costs per ton of collecting garbage and other wastes or the cleaning of streets or maintaining highways between one jurisdiction and another. It can also tell us whether these costs are increasing or decreasing from one budget period to another. Again, accrual accounting is essential to measuring these costs.

Can measures to evaluate performance be improved and what can the accounting profession do to advance what I believe is now recognized as an important aspect of expenditure control?

3. Third, closely related is whether the use of accounting data can help in deciding whether to perform services and activities directly, using government employees. or contracting for them with non-government organizations.

In the United States, "contracting out" has been used widely. For example, approximately 60% of our defense budget is devoted to contracts for goods and services. In many of these instances—particularly such activities as repair and maintenance, computer design and operations, research and development, and similar activities—budget decisions are based on comparative costs. These cost comparisons are frequently difficult and highly controversial. Without good cost data, these decisions can be subjective, or thought to be subjective, and subject to charges of political influence.

4. Fourth, how do we measure and disclose the commitments made for post-employment benefits? Benefits such as retirement, health care, and life insurance have become increasingly popular for employees in a society where people live longer; for employers, they are attractive in that they reduce current outlays, deferring them to the future. From the standpoint of expenditure control, the danger is that these costs become "hidden costs" which become all too real in future years.

The role of the accountant is to devise reasonable ways to measure these commitments and disclose them for those authorizing these benefits. This is not an easy task, given the uncertainty of the cost of providing these benefits, changing needs of retirees, employee turnover, and differing contractual arrangements. Some of these plans are funded in advance; relatively few are adequately funded. Some share the costs with current employees: others are financed entirely by the employer. These accumulated costs are huge and growing. The accountant and the budget analyst need to find ways to both measure and control these costs id establish policies for funding and sharing costs with employees.

5. A fifth area of great importance is that of measuring the condition, age, and serviceability of infrastructure and other major physical assets. Infrastructure—streets, highways, water supply, fire protection equipment, etc.—is both expensive and essential to society. But how do we measure their current condition?

Like post-employment benefits, there is a tendency to postpone repairs, maintenance, and replacment—postponing these costs to the future. Here again, the accountant can contribute to expenditure control by providing improved ways of measuring the condition of these assets, factoring in past experience, the benefits of life-cycle costing, extent of repairs and maintenance in relation to need, and cost-benefit analyses of replacement versus maintenance.

Accounting data is needed to record how much has been spent for repair and maintenance. It is needed to disclose actual expenditures in comparison with estimated needs, how much has been appropriated in comparison with budget requests. It is needed to help in deciding whether it is less costly to replace equipment and infrastructure or continue to spend funds for maintenance and repair.

Physical assets are not only important to carrying on government activities and programs but essential in many cases for a strong private enterprise system. Decisions on acquisition, maintenance, repair and rehabilitation need to be made in the

light of the best information available. Without this information the risk is that we spend too much or too little.

6. Accounting data can help in comparing budgeted to actual expenditures.

Financial reporting should show whether financial resources are obtained and spent in accordance with the adopted budget. The budget is the single most important expression of the policies, program, and plans to execute programs by a governmental entity. It is both a means of control by the legislature and the executive as well as their accountability to the taxpayer. Did government overspend or underspend budgeted amounts? Either can be a matter of concern. Conditions do change but the reasons for change need to be fully documented. Only in this way can budget's be made more accurate for the future.

7. Finally, good financial reporting can help in identifying potential but not readily foreseen costs which can create fiscal crises and surprises.

These potential costs have been referred to as budgetary vulnerabilities or "time bombs." The failure to depreciate major physical assets or accrue the costs of pension entitlements or post—employment benefits such as health or life insurance are examples of the need for accrual accounting. Accounting alone will not reduce these costs but can provide the information needed by decision-makers as to what benefits will cost and can be afforded before such benefits are promised.

A recent well publicized example in the United States relates to the Savings and Loan industry. Federal regulators in any cases were allowed to appreciate the value of assets and not required to recognize certain losses when they occurred which made it easier for these institutions to say they were solvent when, in fact, they were not. A recent General Accounting Office report estimates that the Federal Government guarantee of deposits in these institutions will cost upwards of $500 billion over the next thirty years. Good accounting would have reflected the weak condition of many of these institutions early enough to bring about corrective action.

Auditing and financial reporting must go hand in hand. The auditor can both point out the need for or the absence of good accounting as hidden or potential costs or crises may develop. The GAO, for example, recently identified fourteen "vulnerable" programs which represented potentially large budgetary costs. In many of these cases, early warning is needed to highlight the need for corrective action. Deterioration of the condition of highways or bridges represents an important and easily understood example.

It would not be difficult to enlarge on these issues where good accounting can play an important role in expenditure control. For example, I have not mentioned the measurement of performance of publicly operated enterprises, obviously important in their impact on public sector budgets. Nor have I pointed out the value of accounting information in estimating revenues and expenditures for future budget periods. You undoubtedly could add to the list. All these areas are of importance in longer-term expenditure control.

Much progress has been made over the years in developing useful accounting systems which, in combination with modern computer technology and information systems, have made accounting systems and financial reports increasingly useful in expenditure control. In democratic society, expenditure control will always be a part of the political process—control over new programs, the level of existing programs, and evaluating the effectiveness with which legislative mandates are carried out.

The role of the accountant in government is different in many ways from the role of the accountant in the private sector. There he plays an important part in measuring profits and losses, stockholder equity, and financial condition. In government, the budget is the primary instrument through which political control is exercised. The legislative process itself provides a means of disclosure not present in the private sector. The accountant, in other words, can make his greatest contribution by focusing on areas which provide information needed for expenditure control—and the preparation and execution of the budget. In doing so, the accountant has an obligation to demonstrate that the accounting system developed will help the decisionmaker in this important task. Focusing on such areas as I have outlined above would, I believe, help in this regard.

It should always be kept in mind that accountants, in devising accounting systems, are not decisionmakers on matters of expenditure control. They can play an important part, though, in developing credible and consistent information which can be relied upon by decisionmakers. In short, they are information suppliers, not only to the immediate decisionmaker but to the general public who ultimately influence the decisions with respect to expenditure control.

In the political arena in which expenditure control decisions are made, experience indicates that the executive and the legislator will be governed by their desire to control obligational authority or financial commitments for new and existing programs, thus taking precedence over cost-based budgeting based on accrual accounting. Experience also indicates that the focus will be on cash outlays and revenues in the near-term of one or, at most, a few years because these will be the measure of the need for new revenues or borrowing. In this context accrual accounting can play an important role in disclosing the financial condition of a governmental entity but will only be indirectly related to expenditure control.

There is much more that I could say on the subject of the importance of good accounting and financial reporting. I leave you with a couple of general observations.

- First of all, we should recognize that improvements in financial management do not come about in any revolutionary way; improvements tend to be incremental and progress is made only as the users recognize their importance in policy and decision-making. Good standards and pronouncements—important as they are—yield little unless the executive and the legislator recognize their importance in the decision-making process. Good financial reporting does not guarantee good decisions but without it the risk of poor decisions, fraud and waste, is much greater.
- My second general observation is that we should look at accounting and financial reporting from the perspective of accountability. That is what the word "accounting" means—a word which translates into accountability. Accounting goes beyond a technically accurate operating statement and balance sheet. It calls for providing information on a broad range of financial subjects needed by the legislator, the executive, and the ultimate decisionmaker—the taxpayer, the voter, and the stockholder. The framers of the Budget and Accounting Act of 1921 clearly had this broader concept in mind—to hold those charged with spending decisions accountable for the integrity and wisdom of public expenditures. The framers of the Budget and Accounting Act were also very perceptive in encompassing budgeting and accounting in the same statute. But we still have yet to fully realize the benefits of accrual accounting in budgetary decisionmaking, a concept which they embraced.

In the Statement of Objectives of Financial Reporting issued by the Governmental Accounting Standards Board in May 1987, we included a statement as follows:

> "Accountability is the cornerstone of all financial reporting in government . . . . The dictionary defines 'accountable' as 'being obliged to explain one's actions, to justify what one does.' Accountability requires governments to answer to the purposes for which they are use. governmental accountability is based on the belief that the citizenry has a 'right to know,' a right to receive openly declared facts that may lead to public debate by the citizens and their elected representatives. Financial reporting plays a major role in fulfilling government's duty to be publicly accountable in a democratic society."

In my opening remarks, I emphasized that the Consortium objective was to include and relate the several aspects of public financial management. There could be no better example of the validity of this objective than to utilize accounting and financial reporting in controlling the cost of government.

PREPARED STATEMENT OF HERBERT STEIN

Budgeting is a process of dividing a given scarce resource among competing uses. What is the given scarce resource the U.S. government is dividing up? It is not the $1,500 billion that is the total of Federal expenditures. That total is itself a result of the budget process. It is not the given beginning of the process. The government by its decision could make that $1,500 billion much bigger or much smaller.

What the U.S. Government is dividing up by its decisions, what it is budgeting, is the total national output. At a minimum it is dividing the national output between Federal uses and non-Federal uses—private, State and local. But it is doing much more than this minimum. It is strongly influencing the division of the non-Federal part among competing uses. Actions of the Federal government greatly affect how much of the use of output that we conventionally consider non-Federal goes for investment and how much for consumption, how much for particular kinds of investment, such as pollution control, how much goes for education, how much for health, how much of the consumption is by poor people, and how much by other income classes, and so on. The Federal Government affects these allocations not only through its own expenditures but also through its deficit, its taxes, its mandatory requirements and even, in some cases, through its moral suasion.

These effects of Federal action on the non-Federal uses of the national output are not accidental or unintended. At least at a certain level of generality, these effects are the deliberate objects of policy. The Federal Government wants to reduce its budget deficit because it has a preference for a higher rate of private investment. It gives States tied-grants for certain kinds of welfare expenditures because it wants States to spend their money in a particular way. It excuses certain kinds of fringe benefits from the income tax because it wants to encourage certain kinds of private resource use.

In other words, the Federal government, as the representative and executor of national policy has a preference about the allocation of the whole national output, and not just the part the Federal government uses directly, among certain categories of uses, and it employs a variety of means to bring about this preferred allocation.

My suggestion is that this process, which is now implicit and hardly recognized should be made explicit, deliberate and as well-informed as possible. Budget policies, and other Federal policies, should be made consistent with a certain understanding of the way in which the national output should be divided among competing uses.

My suggestion may be clarified by giving an illustration of what these competing uses might be. In writing on this subject I have suggested a division of the national output among nine categories, as follows:

Investment owned by Americans, including government investment
Defense
Health care
Education
Other consumption by the very poor
Other private consumption
Other Federal uses of output
Other state and local uses of output
Government transfers and interest payments abroad

Some might prefer a different classification of the national output. The point is that the classification should reflect whatever the decision-makers consider the significant issues in the allocation of the national output. I use the above classification because I think that the division among these categories is a legitimate national concern and is significantly affected by actual or potential Federal policies. Others might want to add housing or crime prevention or research. That is unimportant as far as the procedure I propose is concerned.

I visualize the budget process as starting with an agreement about what the nation's problems and priorities are. From that should be deduced a plan for the reallocation of the national output among relevant uses to solve these problems and serve these priorities. From that should be deduced specific expenditure, tax, borrowing and mandated requirements programs to bring about the planned reallocation of the national output. The choice of these specific programs should reflect the same considerations of effectiveness, fairness, and so on that presumably now enter into budgetary decisions, but the difference is that these choices would be grounded in a prior determination of the objectives to be served.

For example, I can imagine a President saying, in his Budget Message, that he thinks the urgent national problem is that too many people are poor, too many are badly educated and that per capita output is growing too slowly. He would further say that to correct these problems he wants to increase the share of the national output going to the consumption of the poor by 1 percent of GNP, the proportion going to education by ½ percent of GNP and the proportion going to investment by 1½ percent of GNP. Correspondingly, he would propose to reduce the share of GNP going to consumption of the not-poor by 2 percent of GNP and to health care of the not-poor by 1 percent of GNP. He would then propose specific budget and other policies to bring about these reallocations. For example, to reduce the consumption of the not-poor he might propose an income tax increase or he might propose to cut social security benefits to elderly people who are receiving benefits in excess of their contributions plus interest. To raise investment he might propose increasing Federal expenditures for infra-structure or cutting the capital-gains tax. These choices would remain as now.

Congress would go through a similar process. It would be free to disagree with the President about what the problems are, about what reallocations of the national output are required to meet the problems, and about what specific policies would be best for achieving the reallocation. But at least the source of the disagreement between Congress would be visible, and we would know what is disagreement about ends and what about means.

Basically, I am proposing that the budget of the U S. government should start with a budget for the U.S. GNP.

I have three purposes for making this proposal,

1. I want to demythologize talking and thinking about the budget. I want to get away from acting as if deficits and spending and taxing were ends in themselves, about which one could have convictions. I want to get away from dividing people into those who want to raise taxes and those who want to cut expenditures, and make clear that these are different ways of accomplishing the same thing. We want to decide what is to be accomplished, before we argue about the relative merits of different ways of getting there. I want to relate the specific decisions about means to the objectives about which we reasonably do have preferences.

2. I want to bring home the fact that there is a limit to what can be done, and that the budget process involves choices. These choices cannot be evaded by redefining the budget or by increasing the total size of the budget. These things will not change the size of the GNP out of which all choices have to be met.

3. I want to eliminate the possibility of avoiding budget constraints by recourse to devices like regulation that affect the allocation of the national output but do not appear in the budget as now formulated.

When I make this proposal, as I have been doing for several years, I encounter three complaints.

First, people say that what I propose is planning and therefore illegitimate. I have been around long enough not to be impressed with such labels. I am proposing only that the government does whatever it does more consciously and intelligently,

Second, people say that we don't know enough to do what I propose. We don't know what the effect of running a deficit is on saving, or what the subsidy in Medicare does to total spending for health care. There is a lot in this. But it only says that we don't know what we are doing now. I believe that if we ask the right questions we are more likely to find the answers than if we never ask the questions. If we are going to continue making the decisions about the deficit or Medicare we had better try to find the best answers we can, rather than make the decisions in the dark.

Third, people say that my proposal may be good economics but it is poor politics. It requires government officials, i.e. politicians, to reveal to the public what they are doing, and the politicians will not stand for that. Although such cynicism is understandable it is not really justified. Over the past 75 years budgetary procedures have changed a great deal in the direction of greater rationality, mainly in response to the prodding of "reformers" like me and despite the reluctance of politicians to change. I see not reason to despair about the possibility of further improvement.

I have spelled out these ideas further in a book published in 1989 entitled, Governing the $5 Trillion Economy, and I have provided one copy each for the Chairman and Ranking Member of this Committee.

COMMUNICATIONS

STATEMENT OF RANDALL G. HOLCOMBE, PROFESSOR OF ECONOMICS, FLORIDA STATE UNIVERSITY

A PROPOSAL FOR INCREASED FISCAL RESPONSIBILITY IN APPROPRIATION LEGISLATION

This proposal suggests a simple change in budgeting procedure which would require that all spending bills explicitly take into account their source of funding, and would require that if spending is underestimated or if revenues are overestimated, new legislation would be required to make up the difference. If adopted, this proposal would only obligate Congress to a degree of fiscal responsibility that would be prudent in any event. The principle behind this proposal is that all legislation should explicitly account for the source of revenue to fund the legislation.

The proposal would be as follows:

(1) Any legislation that authorizes or appropriates funds must explicitly state a maximum dollar amount that can be spent, and the source of the revenues to be spent.

(2) Sources of revenues can be any tax base, a reduction in spending on other programs, or can be government borrowing, but legislation must specify what percent of which tax bases will be used for the spending.

(3) No program can spend more than its explicit dollar limit. If the level of desired spending on a program increases, new legislation would be needed to exceed the previously legislated limit. This would include all programs, including entitlements.

(4) If revenues from a tax base turn out to be less than estimated, the program's spending limit will be reduced accordingly. A program cannot spend more than the tax base it was allocated without new legislation.

EXAMPLES

(A) Assume that Congress decides to appropriate $300 billion to national defense next year. Following the above proposal, this would be the defense spending limit, but the spending bill would also have to specify the source of those funds. Assume that Congress estimates that personal income tax collections will be $450 billion and that corporate income tax collections will be $125 billion. The bill could specify that the $300 billion comes from taking 25 percent of personal income tax collections (estimated to be $112.5 billion) plus 20 percent of corporate income tax collections (estimated to be $25 billion) plus $162.5 billion in new government borrowing. This adds to $300 billion, thus specifying the sources of funding for national defense.

Now assume that personal income tax collections proceed as estimated, but corporate tax collections only amount to $100 billion. In this case, 20 percent of corporate tax collections would be $20 billion, rather than the $25 billion forecast, and the defense budget would have to be cut back to $295 billion because of the unforeseen shortfall in corporate tax revenues. Under the above proposal, Congress would have several alternatives:

(1) Do nothing, in which case the defense budget would be reduced because of lower than estimated tax revenues;

(2) Increase the defense budget by reducing spending in other areas. Assume, for example, that the Department of the Interior was allocated 10 percent of corporate income tax revenues, which would be $10 billion due to the shortfall. Congress could reduce this allocation to 5 percent of corporate tax revenues, and transfer the other 5 percent to defense, thus giving the defense department 25 percent of corporate tax revenues and restoring its budget to $300 billion. Of course, reduced allocations could be spread among several programs instead of one. Another alternative would

be to transfer a smaller amount, such as 3 percent of corporate taxes, which would bring the defense budget up to $298 billion, only partially restoring the shortfall.

(3) If Congress wanted to restore the defense budget without cutting any other spending area, it could authorize an additional $5 billion in borrowing. Under this alternative, the defense budget would once again be $300 billion, but now funds could come from 25 percent of personal income tax collections for $112.5 billion, 20 percent of corporate income tax collections for $20 billion, and $167.5 billion in borrowing, rather than the 162.5 billion initially authorized.

(B) Assume that the defense department budget is set as above, authorizing $300 billion in spending from 25 percent of personal income tax collections ($112.5 billion), 20 percent of corporate income tax collections (25 billion), and $162.5 billion in government borrowing. Now assume that corporate income tax collections are actually $150 billion, so 20 percent of corporate tax collections would produce $30 billion in revenue. The defense budget is still limited to $300 billion, and the $5 billion in additional revenues would be used to reduce the deficit (or add to the surplus!) unless Congress explicitly passed new legislation to spend the money.

The budgeting system proposed here would give Congress an incentive to be conservative in estimating revenues, so as not to have to reallocate funds later in the fiscal year, but if some revenue sources were underestimated, this would provide some funds to make up for areas in which other sources were overestimated.

(C) Assume that Congress estimates that unemployment insurance claims will be $15 billion for the upcoming year. The sources of this revenue are specified as in the proposal. Because it is an entitlement program, the exact amount of claims cannot be known ahead of time. Now assume that as the year progresses it becomes clear that actual claims for the year will total $20 billion. In this case, Congress must authorize additional money for the program, specifying the source as above. Otherwise the program must limit its spending to the $15 billion cap. If no action by Congress is taken, no additional claims can be paid once the $15 billion limit is reached.

The budgeting system proposed above provides incentives not to underestimate entitlement spending, as this example shows.

(D) Assume that a devastating hurricane ravages the Florida panhandle, and Congress decides to appropriate $1 billion in disaster relief. As above, the source of revenue would have to be specified. There are three alternatives: (1) reduce spending on other programs, (2) increase the national debt, or (3) if some revenue source had been underestimated, that additional revenue could be allocated to the new spending.

DISCUSSION

Under this proposal, Congress would have complete authority to tax and spend exactly as they do now. The only difference is that they would have to explicitly account for the cost of every spending program by specifying where the revenue comes from. If, for example, Congress decided to allocate $49 million to build a rock and roll museum in Cleveland, the source of the funds would be included in the spending bill so voters and taxpayers could see where the money would come from. As it is, legislators can propose spending bills without confronting the question of how the money will be raised. We clearly see who the beneficiaries of spending are, but it is harder to see who pays for those benefits. Any responsible spending proposal should incorporate within it the source of the funds to be spent.

If spending was higher than forecast in some area, or if revenue was lower, Congress would be obligated to make an explicit decision on how to handle the shortfall. It makes sense to require legislators to take explicit action to deal with unforeseen events, rather than to allow inertia turn poor forecasts into spiraling deficits for which nobody will take responsibility.

While this type of fiscal responsibility would be new to the Federal Government, it is practiced frequently by state governments, so there is ample experience on which to build. My own experience with state governments in Alabama and Florida is that when a deficit is forecast, the state *immediately* requires agencies to reduce their *current year's* spending in order to balance the budget. This same type of immediate response would be possible at the Federal level. It would, however, require responsible leadership.

The proposal put forward here would force Congress to be more directly accountable for spending decisions, which should lead to more responsible decisions. If Congress wanted to continue as in the past, it would be possible under the above proposal. However, because Congress would be more directly accountable and could not increase the deficit by default, the incentives are present for more responsible budgeting decisions. If deficit spending is warranted, then an explicit decision should be

made to run the deficit, rather than for deficits to be produced because those who propose spending legislation do not have to account for the source of the revenues they propose to spend.

Since it is prudent to make sure there is a source of funds for spending proposals anyway, this proposal only asks that Congress explicitly accept a responsibility that they should have been taking all along. This change should be easy to implement, and the only people who should object to it are those who want to continue being able to legislate to spend money without taking direct responsibility for the costs of their legislation.

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