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LONG-TERM ECONOMIC GROWTH

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ECONOMIC GROWTH

OF THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

NINETY-THIRD CONGRESS

SECOND SESSION

MAY 8 AND 9, JUNE 11, 12, AND 26, 1974

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LONG-TERM ECONOMIC GROWTH

WEDNESDAY, MAY 8, 1974

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 318, Russell Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senators Bentsen, Humphrey, Javits, and Percy; and Representatives Reuss and Moorhead.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, general counsel; William A. Cox, Lucy A. Falcone, Jerry J. Jasinowski, Courtenay M. Slater, and Larry Yuspeh, professional staff members; Leslie J. Bander, minority economist; George D. Krumbhaar, Jr., minority counsel; Walter B. Laessig, minority counsel; and Michael J. Runde, administrative assistant.

Chairman BENTSEN. Ladies and gentlemen, it is 10 o'clock and these hearings, which are scheduled for 10 o'clock, will start on time.

I must say that I have a long prepared opening statement, but we are honored this morning by having the distinguished majority leader, Senator Mansfield, here, who is expressing his deep concern and interests in the objectives of this subcommittee. And he also tells me that he has got other work to do. So, Mr. Leader, we are pleased to have you, if you will proceed.

Senator MANSFIELD. Thank you.

Representative MOORHEAD. Mr. Chairman, may I have permission to insert an opening statement?

Chairman BENTSEN. You certainly will. We are going to have several opening statements as soon as he finishes giving the first statement.

STATEMENT OF HON. MIKE MANSFIELD, A U.S. SENATOR FROM THE STATE OF MONTANA

Senator MANSFIELD. Thank you, Mr. Chairman, Congressman Moorhead, and members of the committee.

I appreciate this opportunity to appear before this committee on what I regard as an issue of the most pressing national significance and concern. What you are embarking upon and what so many of us in the Congress, in the executive and elsewhere in our national life have come to view with increasing alarm could be expressed no better than it has been framed by the enabling charter of this panel: A Subcommittee on Economic Growth: To think ahead, to think long range, to analyze in a very measured methodical way the full spectrum of problems that we as a nation confront in terms of capacity and employment needs, of raw materials, and resource requirements. It is a charter, may I suggest, that has emerged out of a deep sense of frustration with the disjointed way Government has tended for decades not so much to act but instead to react on a crash basis when a component of this gigantic, intricate machine of the American economy gets out of whack in ways that impose both suffering and hardship upon great segments of the American public.

What we face may, in part, be characterized as follows: Cartels, scarcity, diminishing sources, expanding usage, production restrictions, steep price rises, and expedient remedies. What needs to be asked and what you, Mr. Chairman, and your committee with its new mandate are asking through these hearings, and what is being asked over in the Commerce Committee and in others is this: How are we as a nation equipped—or ill-equipped—to address the next crisis in resources or materials or commodities? Do we have at the highest level of national life an effective capacity to look at all of the information; to identify all of the potential areas of crisis and to have the benefit of assessments as to all of the various remedies available to avert the next crisis or to minimize its impact on the American people?

These questions are answered by the very nature of what you are undertaking in this committee, by what Senator Magnuson is undertaking in the Commerce Committee and by what others are doing in the Congress and in the executive branch, not to speak of the activities of private foundations and universities and corporate establishments. If I have read the signs correctly, therefore, what they point to is the emergence of a firm resolve that when it comes to basic economic needs, the Nation must be better equipped and better able to provide more rational answers in the decisionmaking process.

For all of us, I think the issue was clarified a few months ago when long lines of automobiles accumulated to view for short rations of gasoline. It is not only that a decision to build or not to build a new refinery or steel mill or chemical plant, or to start a mining operation can have major repercussions throughout a community, the Nation, or even abroad, it is also that a shortage of raw materials derived from petroleum can shut down auto plants in Detroit and manufacturers of recording tapes in Los Angeles.

It is not so much a lack of study or an absence of data and information. For a quarter century or more, experts have warned about coming crises with regard to vital basic materials and commodities. More important is that we simply have no systematized method of assessing information in order to determine our needs early enough and to move quickly enough to provide a reasoned answer, or even to make the attempt.

What if government at any time in the past two decades had established a central information unit—a data bank so to speak—charged with compiling statistics on energy resources, analyzing on a continuing basis the status of supply and sources, projecting consumption rates, reporting refining capacity, evaluating current technology and future application and equipped to report anticipated deficiencies directly to Congress and to the President with specific recommendations. There is little doubt, I think, that had such an agency existed, there would have been no fuel crisis. and, certainly, no reason to have addressed the matter on a crash basis, establishing almost overnight a whole new Federal bureaucracy so we could meet immediate requirements for heat, light, and transportation.

And if it is energy today, of what will be as a nation be in dire need tomorrow? Three or four years ago, the Interior Department told us that there were at least 13 basic minerals for much of which we depend upon sources outside the United States. That figure has grown to 40 or more. They range from aluminum and chromium, to tin, lead, nickel, and so on. For at least 30 of these materials, the Nation has already become over 60 percent dependent upon other countries. In part, the dependence may be answered at some unknown future date by new technologies such as the recapture and recycling efforts that are just now barely more than an idea. For now, however, that dependence is with us and it is complicated by what happens when supplier nations gang together.

I realize full well that the President and Secretary Kissinger are trying to improve the bargaining strength of the consumer nations insofar as petroleum is concerned. But what happened with oil is very likely to happen with bauxite, or copper or nickel or zinc or tin or whatever, when the basic needs of heavy consumer societies must be met by sources beyond their national boundaries. Secretary Kissinger has now gone to the United Nations to stress that interdependence of developed and developing nations with regard to key resources is essential to global stability. But the international instrumentalities he envisioned to accommodate cooperation between producer and consumer nations can be established, it seems to me, only after there is constructed within our own nation a mechanism able to grasp what is needed for our own people not only today but 5 or 10 or more years hence. It is to this precise task that this committee has addressed itself. And you are to be commended for your efforts.

As you know, the problem goes well beyond metals or minerals and does not relate only to those in which we are in a dependent status. In 1973, the Nation experienced the biggest boost in the cost of groceries in over 25 years. Prices for fibers have risen 93 percent. The story of how inflation continues to wrack our people on every front was written graphically in the double digit figures released 2 or 3 weeks ago—10½ percent from March of 1973 to March of 1974; 14½ percent for the first 3 months of this year.

And while Americans are made to pay more, let us not forget that in some areas of the world, the basic commodities are not even available. The problem is worse in Europe, Asia, and Latin Amerend that our overall approach is the most comprehensive and rational that can be devised.

In my view, what the Nation needs and needs vitally is a full-fledged council on domestic needs and economic foresight, staffed sufficiently and equipped fully to give the President and the Congress and the public the kind of integrated perception of our national requirements now and in the future which has heretofore been lacking.

I should stress, here, Mr. Chairman and members of the committee, that what the joint leadership of the Senate is pursuing in concert with the House leadership and with the President's designees in the executive, is a course of action similar in scope and magnitude to that upon which you and your committee have now embarked. In the Commerce Committee and others, similar efforts have been undertaken. All of these endeavors should be pursued unrelentingly and without delay to the end that at the soonest time possible, as a nation, we have acquired a field of vision expanded by the capacity to view all of the effects of our action of inaction today not just in the context of tomorrow, but in terms of 5 or 10 years hence.

Whatever the immediate results of any one of these pursuits, including those in which I am engaged, let us keep in mind our common concern: It is that we here in the Congress as the policymakers and those in the executive as the policy implementors will be fully prepared and equipped to address the next major challenge to our national stability. Steps taken now, to be sure, could not possibly undo the damage of what has been thrust upon the nation with regard to energy. Steps taken now just might, however, keep the nation from stumbling headlong into the next crisis, and the next and the next, each contributing more to the irrationality of an already disjointed economic condition that, unless corrected, will lead us inexorably to our economic devastation.

Thank you, Mr. Chairman.

Chairman BENTSEN. Thank you very much, Mr. Leader, for helping to bring this into focus. It seems to me that a fear of a heavy-handed and inept bureaucracy has been an obstacle for some time to developing an overall national planning capability in the way of objectives. But, as you point out, the shortages this Nation is facing in resources, and the conflict in policy objectives of different agencies is going to force this to be done.

Do you have any thoughts on how we can avoid some of the bureaucratic pitfalls, of how we can accommodate national planning to our political traditions?

Senator MANSFIELD. Well, may I say, Mr. Chairman, that I tried to advance some of my ideas at the conclusion of my statement. I have not thought it out fully yet. That is why the joint leadership of both Houses is meeting with representatives of the executive branch, Mr. Shultz, Mr. Stein, Mr. Simon, Mr. Ash, Mr. Dunlop, and Mr. Flanagan, to see if we could not set up some sort of a legislative-executive relationship, which I think is the best way to run this Government, rather than to continue the old arm's-length relationship which set us up as adversaries one to the other.

But, speaking of top-heavy bureaucracy, you have got that now. You have got too many agencies, bureaus, and offices. They are working many times against one another. They are in reality disjointed, and I think not only do they work against one another, but in many aspects they overlap the work of one another. And when I mention 130 officials in the Department of Commerce, I do not take in the little empires which they have built up over the years, so I suppose if you had to figure it all up it would be somewhere between 500 and 1,000 in that particular category alone.

And then you have got the FEO, now authorized by law, operating in an area which will call for the employment, has already, of hundreds of more employees. So, you get fragmented, disjointed. And what I would like to see, and what we are considering, without having come to any conclusion, would be some overall commission which would have the power to pool the information which the congressional committee and the agencies, offices, and bureaus downtown accumulate to be able to make projection, to warn the people, and in that way to avoid the chaos insofar as possible which resulted let us say from the energy crisis, a crisis which could have been avoided, in my opinion, in a number of ways; one of which, and most important, was the accumulation of a petroleum stockpile in this country which you and others have advocated not for months, but for years. The result was we were caught flatfooted. We are not in a very secure position today. And while our supplies may be increasing, the gas station is selling oil on Sunday. Any time there is a breakdown in Mid-East negotiations, that spigot can be turned off and it will not be long before we will be in the same position as we were before.

And you have got to do these things not only in the field of energy, like petroleum, but in metals, bauxite, copper, and tin, and so forth. Here we are selling our stockpiles of tin, and we are utterly dependent upon tin because we do not produce an ounce of it in this country.

And then you have got to consider the domestic aspects of the question too. Lumber, a very important commodity, air, which could become scarce, and water, it could become polluted, and it has become polluted in many areas of our country, even in a State like mine which is relatively untouched by the problems of modern society.

It could cover a wide range of things, but you have got to have some coordination commission, or office which would represent the legislative and the executive branches of the Government, and which would be able, or empowered rather, to bring order out of the chaotic, disjoined situation which exist in this Government today, and avoid the possibility of rash moves caused by sudden crises, which no one evidently had been prepared to undertake.

Chairman BENTSEN. Thank you, Mr. Leader.

Because I know you have other commitments, I would ask members to keep questions to just one each, if you will.

Senator Percy.

Senator PERCY. Senator Mansfield, we are grateful for your testimony this morning. My observation, which I have repeated several times on the floor, is that Government is so busy dealing with the immediately urgent that we do not have time to look forward to the ultimately important. This is the case where we certainly are dealing with the long range.

I would like to ask your judgement, if you are specifically proposing a council on domestic foresight, whether it is your intention to embody a piece of legislation that could be referred to the Government Operations Committee? I certainly will refer this testimony to the Subcommittee on Reorganization under Senator Ribicoff. Senator Javits, who serves on this committee, and I are both on that subcommittee, and we would now specifially like to see some joint leadership in the form of legislation so we could actually go to work on it in the committee. Is it your intention to provide some guidelines in legislation that we could go to work on?

Senator MANSFIELD. In time that is a possibility. As I have indicated, perhaps before you came in, Senator Percy, we are not moving fast. We do not intend to rush into anything. We intend to tread carefully, walk slowly, and try to do something surely. For that purpose we have had two meetings already among the individuals which I have mentioned, and two more meetings have been set up, and a special subcommittee will meet on Monday next to try and come to grips with the problem to make recommendations to the full group when it meets the following week.

Yes, I have considered the introduction of a resolution. Whether or not it will be done I do not know. But, it is a possibility.

But, there is one thing I do want to emphasize, that as far as this group of people from the executive and legislative branches are concerned, we do not want in any way, shape, or form to interfere with any committee such as Commerce or Government Operations and similar committees in the House which are carrying on their studies. Furthermore, we do not intend to engage in studies, because we think the question has been studied to death. The information is there. The question is, how do you use it? This is one possibility. And if the group arrives at a decision, I want to assure you, Senator Percy, that you and the members of this committee will be informed of that so you will be fully aware of what has transpired.

Senator PERCY. Senator Mansfield, do you happen to know why the Paley Commission report that was made in the early fifties, when they recommended setting up a permanent institution to deal with material shortages on a permanent basis, why was their recommendation not implemented? The same recommendation was made in the National Commission on Materials Policy, which filed its report in June of 1973. The reason I ask specifically is that twice now we have actually failed to implement something that is very much needed and necessary, as you have so succintly pointed out. Whatever you do decide to do, many of us want to join you.

Senator MANSFIELD. Well, the latter study should have been given consideration, far more so than the Paley Commission report, because the Paley Commission was appointed by President Truman. It did an outstanding job. If you will just look back to 22 years ago and read what it recommended, you are in today. But, it was finished, I think, just between the transition period between a Democrat leaving the White House and a Republican coming in. And it probably got lost in the shuffle because of that time factor.

Senator PERCY. Finally, in the Joint Economic Committee minority report filed this year, we strongly recommended the creation of such an agency. We specifically indicated that it should be independent of the executive branch "in order to insure that it not become a planning agency for implementing the economic policies of any particular administration." Would this be consistent with your own thinking?

Senator MANSFIELD. I agree.

Senator PERCY. Fine.

Senator MANSFIELD. I think it right.

Senator PERCY. Thank you very much, Mr. Chairman.

Chairman BENSTEN. Thank you, Senator Percy.

Congressman Moorhead.

Representative MOORHEAD. Thank you, Mr. Chairman. I want, Mr. Leader, to commend you on a simply superb statement. I think this has distilled a lot of my thinking. I had suggested that one of the reasons we had not taken action on things like the Paley Commission is that many of us grew up in a period of deflation called the Depression where the problem was not scarcity of material but a lack of demand, and that the world has changed but we have not changed our thinking. What I see in your statement particularly was that you say we now have a world of cartels, scarcity, diminishing prices, all of the things that are totally different from the conditions of the thirties, and we have not changed our thinking.

Senator, do you think an existing entity, such as the Council of Economic Advisers, could perform the duties you suggest? Or, is it necessary to create a wholly new unit?

Senator MANSFIELD. That is a possibility. The difficulty that I see is that the Council of Economic Advisers is a creature of the executive branch of the Government. And I am sure you are very much aware of the prophesies and the forecasts which have come out of that council. The latest one this morning is saying that the American people deserve inflation. That is what I heard on the radio. And I would say possibly, because I do not want to put an agency of any kind which would have real power in the hands of the executive branch of Government—there is too much power down there now—and what I want to see is the executive and the legislative working together. There has not been any of it until recently, and this is the first example that I can recall in many months where the administration has met Congress halfway and agreed to give some thought and consideration to a bipartisan proposal made by the joint leadership of both Houses. Not too much Executive power. There is too much down there now. Somewhere in between we have got to find a balance, a level.

Representative MOORHEAD. Well, I certainly share your sentiments on that, Mr. Leader.

Thank you, Mr. Chairman.

Chairman BENTSEN. Thank you, Congressman.

Congressman Reuss.

Representative REUSS. Thank you, Mr. Chairman. I too, think you are on the right track, Senator Mansfield. I particularly like your notion of a commission that includes the Congress, the executive, and leaders in industry and labor. If you look back in history at what got things done in our country, you think of things like the Federal Reserve created in 1913 after a study and recommendation for several years by just that kind of a commission. You cannot do it by Congress alone. You certainly cannot do it by the Executive alone. I think you are on the right track.

Senator MANSFIELD. Well, may I say this is not an original idea. It has been advanced many times before. We are just bringing it to life once again.

Representative REUSS. I like too, your modest list of some of these follies that are currently being committed. You say in your statement that "while the Commerce Department appears to be tightening up on the exports of materials," and they are, like on scrap, "the Treasury is endeavoring to stimulate exports through the DISC incentives." And they are, like on scrap.

Nobody is minding the store as far as I can tell. There are many such examples, and who knows better than our chairman. One of the reasons that we are not bringing in the oil exploration that we should in our country is that we do not have enough oil well drilling equipment, yet the Export-Import Bank is today subsidizing, at a cut interest rate, and for long terms, to Iran, which is choking with reserves and oil, and that very oil well drilling equipment could do some good at home.

Or take credit. Our housing industry here is absolutely flat on its back because of tight money, nonexistent credit. Yet, the Import-Export Bank is granting credit as if it were going out of style. To whom? To Germany and Japan, both of whom are choking on international reserve and have credit running out of their ears.

Or take AID, the middle-income housing guarantee program. They are building middle-income housing all over Latin America, abstracting great quantities of American credit which could be used for building middle-income housing at home. Middle-income people deserve homes too.

So, the whole thing is right out of Alice in Wonderland, and a commission like yours, I think, could start to set it right. I hope, I wish you success.

Chairman BENTSEN. Thank you very much, Congressman Reuss. Senator Javits, do you have questions of the leader?

Senator JAVITS. Yes, I do. One, I would like to compliment the leader on getting into this field. It is a matter which, as he knows, has almost obsessed me for many years, and I could not be more delighted that he is devoting his good integrity and fine mind to this subject.

Secondly, I take great satisfaction in what I understand has already been mentioned by Senator Percy, in the concepts which the leader has described, and which are parallel to concepts contained in the minority views of the Joint Economic Committee. They are almost identical.

I do have a couple of organizational questions which I would like to ask Senator Mansfield, and I know him well enough that if he feels that my questions are premature he will tell me so.

One would be that two alternatives have been suggested for the suggestions which you have made, Senator, and the suggestions which the minority of the Joint Economic Committee made. One of those is a commission which would deal with the Employment Act of 1946, and which would function on the concept of what we have to do in order to bring about the employment objectives, variously referred to as full or maximum of the Employment Act of 1946.

The other idea is now pending in the Foreign Relations Committee, of which the Senator from Montana and I are both members, and that is to establish a bureau in the Department of State respecting the availability, et cetera, of material.

And the third idea, and none of these are inconsistent with Senator Mansfield, but you are a very important figure around here, and it is valuable even if you are not prepared to pass on them to lay them before you, and the third would implement both one and two, and it is an idea which I intend to put into a bill next week, and that is that the Congress, committees, and various committees, have a pipeline into the executive department like they have a pipeline into us. This place is full of liaison officials of every Government department that is in business. We have none down there. And if you really want to keep your finger on the economy, we would have to have a liaison office in every Government department. Not every, not the Congress as such, but for example, the Banking and Currency Committee respecting the Treasury and the Federal Reserve; Labor and Public Welfare, which I am on, respecting Labor and HEW and so on. And I just lay those ideas before you, Senator, for any observation you would care to make on them.

Senator MANSFIELD. Well, may I say, Senator Javits, you never lack for ideas. It keeps one jumping just to remain five behind you.

Senator JAVITS. You are very kind.

Senator MANSFIELD. I have never heard the third of your proposals suggested before. It sounds most interesting. Of course, the departments and some agencies have congressional liaison people up here. I think some of them know more about what is going on in the Congress than we do ourselves, beacuse that is their job. It is worth considering. Let me think about it.

Senator JAVITS. Thank you so much.

Senator MANSFIELD. The first two I do not think too much of, because it would go contrary to the idea which we are giving some serious consideration to, which may or may not come to fruition, and that is an executive-legislative-private sector commission which would have behind it the authority and the power, such as it is, of the Congress and the executive branch.

But, let me raise those two proposals with the group at the appropriate time and we will see. I hesitate to be too vehement in what I have to say because, you know, many times the other guy is right.

Chairman BENTSEN. Senator Humphrey has arrived.

Senator Humphrey.

Senator HUMPHREY. I have had the opportunity to review the Senator's statement, and one nice thing about it is that it is always constructive and I truly say, Senator, that the proposal that you have is one that is needed.

I am going to ask, Mr. Chairman, that some material that I have prepared myself on another area related to this be included at the economists that somehow we have entered a new state of economic development where sheer growth is either undesirable or must be very carefully controlled in order to avoid ecological or economic disaster. I am sure that the witnesses whom we shall hear this morning will be able to give us valuable insights on how to reconcile the problems of economic growth with the equally pressing problems of preserving a high quality of life.

Clearly these problems are not partisan issues. In the Minority Views to the Joint Economic Committee Annual Report this year, the Republican Members of the Committee recommended the establishment of a full time body to chart the course of economic growth for the country and to provide an early warning for possible bottlenecks in the economy so that appropriate governmental steps can be taken. The issues which were raised in the Minority Views reflect the same concerns which both the Chairman and our witnesses are raising this morning. Business capital requirements, material resource availability, and the ability (or lack of ability) to take a candid look into the future are all issues which now seem to be effecting seriously our ability to develop effective and realistic economic policies. In part, the problem is organizational. For example, the Minority Views pointed out that the Paley Commission, which was set up in the early 1950's to study problems of resource availability, made many recommendations which simply had to be repeated again by the recent National Commission on Materials Policy. The Paley Commission called for improved forest management, more Federal research to improve the properties and utilities of our materials, increased recycling, reducing the size and weight of automobiles and an intensified program for offshore drilling, recommendations almost identical to those in the National Commission's 1973 Report. I would like at this time to introduce into this hearing record that portion of the Minority Views dealing with the economic growth agency (see attachment), so that the history of this proposal can be found in one place.

I believe we have reached a watershed in our thinking on economic policy, and proposals such as the Minority Views, and the views of the distinguished Majority Leader, reflect this sorely needed change in our outlook with regard to economic policy. For our economic heritage has been very heavily steeped in the doctrines of free market economics, doctrines which do not hold up under all conditions in this modern world. The free-market system, so economic theory tells us, is supposed to be the best system for rationing material and human resources, and the best allocator of prices known to man. But this system exists only in theory. In fact, regulated industries, major oligopolies, and direct government intervention in the market such as the recent wage price controls, have brought our economy a long way from Adam Smith. And one can even call into question the advisability of a genuine free market system, especially when international considerations are taken into account. The increasing interdependence of the economies of the world often places national interests at odds with the harsh laws of a world free market economy. When the Peruvian anchovy crop, the United States soybean harvest, and the Arab oil embargo can have such dramatic effects on world consumption patterns, we must think seriously about changing the theoretical underpinnings and assumptions of our economic policy.

And, Mr. Chairman, one subject I would like to suggest to you, as I admire so much what you are doing, is the antitrust laws. The antitrust laws of this country are completely archaic, and they militate against the people they are supposed to help. They are destroying our competitive efforts abroad, which does us no good, and the rest of the world no good. And they are really a very inhibiting factor to the capability of the American enterprise system to do even better for the American worker.

It is in this context that we have recommended setting up an agency to take the long look and the medium turn look which the internationally interdependent market demands.

Again, I commend the Chairman of this Subcommittee for recognizing these developments and for assembling this talented panel of witnesses to bring Congress to develop its own thinking on the subject.

Attachment.

[Extract of pp. 106–113, Minority Views on the February 1974 Economic Report of the President, the 1974 Joint Economic Report, H. Rept. 93–927, 93d Congress, 2d session, Mar. 25, 1974]

III. LONG TERM GROWTH

In 1971 the United States posted its first trade deficit of the century. Our trade account, which had once been the strongest sector of our balance of payments, fell to a $2.9 billion deficit. The conditions which forced our trade picture into this position were instrumental in the international monetary upheavals of 1971, and in the two formal devaluations of the dollar of March 1972, and February 1973.

One of those conditions was the generally inflationary setting of the U.S. economy from the mid 1960's on, a condition which contributed to the Administration's wage and price control program of 1971. As reported elsewhere in this volume our economy continues to suffer from inflation at a time when shortages exist in a large number of basic materials necessary for economic growth.

Commenting on these developments, many business and political leaders have expressed concern that something more serious than a simple overvaluation of the dollar or an unfortunate coincidence of inflationary pressures has been at fault. Reports of fundamental changes in the attitudes of working people toward their jobs have suggested to many that America has somehow gone wrong, that we are somehow becoming less productive. With regard to management, serious misgivings have been expressed about the fact that businesses have begun more and more to look to the government to insulate them from the harsh winds of competition. Even the strong Phase II price controls were supported by many businessmen, who felt that the controls helped management negotiate successfully. Summing up this attitude, former Price Commission Chairman C. Jackson Grayson wrote in a recent article that many businessmen "prefer regulation to the problems freedom poses."

Business investment policies have also come under fire. The energy crisis has spotlighted the fact that domestic refinery construction has declined while demand for petroleum products has soared. Domestic capital investment in other basic industries such as cement, steel, aluminum, glass and paper has also been growing at historical lows in recent years.

Whether or not these observations reflect deep-seated problems in the economy as a whole, they do reflect the views of many prominent persons who have felt compelled to speak out on the effects which changing values and habits are having on our society and our economy. President Nixon himself addressed this issue in his 1971 Labor Day message. In a recent speech, Federal Reserve Chairman Arthur Burns expressed concern about the growing public disenchantment with established institutions. A Republican member of this Committee last fall found "a new skepticism about the viability of our economic institutions and a lack of trust in the function of our marketplace economy."

We do not believe the situation is cause for panic or alarm. In fact, we believe that the American economy has been able to respond remarkably well to the swiftly changing conditions of the past decade. In particular, we believe that the rigidity of international exchange rates which characterized the international monetary system prior to 1971 probably influenced prices, employment levels and investment rates to a greater degree than is commonly acknowledged. Thus, we are optimistic over the future of our economy, given the application of appropriate policies at the present time.

However, we do take such observations about the changes in American life seriously. We do believe that the present time requires considerable flexibility and innovation in developing economic policies for the rest of the century. Inflation still is a problem which demands immediate attention. Many basic materials are in critically short supply. Capital investment, while expected to grow swiftly this year, still falls short of the levels needed to keep pace with projected levels of domestic demand. Factory working conditions and methods have changed little over the years even though the percentage of our labor force with a high school education is almost twice as high as it was 30 years ago.

The range of solutions and policy measures which address the current set of economic problems can be generally described as policies for productivity improvement and economic growth. There is a direct connection between productivity improvement and the level of inflation. Balanced economic growth should be able to supply this country with raw materials in sufficient quantity to moderate prices increases and permit high levels of investment in new plant and equipment. Our educational system should be able to supply productive employees but also management techniques for utilizing a highly trained labor force. Levels of investment in plant and equipment, if sufficient, should provide modern and efficient productive facilities to supply a wide range of consumer wants at non-inflationary prices. A sensible national materials policy could ensure that America can have access to necessary raw materials, including recycled materials, at a minimal cost to the environment.

Federal Government efforts in the past to promote balanced growth, increased productivity, adequate supplies of raw materials and orderly conservation of our natural resources have been well-intentioned but poorly coordinated at best. Specialized commissions and government departments have dealt with aspects of the overall problem, but few efforts have attempted to take on the issue as a whole. The President's Commission on National Goals (1960) was the last effort along these lines. Other Commissions which are worth noting are the National Commission on Materials Policy and the National Commission on Productivity.

We believe that the breadth of today's economic problems and the sophistication of today's economy requires a full-time body to chart the course of economic growth for the country and provide an early warning for possible bottlenecks in the economy so that appropriate governmental steps can be taken. Such a body should be independent of the Executive Branch, but be adequately enough staffed to provide thorough medium and long range analyses of the economy and recommend legislative and other solutions where problem areas are identified. It is essential that such a body be independent of the Executive Branch in order to ensurethat it not become a "planning agency" for implementing the economic policies of a particular administration.

Capital Investment.—One of the major items which such an economic growth agency must examine is the level of capital investment in this country: What is the optimum level for improving industrial efficiency and supplying the demands of society without generating overcapacity? Are the incentives for investment in this country comparable with those for investing in others? If not, is the imbalance having a substantial effect on comparative levels of investment? Are there substantial capital investments which should appropriately be done by government, in addition to traditional public works projects? (A report from this Committee 2 years ago, for example, recommended the establishment of a national computer net, under government regulation, for bringing the efficiency and convenience of computers at low cost to anyone within reach of a telephone.)

Our concern with capital investment arises from the startingly low levels of such investment, levels which coincide in part with the shortages plaguing our economy. Investment in railroad transportation equipment has not yet reached the dollar level attained in 1966; investment in real terms, of course, lags the 1966 level substantially.

Investment in transportation plant and equipment generally in 1973 was only slightly above the 1965 level.

Blast furnaces and steel works received approximately the same dollar investments in 1973 as they did in 1957.

Investment in primary metals was the same in 1973 as in 1968.

Investment in machinery except electrical in 1973 was less than in 1969.

Investment in textiles was less in 1973 than in 1966.

Petroleum investments are at approximately the same level now as they were in 1967, a point which is often cited as contributing to the present energy crisis.

Paper investment was less in 1972 than in 1966, and finally exceeded the 1966 level last year.

Again, it should be pointed out that these descriptions reflect current dollar figures; investment in real terms in these industries is correspondingly lower now than in previous years.

The traditional response to flagging investment has been tax incentives either in the form of accelerated depreciation schedules or an investment tax credit.

Usually the incentives are imposed economy-wide; occasionally they respond to a particularly pressing public policy need, such as the accelerated write-off provision in the 1969 Tax Reform Act for pollution control equipment, certain railroad rolling stock, and coal mine safety equipment.

While we endorse the use of tax incentives for capital investment in principle, we believe that current incentives often reward management for actions it might have taken anyway. We believe the government could receive bigger effect from the incentive—and the incentive itself could be made more attractive —if it were applied to the amount of capital investment in excess of a certain base period.

In the final analysis, the decision to set up a new plant or a new piece of machinery is going to depend largely upon the existence of a market for the finished product at a price which makes the investment profitable. The role of the government in this regard is to create demand both in its purchase of goods and services and also in the conduct of its monetary and fiscal policies. Here we cannot emphasize strongly enough the absolute necessity of achieving consistency in fiscal policy, assuming an acommodating monetary policy. One of the mistakes of the past decade, we believe, is that the Federal government has led Americans to believe that it will respond quickly to the pressures of the moment, upsetting carefully laid policies before they have had time to become effective.

Elsewhere in this Report we state our views concerning international exchange rates. However, it is appropriate to mention at this point the effect which an over-valued or an under-valued currency can have an investment rates. In April, 1971, for example, it took 28 percent fewer dollars to buy the same number of German marks as it does now. To the extent the old exchange rates were unrealistic, therefore, investment made by American firms in Germany during that period for the purpose of serving the U.S. market or third country markets thus had the effect of a substantial investment tax credit and wage/ operating cost subsidy. Although we do not mean by this to imply that most U.S. firms deliberately invested abroad in order to escape U.S. costs imposed by unrealistic rates, one cannot avoid the fact that some such investments were made for this purpose. Recently the converse of this argument has been bearing itself out: that the prospect of continued, realistic rates for the dollar is consistent with a marked increase of foreign direct capital investment in the United States.

Materials Policy.—The current economic scene is unique for the large number of marked materials shortages. In part, these shortages are the result of insufficient plant capacity; there is a clear connection between sound investment policies and the adequate supply of materials. In part, the current inflation is the direct result of supply shortages. For these reasons, if for none other, this country must develop a materials policy for the 1970's and beyond.

A start was made in 1970, when the Congress passed the National Materials Policy Act. That Act established the National Commission on Materials Policy, and the Commission's final report was published in June 1973.

Both the Commission and its report are curiously reminiscent of the Paley Commission and Report of twenty years ago. That Commission, which was appointed in response to materials shortages of the Korean War period, called for improved forest management, more Federal research to improve the properties and utilities of our materials, increased recycling, reducing the size and weight of automobiles, and an intensified program of offshore drilling. These are almost identical to recommendations in the 1973 report.

The Paley Commission also recommended setting up a permanent institution to deal with materials shortages on a permanent basis; this recommendation was repeated in 1973. The growth agency which we support follows the thrust of such a recommendation, as its effect would be to keep before the public eye the salient features of important recommendations on these long-term issues. Clearly, the record shows that temporary commissions, which do not have a chance to stay on an advocates for their views, often find that their work must be repeated by new generations.

Productivity.—In 1971, the President established the National Commission on Productivity, and later that year Congress gave it legislative sanction. The vote in the Senate was unanimous. Concern had been expressed for some years about this country's flagging productivity performance, and by 1971 it was clear that the inflationary pressures in the economy were directly related to that performance.

Conceptually speaking productivity is the relationship of output to input. As a definitional matter, however, productivity in this country is usually said to refer to labor productivity, or units of output per unit of labor input.

The factors which lead to productivity growth have been charted by one prominent economist as: education, capital investment, new techniques and practices made possible by advances in knowledge, improved allocation or resources, and economies of scale.

It is safe to say that the actual achievements of the National Commission on Productivity have fallen short of expectations, though not through any lack of sincerity on its part. One reason for its inability to do more is that it was seriously underfunded, running at one quarter of its $10 million annual authorization. But two more knotty reasons can also be given. First is that productivity improvement is such a vast field as to defy any organized approach. Hearings on the subject of productivity held by this Committee two years ago examined aspects of human motivation, crime, physical surroundings, research and development, business competition, safety and health, product hazards, recycling, freedom of information, education, and advertising. Any effort to improve national productivity must either concentrate on a few aspects of the problem, to the detriment of others, or spread itself thin.

The other reason speaks to the purpose of the National Commission itself, that is, honest people can disagree strongly about the proper role of government in promoting productivity improvement in the first place. Research activities are noncontroversial enough, but serious questions can be raised about the Government telling business and labor how it should become more productive. To its detriment, we believe, the National Commission adopted a low profile and attempted to develop—through studies and grants-in-aid—some fruitful lines of enquiry. It also commenced a nationwide advertising campaign, to alert American employees to the fact that American is only as productive as we make it. To date, the major achievements of the Commission have been a comprehensive study of the food industry, a forthcoming study of health productivity, sofe projects for improving the productivity of local government, and the establishment of a unit train to carry food from California to the East Coast.

We believe that the Federal Government must continue the work begun by the National Commission on Productivity, but raise both the effort and the profile of the agency. Ideally, the agency should be linked to the economic growth agency we have described on page 107, with all that this implies in terms of independence. Such an agency should be commissioned to recommend legislation and other steps to minimize bottlenecks in the economy. It should promote, through education and public advertising campaigns, the importance of productivity improvement to the achievement of our national goals. It should fund innovative experiments aimed at increasing the amount which advances in knowledge can affect productivity. Above all, it should advocate the public interest in improving productivity.

Human Resource Development.—One critical area which must be addressed by the growth agency is that of human resource development. This is more basic than performing time studies or developing training programs; it is no less than coming to grips with societal changes of the past decade and translating them into recommendations for adapting the government to the way people think about their work. There can be no doubt that our television culture has spawned a generation of workers who feel that a piece of the affluent society is theirs for the asking. "Once a certain level of affluence is taken for granted," writes Michael Maccoby in the major book on worker attitudes, "Where Have All the Robots Gone?," "this tends to undermine the attitudes based on the principle of scarcity, that one must sacrifice individual expression and growth in order to survive."

The implications of this state of affairs for the productivity of the nation's economy are profound. In terms of educational achievement alone, the American worker today is almost the equivalent of yesteryear's manager. In terms of affluence and real income, he has a standard of living which is higher. It should come almost as a truism that worker attitudes have changed as well, even if—especially if—the nature of the average job has not changed.

In some ways, the nature of American work *has* changed. The much-observed shift in the nature of the American economy from a manufacturing to a service-oriented economy implies that types of jobs have changed as well. However, we believe that the preconditions have been met for a more fundamental change in the workplace, one which could transform employees from servants of their employers to decision-making participants in the productive process. We have also observed that the average assembly line job, in particular, is little changed from the days of the Model T.

America has found that tapping the reservoir of talent which was hidden by racial and other prejudice has altered the structure of labor markets as well as affected social values. The number of individuals from minority groups and the number of women in high places in government and industry, while insufficient, at least attests to the fact that social and economic progress go hand in hand. We believe that a similar principle applies to tapping the reservoir which is hidden by conventional attitudes about the structure of employment, the nature of the workplace, and the participation of employees in decisions regarding their employment conditions.

Far from being a radical notion, we believe that such a statement simply embodies sound economics as well as a realistic appraisal of societal trends. It is fairly evident, for example, that the preconditions for a greater participation by women professionals in the labor force had been met long before the latest phase of the women's liberation movement became widespread.

Forward-looking firms, and even government offices, have begun experimenting with methods to give employees a greater voice in their own worklife. In many countries abroad, the use of such methods is quite well established, and some countries such as West Germany and Norway have legislation implementing these concepts. While we do not deem it advisable to impose systems of industrial organization on the private sector, it is safe enough simply to predict that methods for giving employees greater decision-making power over their jobs and a greater stake in the companies will become more widespread in the future. A decade ago, for example, no one would have questioned the fact that major decisions of corporate organization should be left to management. However, a 2½-year-old article in the "Harvard Business Review" indicates a large amount of management support for increased employee influence on management decisions.[1] In urging that attention be paid to these trends, therefore, we are simply urging that attention be paid to the obvious, and that the economic consequences of trends taking place at the present time be analyzed so that appropriate policy responses can be made.

Employment.—Elsewhere in these Views, we examine the short and intermediate-term employment picture. A growth agency such as we suggest would have to take a look at the long-term picture. Had such an agency been established some years ago, it might have been able to anticipate some of the incipient structural problems in time to avoid some of the bottlenecks we are facing today.

We must look back to the 1972 Annual Report of the Council of Economic Advisers for a specific discussion of long-term employment planning. And since that time, the economics profession has been engaged in a controversy about the unemployment rate which corresponds to "full employment" for policy planning purposes. Most of the arguments dwell on a theoretical analysis of how to interpret the effects of the increased share in the labor force of certain groups which have traditionally had above-average unemployment rates. Few economists—and no government officials—have attempted a full-scale look at how present trends might acect the labor market of the late 1970's and the 1980's.

For example, it is known that the post-war baby boom is responsible in part for the high teenage unemployment rate. Teenagers not only constitute a larger proportion of the labor force than previously, but also have a higher unemployment rate. However, we do not know what effect this bulge will have on unemployment rates when this group moves into the prime employment category of 26–44 year olds.

The same can be said about the employment picture for women. Participation rates for women in the labor force have increased steadily in recent years. Just how high these rates will climb in the future is open to conjecture. However, the consequences of the various possible scenarios have never been fully and openly discussed by any Administration.

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[1] Ewing, "Who Wants Corporate Democracy?" Harvard Business Review, vol. 49, No. 5 (September-October, 1971), p. 12.

be printed at this point in the hearing record, describing the proposed legislation. It is just one of several proposals that are in the legislative hopper, and I do believe that all of those Senators that have made these proposals might well find it helpful to testify to explain what they have in mind.

The Woodrow Wilson International Center for Scholars, with which I have been closely associated since its inception, also published a very remarkable study relating to growth and development and planning and forecasting. The summary of that study has been included as part of my statement. I ask that the full statement be included in the record.

Chairman BENTSEN. Without objection, it will be done.

[The statement referred to follows:]

[From the Congressional Record, Feb. 25, 1974]

S. 3050. A bill to promote the general welfare by establishing a balanced national growth and development policy and establishing an Office of Balanced National Growth and Development and certain programs to carry out such policy. Referred to the Committee on Government Operations.

THE BALANCED NATIONAL GROWTH AND DEVELOPMENT ACT OF 1974

Mr. HUMPHREY. Mr. President, I rise today to introduce one of the most important bills that I have ever introduced in this body. This particular piece of legislation has been in the making since early 1972. I first unveiled its general provisions on May 26, 1972 before the Commonwealth Club in San Francisco, Calif. Later that same year on October 11, 1972, I addressed the annual meeting of the American Institute of Planners in Boston where I again discussed the proposal and invited the professional planning community to join me in my efforts to further its development. And just 1 year ago, on February 26, 1973, my proposal for achieving balanced national growth and development was published as a committee print by the Joint Economic Committee of the Congress. Since that date over 3,000 copies of my proposal, in the form of this special Committee Print, have been circulated throughout the Nation.

Also, during this same period, the Congressional Research Service, at my request, prepared two important reports on national growth and development policy which have been published by the Senate. They were: First, Toward a National Growth and Development Policy: Legislative and Executive Actions in 1970 and 1971: and second, Toward a National Growth Policy: Federal and State Developments in 1972.

A third and similar report will soon be published covering 1973 happenings in this regard.

Interest in the subjects of national growth and development, long-range national policy planning, and institutional systems for establishing national goals and priorities, has been steadily growing. But at the State and local levels these past few years, action has been substituted for mere interest in these subjects. Concern about rates of growth and about environmental deterioration has moved from the meeting hall into the courts and ballot boxes.

And, of course, on the national level, Americans have these past few years been hit by a series of worsening crises, including confidence-in-Government, runaway inflation, and fuel to food crises.

We can continue along the path of haphazard growth and frequent environmental, economic and social crises, but following that path surely means national disaster. Or, we can create the machinery and processes that are required to develop policies, incentives and programs for balanced, rational coordinated patterns of national growth. In that way, we can guide and control our future destiny rather than let events or fate dictate it.

Continued unplanned growth—without goals and guiding policies—will stimulate thousands, even millions, of uncoordinated individual personal and community responses to the aggravated problems of everyday living. And in an increasingly technologically complex and interdependent society, these individual decisions affect the lives of many other people and communities, and indeed the health and welfare of the Nation. For example, the decision of many millions of Americans to purchase an automobile—or two, or three—over the past several decades not only has contributed to increased air pollution, time-losses in traffic, accidents, high road construction and maintenance costs, and today's fuel and energy crisis, but it has also shaped the actual physical structure of our Nation's cities and contributed to a major migration of millions of people to those cities from our Nation's farms, and open countryside.

Now, as Americans are forced to experience personally automobile fuel shortages, many of them are learning how dominant their dependency on such a conveyance really is. Some are now wishing they had not moved from the inner-city to the suburb. Others are asking why more has not been done to date to provide for other means of transport such as mass transit. And still others are wondering how such a crisis could have hit a nation so fast and hard when it only imports about 17 percent of its total energy needs. In short, they are now being given an object lesson in the value of long-range policy planning and the need to anticipate possible changes in the future availability of resources.

I believe that a balanced national growth and development policy framework can and must be developed to maximize the positive impact of public policy on the "quality of life" of all Americans.

The questions that we face, given the expected social and economic countours of our Nation in the year 2000, are awesome when we look at the inadequacy of our current public policymaking process.

The United States is in one sense the "oldest" country in the world—we were the "first" Nation to enter the 20th century. Our society has lived the longest with

High technology;
High mobility;
High urbanization; and
High affluence.

Despite this historic advantage, we seem to have done the least among nations in developing the policymaking and planning processes required by our people and institutions to adjust to these new realities.

Most European nations have instituted policies of balanced national growth and development during the last 20 years.

These policies, incorporating population distribution goals, land use objectives, economic growth targets, and the like, have met with some success already, despite their relatively recent initiations.

During this same period in our country, anything that even sounded like national policy planning was looked upon with suspicion by a large and vocal segment of our population.

But, in recent years, some important rogress has been made in making at least a start toward achieving a balanced national growth and development policy.

For example, in title IX of the Agriculture Act of 1970, Congress and the President committed themselves to a national policy of "sound balance between rural and urban America." Congress proclaimed that it "considers this balance so essential to the peace, prosperity, and welfare of all our citizens that the highest priority must be given to the revitalization and development of rural areas."

And, shortly following the declaration of that new national policy, Congress enacted the Rural Development Act of 1972, which provides the programs for implementing that policy.

A similar commitment to the balanced growth and development of rural and urban America was echoed in title VII of the Housing and Urban Development Act of 1970.

However, while these policy changes and other specific development programs are important, good and necessary for America, they are far from sufficient to help us cope with the long-term balanced growth and development problems which we face.

The problems we must address in America include:

Natural resource availability and use;
Population growth and distribution;
Regional distribution of national economic growth;

I have asked many individuals and groups throughout the country for comments and recommendations concerning this legislative proposal. In due course, all of these sugestions will be carefully scrutinized, and changes in my proposal will undoubtedly be made. I welcome any and all additional ideas and comments.

I also would like to take this opportunity to urge my Senate colleagues to join me in sponsoring this legislation.

In these times of amazing proximity between people and nations, resulting from revolutions in communication and transportation technology:

In this age of unbelievably rapid change in virtually every facet of man's existence, from the way he constructs his office buildings to the way his children perceive "right and wrong";

We need a way for all the people of this Nation to participate in shaping their own future.

Only through an effective process of the kind I am recommending here today can we as a nation anticipate and direct change and consequently, minimize that Alvin Toffler has aptly named "future shock."

For more than 2 years my staff and I have been working on this proposal. I consider it to be the single most important piece of legislation of my 25 years of public service.

I believe this legislation goes a long way toward providing the institutional arrangement necessary to the development of a continually evolving balanced national growth and development policy in the United States.

Mr. President, before the end of this month, Congress is to receive its second biennial report from the executive branch identifying Federal actions that will strengthen the Nation's ability to deal effectively with future national growth and development issues. The first of such reports was presented to Congress in 1972. The New York Times characterized that particular report as "A mausoleum of words." For the most part, the 1972 report merely summarized the Nixon administration's domestic legislative program calling for Government reorganization, revenue sharing, and national land use policy. I certainly hope this year's report is more in accordance with what the congressional authors of title VII of the Housing and Urban Development Act of 1970 had in mind.

Mr. President, I ask unanimous consent that the complete text of my bill be printed in the RECORD following the completion of my remarks. I also ask unanimous consent that a "Proposal for Developing a Capability at the National Level for Strategic Policy Assessment," developed by the Woodrow Wilson International Center for Scholars, be printed in the RECORD, along with a statement by Archibald C. Rogers, chairman of the American Institute of Architect's National Policy Task Force, and presented before the House Interior and Insular Affairs Committee last April, in which Mr. Rogers discusses the institute's work and recommendations concerning national growth and development policy.

Finally, Mr. President, I would like to take this opportunity to pay tribute to James E. Thornton, now a member of the Senate Agriculture Committee staff, for the work and help he has provided me in developing this proposed National Growth and Development Act. He has spent much of his own off-hour time working on this proposal and related matters for me, for which I am deeply grateful and appreciative.

There being no objection, the bill and material were ordered to be printed in the RECORD, as follows:

S. 3050

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Balanced National Growth and Development Act of 1974."

Title I—Statement of Policy; Findings; and Purpose

STATEMENT OF POLICY

Sec. 101. In order to promote the general welfare and to improve the quality of life and standard of living for all the Nation's people by providing direction for the forces determining economic growth, population distribution, and environmental quality consistent with guarantees of maximum freedom and self-determination among citizens, the Congress declares that it is the continuing responsibility of the Federal Government, in concert with State and local governments, to undertake the development of a balanced national growth and development policy, which shall incorporate economic, social environmental, and other appropriate considerations. The balanced national growth and development policy shall serve as the guide for national decisionmaking and Federal assistance and cooperation with States and local governments and appropriate encouragement of cooperation by private enterprise, to effect the achievement of balanced economic growth in urban and rural areas, through optimum allocation of resources, balanced distribution of population, and environmental protection.

FINDINGS

Sec. 102. The Congress finds that there is a need for a more explicit and rational formulation of national goals and priorities, and that the Congress needs more detailed economic social, environmental, and program analysis in order to make informed priority decisions among alternative programs and courses of action to formulate policies that will bring into concert the numerous and often conflicting efforts for national improvement. The Congress also finds—

(1) that a lack of coordinated policies for Federal programs and incentives to private enterprise designed to achieve a balanced national growth has resulted in a serious decline in the quality of life of our Nation's people, and that much of this decline has been caused by a failure to properly provide for the management, use, protection, and conservation of resources essential to maintaining and improving such life quality standards;

(2) that rapid growth of population in urban areas and uneven expansion of urban development, together with a decline in rural population and slower growth in rural areas, has created imbalances between fundamental needs and resources of air, water, and land which seriously threaten the environment for quality living in many regions of the country;

(3) that the heavy concentrations of our Nation's population in only a few small areas increases their vulnerability to various social system and community service breakdowns, resource shortages, natural disasters, and even destruction by weapons of modern warfare;

(4) that there is a national and individual citizen interest to be served in a more efficient and comprehensive national system of interstate, statewide, regional, and local comprehensive planning and decisionmaking and that large-scale industrial and other economic growth conflicts in patterns of land use, fragmentation of governmental entities exercising land use regulation powers, and the increased size, scale, and impact of private actions, have created a situation in which land use and other management decisions of wide public concern often are being made on the basis of expediency, tradition, and other factors which too frequently are unrelated or contradictory to the real concerns of a sound national land use;

(5) that costs of public services and facilities can be optimized when such services and facilities are well-planned as an integral part of national, regional, State, or local community growth and development policies and goals;

(6) that the development of a balanced and efficient multi-mode transportation system adequate to meet the current and future transportation needs of the United States is essential to the commercial life and general welfare of the people of the United States; that present transportation facilities, transportation rate structures, transportation development are inadequate to meet the minimum current and future transportation needs of the people of the United States;

(7) that systematic and coordinated planning and development of balanced transportation facilities and services within and between all regions of the United States must be encouraged and vigorously pursued in order to improve the mobility of our Nation's population;

(8) that the energy needs of the Nation have been rising faster than its capacity to convert fuels into energy and that no nationwide system now exists to interlink existing electrical generating and transmission systems, the failure to implement may lead to power shortage, higher consumer cost, and other failures which endanger health and safety in the heavily populated areas of the country;

(9) that the maintenance of adequate energy and fuel supplies at reasonable price levels, the continued fiscal stability of the basic energy and fuel industries, the establishment of an adequate energy research and development program, the proper development of adequate facilities for the production, distribution, transportation, and transmission of fuel and energy resources and the proper conservation and use of fuels and energy resources consistent with the national goals of balanced economic growth are essential to the well-being of our Nation, to the quality of life of our individual citizens, and that there now exist various and sometimes conflicting laws and regulations setting forth national goals which affect fuels and energy policy and which are vital to the development and conservation of fuel and energy resources;

(10) that a lack of long-term comprehensive policies and goals regarding the production of food and fiber has excerbated our national and international social and economic problems;

(11) that during the housing needs of our Nation, particularly in center-cities and in nonmetropolitan areas, have reached critical proportions; and that a national housing policy, accompanied by specific goals, is needed reflecting the importance of adequate housing for all citizens regardless of income status or area of residence;

(12) that there are many unmet needs for new or expanded community facilities, such as the replacement and extension of sewer and water services, for separation of storm and sanitary sewers and for new and efficient methods of solid waste disposal;

(13) that the health services and facilities of the Nation have been greatly strained and have produced the most inflationary increases in the cost of living; and that rural and center-city areas in particular suffer most severely from the lack of adequate health care services and medical personnel;

(14) that the public education systems in many areas of the country have failed to offer adequate education and training to many people to enable them to find satisfactory employment;

(15) that there is still a significant incidence of poverty, crime, malnutrition, and social maladjustment in our Nation that tends to degrade human dignity, impair people's quality of life, and divide people along lines of race, income status, and class, and to sap the vigor of our society;

(16) that fiscal and monetary policies have failed to promote balanced national development, stable economic growths, or more equitable income disbursements;

(17) that the availability of capital and credit, at reasonable rates, terms, and conditions, is inadequate to meet many of the needs of State and local government and of private industry;

(18) that fragmentation of local government in metropolitan areas and lack of consolidation of local government resources in nonmetropolitan areas has fostered uncoordinated and wasteful growth and development, and there is a need for improved coordinated management of all governmental functions at State and local levels; and

(19) that certain Federal programs affect the location of population, economic growth, income distribution, and the character of urban and rural development; that such programs frequently conflict and result in undesirable and costly patterns which adversely affect the environment and wastefully use our natural resources, and that existing and future programs must be interrelated and coordinated within a system of orderly development and established priorities consistent with a balanced national growth and development policy.

STATEMENT OF PURPOSE

Sec. 103. To promote the general welfare and to improve the quality of life and standard of living for all of our Nation's citizens by properly guiding and applying the resources of the Federal Government and of our entire society in strengthening the economic and social health of all areas of the Nation; more adequately protect the physical environment; effect maximum efficiency in the allocation, utilization, and conservation of resources; and achieve a more balanced distribution of urban and rural population, consistent with the commitment made by Congress in title IX of the Agricultural Act of 1970 as amended, and the Rural Development Act of 1972, the Congress declares that the Federal

Government, consistent with the responsibilities of States and local governments and the private sector, must implement the responsibility acknowledged in title VII of the Housing and Urban Development Act of 1970 for the development of a national growth policy which shall incorporate social, economic, environmental, and other factors in order to accomplish, within the framework of balanced economic growth, the following national goals:

(1) expansion of the Employment Act of 1946 to provide, in addition to the goal of reasonably full employment, the goal of income distribution that will assure an income adequate to provide acceptable levels of nutrition, health, education, housing, and cultural opportunity for all our Nation's population;

(2) a level of environmental quality, as provided in the National Environmental Policy Act of 1969, as amended, which safeguards the health and tranquility of our Nation's residents wherever they choose to live and which prevents and avoids further pollution, and preserves our Nation's and the world's valuable natural resources;

(3) a distribution of population, through the development of appropriate policies based on the findings and recommendations of the Office of Balanced National Growth and Development in the Office of the President, the Foundation on the American Future, the National Citizens' Council on America's Future, and the Joint Congressional Committee on Balanced Natural Growth and Development, as established in this Act, and requirements of balanced economic growth;

(4) implementation of the balanced national growth and development policy through a national regional development system of multi-State regional commissions based upon comprehensive State multijurisdictional, county, metropolitan, and nonmetropolitan planning and development districts;

(5) coordinated land-use planning, regulation, and development among governments in a region to avoid duplication of facilities to facilitate balanced distribution of housing relative to employment locations, and to permit freedom of choice of residential location to citizens of all races, colors, creeds, and income status;

(6) development of an integrated and balanced national transportation system, utilizing advanced technology and planning, and incorporating rate structures consistent with the goals of balanced economic growth;

(7) development of a comprehensive and integrated national communications systems to facilitate the dissemination of information conducive to an informed public and one which is designed to meet requirements of improved education, health care, the arts and sciences, private enterprise, government, and of the employment of a more balanced national growth pattern in the United States;

(8) motivation of private enterprise to participate to its fullest possible extent in activities that will further the national growth policies that are developed in pursuance of these goals;

(9) formulation of a national fuels and energy policy based upon sound conservation and use principles, which will provide adequate supplies of energy, at reasonable prices, in all regions of the country, with minimal environmental impact, while providing consumers with reasonable choices among alternative forms of energy, and the encouragement and promotion of the development of a viable domestic energy industry, consistent with the goals of balanced economic growth;

(10) formulation of national food and fiber policy which will insure a fair economic return to agricultural producers which will insure adequate supplies for the American people and for those of the world who depressed upon our nation for agricultural exports and which will end stability to large sectors of our economy engaged in related or dependent activities and to our international trade relations;

(11) provision of a decent home in a suitable environment for all citizens, through implementation and updating of the national housing goals adopted in title XVI of the Housing and Urban Development Act of 1968;

(12) development of planned communities of optimum size from the viewpoint of costs of public services, spatial relationships between economic functions and population densities to minimize daily transportation needs and energy use and facilities movement of people and goods, and the application of advanced technology in the planning and development of expansion of existing and new communities to promote the goals of this Act;

and local planning agencies relevant to the planning process for the purpose of periodic joint determination of mutually consistent realistic and attainable regional, State and local growth policies;

(D) monitoring the growth and development or stabilization of the regions, States, and localities, comparing planned with actual development or stabilization, and making adjustments in growth policies or in developmental activities, as may be indicated by such reviews, in order that the growth policies continue to serve as current and suitable guides for Federal, State, and local program decisions;

(E) reviewing proposals for federally aided programs and projects for consistency with the stated growth policies, in accordance with the provisions of section 204 of the Demonstration Cities and Metropolitan Development Act of 1966, section 401(A) of the Intergovernmental Cooperation Act of 1968, the Rural Development Act of 1972 and of this Act;

(F) reviewing and planning requirements of all existing and proposed Federal programs, and taking such steps as are necessary to insure that these planning requirements are compatible with the unified comprehensive planning system, and,

(G) periodically summarizing, for the use of both the President and the Congress, the current and foreseeable needs for various types of Federal assistance as indicated by the comprehensive planning system, taking into consideration, among other things, the relative priorities assigned to such assistance among the several regions, States, and districts in their respective plans; and

(18) an evaluation of the yearly funding of the Office, and the Foundation established in title X of this Act.

(b) The Office shall, as soon as practicable, prescribe such rules and regulations as may be necessary to implement its functions under this section and the other provisions of this Act.

ANNUAL REPORT ON BALANCED NATIONAL GROWTH AND DEVELOPMENT

Sec. 203. (a) The Annual Report on Balanced National Growth and Development shall include—

(1) information and statistics describing characteristics of national growth and development identifying significant national and regional trends;

(2) a summary of significant problems facing the United States as a result of population level and distribution trends and other developments affecting the quality of life of the Nation's citizenry;

(3) an evaluation of the progress and effectiveness of Federal efforts designed to meet such problems and to implement the policy and objectives of this Act;

(4) a review and evaluation of multi-State, State, and local government (including multicounty) planning and development efforts to determine the extent to which such activities are not consistent with the policy and goals described in sections 101 and 103, respectively, of this Act;

(5) appropriate projections and forecasts regarding future social, economic, environmental, and scientific developments affecting the growth and development of the Nation, stated in five-, ten-, and twenty-five-year time-frames;

(6) recommendations for policies and programs to further carry out the policy and objectives of this Act, including such legislation as may be deemed necessary and desirable;

(7) data and analyses regarding any existing or anticipated shortages of essential resources, with recommendations as to how such shortages might be minimized or avoided altogether;

(8) general plans regarding the implementation of the policy and objectives of this Act, including estimates of time and cost required to achieve them; and

(9) incorporate the reports required under title VII of the Housing and Urban Development Act of 1970, title I of the Airport and Airway Development Act of 1970, and title IX of the Agricultural Act of 1970, as amended, and other Acts where the President determines that incorporation of such reporting requirements into one single comprehensive report will lead to a better and more thorough understanding of both the individual reports and the interrelationships between and among such reports.

(b) Such annual report; and any reports supplementary thereto, shall, when transmitted be referred, through the Congressional Office of Policy and Planning, to the Joint Committee on National Growth and Development, the Joint Economic Committee, the Committee on Government Operations and Appropriations of each House and such other standing committees as the presiding officer of each House may designate.

EVALUATION BY THE COUNCIL OF ECONOMIC ADVISORS; THE COUNCIL ON ENVIRONMENTAL QUALITY; THE NATIONAL CITIZENS COUNCIL ON THE AMERICAN FUTURE, AND THE ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS

Sec. 204. The Council of Economic Advisors, the Council on Environmental Quality, the National Citizens Council on the American Future, and the Advisory Commission on Intergovernmental Relations shall review all new and modified growth and development policies and programs with respect to their economic, environmental, social, intergovernmental, and general impact, and report their recommendations to the Office within time limits prescribed by the Office.

TRANSFER OF CERTAIN DUTIES OF THE DOMESTIC COUNCIL TO THE OFFICE OF BALANCED NATIONAL GROWTH AND DEVELOPMENT

Sec. 205. (a) All functions of the Domestic Council related to national growth and development policy are transferred to the Office.

(b) This section shall be effective after one hundred and eighty days following the date of enactment.

CONSOLIDATION OF FEDERAL COMPREHENSIVE PLANNING ACTIVITIES AND PLANNING ASSISTANCE PROGRAMS

Sec. 206. (a) In order to facilitate the formation of the Office, the expeditious development of its activities, and the prevention of duplication and overlapping of its functions with other departments and agencies, the President shall transfer to the Office, in addition to the transfer provided for in section 502 of this Act, any units presently established in the executive branch of the Government and performing functions such as the collection, analysis, and dissemination of information; the administration of planning grants; or the review of proposals for federally aided projects or programs, or both, which, in his judgment, are sufficiently closely associated with the functions of the Office, as provided for in section 202, to warrant such transfer.

(b) Within one year of the date of enactment of this Act, the President shall report to the Congress which units and activities he proposes to transfer to the Office. Such transfers shall take effect after ninety days following such reports, unless otherwise provided by Act of Congress.

Title III—Transfer of Certain Functions From Office of Management and Budget With Respect to Review of Federal Projects and Liaison With State and Local Governments

Sec. 301. (a) All functions of the Office of Management and Budget under the provisions of title IV of the Intergovernmental Cooperation Act of 1968, section 204 of the Demonstration Cities and Metropolitan Development Act of 1968, and section 102(2)(C) of the National Environmental Policy Act of 1969 are transferred to the Office.

(b) So much of the personnel, property, records, and unexpended balances of appropriations, allocations, and other funds, used, held, available, or to be made available in connection with the functions transferred by this section as the Director of the Office determines shall be transferred to the Office.

(c) This section shall be effective after one year following the date of its enactment.

Title IV—Multi-State Regional Planning and Development Commissions

DECLARATION OF FINDINGS AND PURPOSE

Sec. 401. (a) The Congress finds that effective and equitable use of Federal resources in assisting the States and localities with their economic, social, and environmental needs requires a framework of policies for their growth, development, and stabilization which is consistent, realistic, and attainable. The

Congress further finds that continuing the systematic consultation and joint decisionmaking can take place. It is the purpose of this title to provide for consultation and joint decisionmaking through the establishment of multi-State regional planning and development commissions.

DETERMINATION OF REGIONAL BOUNDARIES

Sec. 402. (a) For purposes of this title the Nation shall be divided into a system of not less than eight, nor more than twelve, planning and development regions. The President is hereby authorized and directed to submit to Congress within two years after the date of enactment of this Act a report containing his recommendations concerning the number and the boundaries of such regions. Such recommendations shall be effective at the end of the first period of ninety calendar days of continuing session of Congress after the date on which the recommendations are submitted to it unless, between the date of submission and the end of the ninety-day period, either House passes a resolution stating in substance that that House does not favor the recommendations. For the purpose of this subsection—

(1) continuity of session is broken only by an adjournment of Congress sine die; and

(2) the days on which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the ninety-day period.

(b) In determining regional boundaries, the President shall take into consideration recommendations made by State and local governments. He shall also take into consideration the following criteria to the maximum extent feasible:

(1) adherence to State boundaries, unless individually affected States determine otherwise;

(2) adherence to Federal executive administrative regional boundaries;

(3) inclusion of entire metropolitan areas and multi-county development districts; and

(4) inclusion of interstate areas with common economic, social, or environmental problems requiring joint effort on the part of Federal, State, and local governments.

ESTABLISHMENT OF MULTI-STATE REGIONAL PLANNING AND DEVELOPMENT COMMISSIONS

Sec. 403. (a) For each region designated pursuant to section 402, there shall be established a multi-State regional planning and development commission. Recommendations concerning the establishment of each commission shall be made by the President to Congress with the concurrence of the Governor of each State included in the region based upon an Act of the legislature of that State. The President is authorized and directed to declare the establishment of each commission upon the approval thereof by concurrent resolution of the Congress.

(b) Each regional planning and development commission shall consist of the Governor and a State legislator, the latter of whom shall be selected by the legislature of each State included in whole, or in part, in the region, and a representative of the Office, who shall be appointed by the President by and with the advice and consent of the Senate. Such representative shall serve as Federal Co-Chairman, and a governor elected initially by a commission shall serve as State co-chairman. The term of the State co-chairman shall be one year, with terms provided for each of the States represented in succession.

(c) The Federal Co-Chairman shall be responsible to the President through the Office. He shall serve, wherever practicable, as the Executive Director of the Federal Executive Administration region within which the multi-State regional planning and development commission operates. He also shall maintain direct contact as appropriate with all regional and other offices of Federal agencies having grant-in-aid or other programs, or activities that may affect the growth and development within the region. Each Federal Co-Chairman shall be informed by each Federal department or agency of every grant, or agreement involving Federal funds made within the region. Such notice to each Federal Co-Chairman shall be given no later than the date of awarding such grant or assistance to the recipient.

(d) In addition to the Governor and a State legislator, each State shall have two State representatives, one representing the Governor and one representing the State legislature to be concerned full-time with commission activity, and who shall have authority to act as State members and to cast the State votes in the absence of the legislator and the Governor. Such State representatives and their staffs shall be supported by State funds.

(e) Each regional planning and development commission shall have an executive director, who shall serve as the general manager of the commission's program. He shall carry out his duties under the general direction of the commission, and on a day-to-day basis under the direction of the executive committee established in subsection (f).

(f) Each regional planning and development commission shall have an executive committee consisting of the Federal Co-Chairman, the State representatives of the State whose Governor and legislator are currently serving as State co-chairmen voting, and the executive director nonvoting. The executive committee shall be responsible to the commission for overall policy and management of the program.

(g) Commission decisions shall be determined by vote of the members. All decisions shall require affirmative votes by at least a majority of the States represented including the Governor and the legislator of each State affected by the decision.

(h) For the period ending on June 30 of the second full Federal fiscal year following the date of establishment of a commission,. the administrative expenses of each commission as approved by the Office shall be paid by the Federal Government. Thereafter, not to exceed 50 per centum of such expenses shall be paid by the Federal Govrnment. In determining the amount of the non-Federal share of such costs or expenses, the Office shall give due consideration to all contributions both in cash and in kind, fairly evaluated, including but not limited to space, equipment, and services.

FUNCTIONS

Sec. 404. (a) The functions of the multi-State regional planning and development commissions shall include, but not be limited to the following:

(1) establishing systems of policy formulation and planning in coordination with Federal and State governments and organizations of government officials;

(2) serving as coordinators of State comprehensive plans, including taking such steps as are necessary to assure the compatibility of such plans with each other;

(3) being responsible for interstate planning;

(4) cooperating with each other, and to the extent possible, maintaining interregional compatibility in policy and plan formulation and recommendations;

(5) serving as major continuing contributors to the formulation of national growth and development policies;

(6) advising the President through the Office of the most effective way in which to use Federal resources in the region in relation to the goals, strategies, and priorities developed through the planning system; and

(7) providing assurance that regional plans and developments are not inconsistent with balanced national growth and development policies.

(b) In order to achieve the purposes set forth in subsection (a) each multi-State regional planning and development commission shall—

(1) foster and undertake such studies of regional resources and problems as are essential to the policy and planning process;

(2) undertake a program of information exchange with the Federal Government, with other regional commissions, and with the States and districts within its own region;

(3) maintain a continuing study of the adequacy of administrative and statutory means for the coordination of plans and programs of the different Federal, State, district and local governments, agencies, and organizations of government officials; and

(4) establish and educational and research effort to assist State and local governments in improving the skills and proficiency of their officials and staff in the management and administration of Government and public services.

ADMINISTRATIVE POWERS

Sec. 405. (a) Each regional commission shall establish, after consultation with other interested entities, both Federal and non-Federal, principles, standards, and procedures for participants in the preparation, coordination, and implementation of comprehensive regional plans.

(b) To carry out its duties under this title, each regional commission is authorized to—

(1) adopt, amend, and repeal bylaws, rules, and regulations governing the conduct of its business and the performance of its functions;

(2) appoint and fix the compensation of the executive director and such other personnel as may be necesary to enable the commission to carry out its functions, and no member, alternate, officer, or employee of such commission, other than the Federal Co-Chairman on the commission and his staff, and Federal employees detailed to the commission under clause (3) shall be deemed a Federal employee for any purpose;

(3) request the head of any Federal department or agency (who is hereby so authorized) to detail to temporary duty with the commission such personnel within his administrative jurisdiction as the commission may need for carrying out its functions, each such detail to be without loss of seniority, pay, or other employee status;

(4) arrange for the services of personnel from any State or local government or any subdivision or agency thereof, or any intergovernmental agency;

(5) make arrangements, including contracts, with any participating State goverment for inclusion in a suitable retirement and employee benefit system of such of its personnel as may not be eligible for, or continue in, another governmental retirement or employee benefit system, or otherwise provide for such coverage of its personnel, and the Civil Service Commission of the United States is authorized to contract with such commission for continued coverage of its personnel, and the Civil Service Commission of the United States is authorized to contract with such commission for continued coverage of commission employees, who at date of commission employment are Federal employees, in the retirement program and other employee benefit programs of the Federal Government;

(6) accept, use, and dispose of gifts or donations of services or property, real, personal, or mixed, tangible, or intangible;

(7) enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in carrying out its functions and on such terms as it may deem appropriate, with any department, agency, or instrumentality of the United States, or with any State, or any political subdivision, agency, or instrumentality thereof, or with any person, firm, association, or corporation;

(8) maintain an office in the District of Columbia and establish field offices at such other places as it may deem appropriate; and

(9) take such other actions and incur such other expenses as may be necessary or appropriate.

(c) In order to obtain information needed to carry out its duties, each regional commission shall—

(1) hold such hearings, sit and act at such times and places, take such testimony, receive such evidence, and print or otherwise reproduce and distribute as much of its proceedings and reports thereon as it may deem advisable, a co-chairman of such commission, or any member of the commission for the purpose, being hereby authorized to administer oaths when it is determined by the commission that testimony shall be taken or evidence received under oath;

(2) arrange for the head of any Federal, State, or local department or agency (who is hereby so authorized, to the extent not otherwise prohibited by law) to furnish to such commission such information as may be available to or procurable by such department or agency; and

(3) keep accurate and complete records of its doings and transactions which shall be made available for public inspection.

(d) Each regional commission may establish, and is encouraged to establish, a multi-State citizen's council in accordance with provisions specified in subsections (c), (d), and (e) of section 706 of title VII of this Act.

(e) The executive director for each regional commission shall, with the concurrence of the executive committee, appoint the personnel employed by such commission, and shall, in accordance with the general policies of such commission with respect to the work to be accomplished by it and the timing thereof, be responsible for (1) the supervision of personnel employed by such commission, (2) the assignment of duties and responsibilities among such personnel, and (3) the use and expenditure of funds available to such commission.

ADJUSTMENTS OF BOUNDARIES OF ESTABLISHED REGIONAL COMMISSIONS

Sec. 406. (a) The Congress hereby authorizes and directs the President to adjust the operation, the administrative framework and geographical boundaries of the multi-State regional development commissions authorized under title V of the Public Works and Economic Development Act of 1965 to conform to the operation, administrative and geographical boundary framework provided under this title within one year after the recommendations submitted by the President under section 402(a) of this Act become effective.

(b) The Appalachian Regional Commission, authorized by the Appalachian Regional Development Act of 1965 is hereby authorized and directed to adjust its operations to conform with sections 403 (b), (c), (d), (f), and (g) of this Act within one year after the recommendations submitted by the President under section 402(a) of this Act have become effective. It is further provided, upon the date of enactment of this Act, that no new counties will be authorized to join or become a part of the existing Appalachian Regional Commission.

(c) The President, in carrying out his responsibilities under section 402(a) of this Act, shall also include recommendations concerning what further adjustments and changes should be considered by Congress in making the operation of the Appalachian Regional Commission more consistent with the legal, administrative, and geographical boundary framework of the multi-State planning and development regional commissions provided for under this Act.

UTILIZATION OF ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS

Sec. 407. (a) Pursuant to the objectives of this Act, the Director of the Advisory Commission on Intergovernmental Relations is hereby authorized and directed to make available to any of the multi-State regional planning and development commissions established under this Act such services and assistance by the Advisory Commission on Intergovernmental Relations as may be appropriate and feasible.

(b) The foregoing services and assistance to any multi-State regional planning and development commission shall include all of the services and assistance with the Advisory Commission on Intergovernmental Relations is presently authorized by law to provide.

(c) Nothing in this section shall alter or modify any services or responsibilities, other than those performed for any multi-State regional planning and development commission, which the Advisory Commission on Intergovernmental Relations under law performs for or on behalf of the Congress, the executive branch, or other parties.

The Director of the Advisory Commission on Intergovernmental Relations is, however, authorized to establish within its organization such additional divisions, groups, or other organization entities as may be necessary to carry out the objectives of this Act.

(d) Services and assistance made available to any multi-State regional planning and development commission by the Advisory Commission on Intergovernmental Relations in accordance with this section may be provided with or without reimbursement from funds of any multi-State regional planning and development commission, as agreed upon by the chairman of any individual multi-State regional planning and development commission and the Director of the Advisory Commission on Intergovernmental Relations.

APPROPRIATIONS AUTHORIZED

Sec. 408. There is hereby authorized to be appropriated for the expenses of this title the sum of $10,000,000 for the fiscal year 1975, and the sum of $20,000,000 for each fiscal year thereafter. All moneys appropriated under this section shall remain available until expended.

Title V—Comprehensive Planning Assistance

DECLARATION OF FINDINGS AND PURPOSE

Sec. 501. The Congress finds that full participation by State and local governments is essential to the unified Federal-State-local comprehensive planning system provided for in this Act; that full participation by State and local governments will place additional burdens both on their planning agencies, and on their general legislative and administrative decisionmaking processes; and that to insure the successful establishment and operation of the system, assistance to offset in part the additional costs attributable to such participation should be made available by the Federal Government. The Congress further finds that such assistance should be coordinated with other planning assistance provided under section 701 of the Housing Act of 1954 as amended (82 Stat. 526; 40 U.S.C. 431); that to insure such coordination, all comprehensive planning activities authorized by that Act should be administrated by the Office; and that to achieve maximum interprogram coordination on the State and local level, as well as to eliminate duplication of effort, service agreements with State, district and local comprehensive planning agencies should be authorized as an allowable expense in all Federal assistance programs. The purpose of this title is to transfer activities under section 701 of the Housing Act of 1954, as amended, to the Office; to provide for planning growth in furtherance of the unified comprehensive planning system; and to provide for the use of other Federal grant funds for service agreements with comprehensive planning agencies.

TRANSFER OF COMPREHENSIVE PLANNING ASSISTANCE PROGRAM TO THE OFFICE

Sec. 502. (a) The President shall transfer the administration of the planning assistance program provided for in section 701 of the Housing Act of 1954, as amended, from the Secretary of Housing and Urban Development to the Office, except for such funds and personnel as he finds to be needed to continue grants for functional planning where such planning is a requirement for other programs of Federal assistance administered by the Secretary.

(b) In order to insure that such planning assistance program is administered with maximum effectiveness, and is adequately funded, the President shall review the program and submit a report to Congress not later than twelve months after the date of enactment of this Act, setting forth his views and recommendations concerning the future of the program. The report shall include, but not be limited to, (1) the possibility of administering such program through the regional planning and development commissions established under title IV of this Act; and (2) current and foreseeable funding needs.

(c) There is hereby authorized to be appropriated the sum of $—— for the fiscal year 1975 and the sum of $—— each fiscal year thereafter, which funds shall be used specifically for the purposes set forth in subsection (j) of section 701 of the Housing Act of 1954, as amended. All funds appropriated shall remain available to the Office until they are expended.

(d) It is the intent of Congress that, consistent with the nature of a unified, comprehensive planning system, only one agency in a State or a district shall be eligible to receive a grant for statewide or districtwide comprehensive planning grants under subsection (a)(1), of section 701 of the Housing Act of 1954, as amended, and consistent with this intent shall continue to be eligible for such grants.

PLANNING SERVICE AGREEMENTS

Sec. 503. (a) In order to achieve a high level of interprogram coordination and to eliminate duplication of effort in the development of basic planning data and information, any State, regional, or local governmental agency administering or receiving funds under any Federal assistance program, may, notwithstanding any other provision of law, enter into agreements with comprehensive planning agencies for the provision of services. Such agreements may provide for payments to a comprehensive planning agency (1) in support of comprehensive planning and coordination activities; (2) for planning review and advice, technical assistance, and consultation; (3) for the provision of basic and supporting planning and development information; and (4) for other similar services facilitating the efficient administration of such Federal assistance program.

(b) The head of any Federal department or agency administering a Federal assistance program under which an agreement is made as provided in subsection (a), may approve the expenditure of functional planning funds granted under the program for payments to a comprehensive planning agency for services under the agreement under such conditions as he may deem necessary and desirable.

Title VI—Uniform Planning and Requirements for Grant-in-Aid Programs

DECLARATIONS OF FINDINGS AND PURPOSE

Sec. 601. (a)(1) The Congress finds that the rapid increase in the number of Federal grant-in-aid programs has been accompanied by a comparable increase in planning requirements for such programs. These planning requirements lack uniformity, frequently fail to define clearly comprehensive or functional planning, or to identify the jurisdiction responsible for planning, and may result in a variety of overlapping and inconsistent activities related to the gathering and analysis of data.

(2) The Congress further finds that while sound, coordinated and consistent comprehensive and functional planning is essential to the accomplishment of national objectives through grant-in-aid programs, the present overlapping and inconsistent requirements limit the accomplishment of this objective.

(b) It is the purpose of this title to eliminate inconsistent and overlapping grant requirements by providing a method of identifying growth and development policy and by establishing a basis for the use of common data and information.

USE OF COMMON POLICY AND PLANNING INFORMATION

Sec. 602. Federal departments and agencies administering grant programs which require comprehensive or functional planning or require conformity to existing planning as a condition to making the grants shall require (1) that such planning be consistent with policies for regional, State, and district growth, and development which have been established by Regional Planning and Development Commissions; and (2) that such planning, unless specifically excepted, utilize the same geographic areas, time periods, social, economic, demographic and other base data, statistics and projections as are being used by the Regional Commission, States and districts for comprehensive planning pursuant to section 404 of this Act.

STATUTORY REVISION

Sec. 603. In order to clarify further the problem of establishing uniform planning requirements for grant-in-aid programs, the President is authorized and directed to report to Congress within two years after the date of enactment of this Act on the extent and nature of inconsistencies in such requirements, and to present recommendations for revisions in the statutes establishing .such grant-in-aid programs which will bring the requirements into conformity with each other.

Title VII—National Citizens' Council on the American Future

ESTABLISHMENT

Sec. 701. (a) There is established a National Citizens Council on The American Future (hereinafter referred to as the "Citizens Council"). The Citizens Council shall be composed of fifteen members consisting of (1) five members appointed by the President pro tempore of the Senate, (2) five members appointed by the Speaker of the House of Representatives, and (3) five members appointed by the President of the United States. Not more than two of the five members appointed by the President pro tempore of the Senate, the Speaker of the House of Representatives, or the President shall be elected public officials of Federal employees. Appointments shall be made with consideration to geographic, racial, occupational, sex, age, and income-class representation.

(b) The Citizens Council shall select a Chairman and a Vice Chairman from among its members.

(c) Eight members of the Citizens Council shall constitute a quorum.

(d) Any vacancies in the Citizens Council shall not affect its powers, but shall be filled in the same manner as the original appointment.

DUTIES

Sec. 702. (a) The Citizens Council shall advice the Office and Congress in the formulation, evaluation, and implementation of national growth policies and in carrying out its other activities pursuant to this Act.

(b) The Citizens Council also shall advise the Foundation on the American Future in carrying out its functions.

(c) The Citizens Council shall submit an annual report to the Joint Congressional Committee on National Growth and Development through the Congressional Office of Policy and Planning established pursuant to title VIII of this Act. Such report shall contain a review of the Citizens Council's activities and its recommendations.

COMPENSATION OF MEMBERS

Sec. 703. Members of the Citizens Council shall receive no compensation for their services as such members, but shall be allowed necessary travel expenses (or in the alternative, mileage for use of privately owned vehicles) and a per diem allowance in lieu of subsistence not to exceed the rates prescribed in sections 5702 and 5704 of title 5, United States Code, and other necessary expenses incurred by them in the performance of duties vested in the Citizens Council, without regard to the provisions of subchapter I, chapter 57 of title 5, United States Code, the standardized Government travel regulations, or section 5731 of title 5, United States Code.

ADMINISTRATIVE POWERS

Sec. 704. (a)(1) The Citizens Council, or at its direction any subcommittee or member thereof, may, for the purpose of carrying out the provisions of this title, hold such hearings, sit and act at such times and places, administer such oaths, and require by subpena or otherwise the attendance and testimony of such witnesses and the production of such books, records, correspondence, memorandums, papers, and documents as the Citizens Council or such subcommittee or member may deem advisable. Any member of the Citizens Council may administer oaths or affirmations to witnesses appearing before the Citizens Council or before such subcommittee or member. Subpenas may be issued under the signature of the Chairman or Vice Chairman and may be served by any person designated by the Chairman or the Vice Chairman.

(2) In the case of the contumacy or refusal to obey a subpena issued under paragraph (1) of this subsection by any person who resides, is found, or transacts business within the jurisdiction of any district court of the United States, such court, upon application made by the Attorney General of the United States, shall have jurisdiction to issue to such person an order requiring such person to appear before the Citizens Council or a subcommittee or member thereof, there to produce evidence if so ordered, or there to give testimony touching the matter under inquiry. Any failure of any such person to obey any such order of the court may be punished by the court as a contempt thereof.

(b) The Citizens Council is authorized to acquire directly from the head of any Federal department or agency information deemed useful in the discharge of its duties. All departments and agencies of the Government are hereby authorized and directed to cooperate with the Citizens Council and to furnish all information requested by the Citizens Council to the extent permitted by law. All such requests shall be made by or in the name of the Chairman or Vice Chairman of the Citizens Council.

(c) The Citizens Council shall have power to appoint and fix the compensation of such personnel as it deems advisable without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and such personnel may be paid without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, but no individual shall receive compensation at a rate in excess of the maximum rate authorized by the General Schedule. In addition, the Citizens Council may procure the services of experts and consultants in accordance with section 3109 of title 5, United States Code, but at rates for individuals not in excess of that provided for Grade 18 in such General Schedule.

(d) The Citizens Council is authorized to negotiate and enter into contracts with private organizations and educational institutions to carry out such studies and prepare such reports as the Citizens Council determines are necessary in order to carry out its duties.

UTILIZATION OF THE ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS, THE FOUNDATION ON THE AMERICAN FUTURE AND OTHER GOVERNMENT DEPARTMENTS AND AGENCIES

Sec. 705. (a) Pursuant to the objectives of this Act, the Director of the Advisory Commission on Intergovernmental Relations and the Director of the Foundation on the American Future are authorized to make available to the Citizens Council such services and assistance as may be appropriate and feasible.

(b) The foregoing services and assistance to the Citizens Council shall include all of the services and assistance which the Advisory Commission on Intergovernmental Relations is now by law authorized to provide and which are authorized by this Act for the Foundation on the American Future.

(c) Nothing in this section shall alter or modify any services or responsibilities other than those performed for the Citizens Council, which the Advisory Commission on Intergovernmental Relations or the Foundation on the American Future either under law or under this Act performs for or on behalf of either the legislative or executive branches of Government. The Director of the Advisory Commission on Intergovernmental Relations and the Director of the Foundation on the American Future are, however, authorized to establish within their organizational structure such additional divisions, groups, or other organization entities as may be necessary to carry out the objectives of this Act.

(d) Services and assistance made available to the Citizens Council by either the Foundations or the Commission, or by any department or agency of the Government, which also is hereby authorized by this Act, which is in accordance with this section may be provided with or without reimbursement from funds of the Citizens Council as may be agreed upon between the Chairman or Vice Chairman of the Citizens Council and the Foundation, Commission, Department, or Agency.

FORMATION OF MULTISTATE AND STATE CITIZENS COUNCILS

Sec. 706. (a) The Office shall encourage and assist in the formation of multistate and State citizens councils or the purpose of advising any Regional Planning and Development Commission established under title IV of this Act and governments and industry with respect to multistate or State planning and development.

(b) The Office may fund the operation of any multistate or State citizens council up to but not to exceed 90 percentum of the operating costs of such council.

(c) Any multistate citizens council established under this section shall be established based upon geographic boundaries which are coterminous with any Regional Commission established under title IV of this Act.

(d) The formation of any multistate citizens council provided for under this section shall be initiated by a majority vote of the members of the Regional Planning and Development Commission for the multistate region within which such citizens council is to operate.

(e) The membership, organizational structure, duties, and powers of any multistate citizens council established under this section may be similar to, but not necessarily limited to, those provided for under this Act for the National Citizens Council on the American Future, *Provided, that:* Any such multistate citizens council's membership, organizational structure, duties, and powers shall be limited to the multistate region within which it is organized and serves.

(f) The formation of any State citizens council under this section shall be initiated by the Governor of the State, with the concurrence of the State legislature. The membership, organizational structure, duties, and powers of any such State citizens council shall be determined by State law.

(g) The Office on any multistate regional planning and development commission may delegate the review and evaluation of federally-assisted planning and development programs to such multistate and State councils and such other functions as they may deem appropriate.

Title VIII—Joint Congressional Committee on Balanced National Growth and Development and Congressional Office on Policy and Planning

ESTABLISHMENT OF JOINT COMMITTEE

Sec. 801. (a) There is established a joint committee of the Congress to be known as the Joint Committee on Balanced National Growth and Development.

(b) The membership of the joint committee shall consist of the chairman, or his designee, of each of the following committees of the Senate:
(1) Aeronautics and Space Sciences;
(2) Agriculture and Forestry;
(3) Appropriations;
(4) Armed Services;
(5) Banking, Housing, and Urban Affairs;
(6) Commerce;
(7) Finance;
(8) Government Operations;
(9) Interior;
(10) Labor and Public Welfare;
(11) Public Works;
(12) Veterans' Affairs; and,
each of the following committees of the House of Representatives:
(1) Agriculture;
(2) Appropriations;
(3) Armed Services;
(4) Banking and Currency;
(5) Education and Labor;
(6) Government Operations;
(7) Interior;
(8) Interstate and Foreign Commerce;
(9) Public Works;
(10) Science and Astronautics;
(11) Veterans Affairs;
(12) Ways and Means; and,
each of the following Joint Committees of the Congress:
(1) Joint Committee on Atomic Energy, and
(2) Joint Economic Committee; and
the ranking minority member, or his designee, of each of the aforementioned committees of the Senate and the House of Representatives numbered 1, 3, 5, 7, 9, and 11 during each odd numbered Congress and of each of such committees numbered 2, 4, 6, 8, 10, and 12 during each even numbered Congress and of the aforementioned joint committee numbered 1 during each odd numbered Congress and of such joint committee numbered 2 during each even numbered Congress.

(c) The chairman of the joint committee shall be designated from among its members by the President pro tempore of the Senate in each even numbered Congress and by the Speaker of the House of Representatives in each odd numbered Congress.

(d) A majority of the members of the joint committee shall constitute a quorum thereof for the transaction of business, except that the joint committee may fix a lesser number as a quorum for the purpose of taking testimony. Vacancies in the membership of the joint committee shall not affect the authority of the remaining members to execute the functions of the joint committee.

(e) The committee may formulate and refer to the appropriate legislative committees of the Congress for their consideration such proposals or recommendations as will promote the purposes of this Act.

(f) No legislative measure shall be referred to the joint committee, and it shall have no authority to report any such measure to the Senate or the House.

(g) Each committee of the Congress to which the joint committee refers a proposal or recommendation shall endeavor to assure that such proposal or recommendation receives prompt consideration.

(h) The joint committee shall direct the activities of the Congressional Office of Policy and Planning established by section 803 of this Act.

ADMINISTRATIVE POWERS

Sec. 802. (a)(1) The Joint Committee on National Growth and Development, or any subcommittee thereof, is authorized, in its discretion (A) to make expenditures, (B) to employ personnel, (C) to adopt rules respecting its organization and procedures, (D) to hold hearings, (E) to sit and act at any time or place, (F) to subpena witnesses and documents, (G) with the prior consent of the Federal department or agency concerned, to use on a reimbursable basis the services of personnel, information, and facilities of any such department or agency, (H) to procure printing and binding, (I) to procure the temporary services (not in excess of one year) or intermittent services of individual consultants, or organizations thereof, and to provide assistance for the training of its professional staff, in the same manner and under the same conditions as a standing committee of the Senate may procure such services and provide such assistance under subsections (i) and (j), respectively, of section 202 of the Legislative Reorganization Act of 1946, and (J) to take depositions and other testimony.

(2) Subpenas may be issued over the signature of the chairman of the joint committee or by any member designated by him or the joint committee, and may be served by such person as may be designated by such chairman or member. The chairman of the joint committee or any member thereof may administer oaths to witnesses. The provisions of sections 102–104 of the Revised Statutes (2 U.S.C. 192–194) shall apply in the case of any failure of any witness to comply with a subpena or to testify when summoned under authority of this subsection.

(b) With the consent of any standing, select, or special committee of the Senate or House, or any subcommittee thereof, the joint committee may utilize the services of any staff member of such House or Senate committee or subcommittee whenever the chairman of the joint committee determines that such srvices are necessary and appropriate.

(c) The expenses of the joint committee shall be paid from the contingent fund of the Senate from funds appropriated for the joint committee, upon vouchers signed by the chairman of the joint committee or by any member of the joint committee authorized by the chairman.

(d) Members of the joint committee, and its personnel, exports, and consultants, while traveling on official business for the joint committee within or outside the United States, may receive either the per diem allowance authorized to be paid to Members of the Congress or its employees, or their actual and necessary expenses if an itemized statement of such expenses is attached to the voucher.

ESTABLISHMENT OF CONGRESSIONAL OFFICE OF POLICY AND PLANNING

Sec. 803. (a) There is established a Congressional Office of Policy and Planning (hereinafter referred to as the "Congressional Office"), which shall conduct a continuing, non-partisan analysis of national goals, priorities, and urban, rural, and national growth policies and shall provide the Congress with the information, data, and analyses necessary for enlightened decisions with respect to such matters.

(b) There shall be in the Congressional Office a director and deputy director, each of whom shall be appointed jointly by the President pro tempore of the Senate and the Speaker of the House of Representatives. The Congressional Office shall have a seal adopted by the Director. The Deputy Director shall perform such duties as may be assigned to him by the Director, and during a vacancy in that position, shall act as the Director.

(c) The annual compensation of the Director shall be equal to the annual compensation of the Comptroller General of the United States. The annual compensation of the Assistant Comptroller General of the United States.

(d) The terms of office of the Director and the Deputy Director first appointed shall expire on January 31, 1976. The terms of office of Directors and Deputy Directors subsequently appointed shall expire on January 31 every four years thereafter.

(e) The Director or Deputy Director may be removed at any time by a resolution of the Senate or the House of Representatives. A vacancy occurring during the term of the Director or Deputy Director shall be filled by appointment, as provided in this section, for the remainder of the unexpired term.

FUNCTIONS

Sec. 804. In carrying out the general purpose expressed in section 803(a), the Congressional Office shall—

(a) make such studies as it deems necessary for the purpose of this Act with primary emphasis on supplying such analysis as will be most useful to the Congress in voting on the measures and appropriations which come before it, and on providing the framework and over-view of priority and growth policy considerations within which a meaningful consideration of individual measures can be undertaken;

(b) maintain a continuing review of the activities of the Office, the National Citizens Council on the American Future, and the Foundation on the American Future; and

(c) review the implementation of all legislation relating to national policy, planning and development, growth, and national goals and priorities, conduct studies in areas which will promote the purpose of this Act, and request the Foundation on the American Future, the Agency for Population and Demographic Analysis through the Secretary of Commerce, the National Citizens Council on the American Future, and the Advisory Commission on Intergovernmental Relations to make such studies as will promote the purposes of this Act;

(d) submit to the Congress on the first day of March of each year a "Balanced National Goals, Priorities, and Growth Policy Report." The report shall include, but not be limited to—

(1) an analysis, in terms of national goals, priorities, and growth policies, of the annual budget submitted by the President and the Economic Report of the President;

(2) an analysis of the President's Balanced National Growth and Development Report following its submission to Congress each year;

(3) an examination of resources available to the Nation, the foreseeable costs and expected benefits of existing and proposed Federal programs, and the resource and cost implications of alternative sets of national goals, priorities, and growth policies, and

(4) recommendations concerning pending priorities among Federal programs and courses of action, including the identification of those programs and courses of action which should be given greatest priority and those which could more properly be deferred.

(e) in addition to the "Balanced National Goals, Priorities, and Growth Policy Report" and other reports and studies which the Congressional Office submits to the Congress, the Congressional Office shall provide upon request to any committee or Member of the Congress further information, data, or analyses relevant to an informed determination of national goals, priorities, and growth policies.

UTILIZATION OF THE LIBRARY OF CONGRESS

Sec. 805. (a) Pursuant to the objectives of this Act, the Librarian of Congress is authorized to make available to the Congressional Office such services and assistance by the Congressional Research Service as may be appropriate and feasible.

(b) The foregoing services and assistance to the Congressional Office shall include all of the services and assistance which the Congressional Research Service is presently authorized to provide to the Congress.

(c) Nothing in this section shall alter or modify any services or responsibilities, other than those performed for the Congressional Office which the Congressional Research Service under law performs for or on behalf of the Congress. The Librarian is, however, authorized to establish within the Congressional Research Service such additional divisions, groups, or other organization entities as may be necessary to carry out the objectives of this Act.

(d) Services and assistance made available to the Congressional Office by the Congressional Research Service in accordance with this section may be provided with or without reimbursement from funds of the Congressional Office, as agreed upon by the Director of the Congressional Office and the Librarian of Congress.

UTILIZATION OF THE FOUNDATION OF THE AMERICAN FUTURE

Sec. 806. (a) Pursuant to the objectives of this Act, the Director of the Foundation on the American Future in this section (hereinafter referred to as the "Foundation") is authorized to make available to the Congressional Office such services and assistance by the Foundation as may be appropriate and feasible.

(b) The foregoing services and assistance to the Congressional Office shall include all of the services and assistance which the Foundation is authorized to provide by this Act.

(c) Nothing in this section shall alter or modify any services or responsibilities, other than those performed for the Congressional Office, which the Foundation under this Act is authorized to perform for or on behalf of itself, the Executive or the Congress. The Director is, however, authorized to establish within the Foundation, such additional divisions, groups, or other organizational entities as may be necessary to carry out the objectives of this Act.

(d) Services and assistance made available to the Congressional Office by the Foundation in accordance with this section may be provided with or without reimbursement from funds of the Congressional Office, as agreed upon by the Director of the Congressional Office and the Director of the Foundation.

COORDINATION WITH THE OFFICE OF TECHNOLOGY ASSESSMENT

Sec. 807. (a) The Congressional Office shall maintain a continuing and close liaison with the Office of Technology Assessment with respect to—

(1) activities, studies, policies, grants, and contracts formulated or initiated by the Office of Technology Assessment which are for the purpose of assessing the impact of technology on the future growth and development of the United States and on the future quality of life of its citizens; and

(2) the promotion of coordination in areas affecting the formulation of a balanced national growth and development policy for the United States and the avoidance of unnecessary duplication or overlapping of research activities in the development of such a policy or program or activities designed to implement such a policy.

(b) Section 3(d) of the Technology Assessment Act of 1972 (Public Law 92-484) is amended by striking items (2) and (3) under that subsection and inserting in lieu thereof the following:

"(2) the Director of the Congressional Office of Policy and Planning; (3) the Board; or (4) the Director, in consultation with the Board."

COORDINATION WITH THE NATIONAL SCIENCE FOUNDATION

Sec. 808. (a) The Congressional Office shall maintain a continuing liaison with the National Science Foundation with respect to—

(1) grants and contracts formulated or activated by the National Science Foundation which are for purposes of understanding, assessing, or determining the impact that certain social, environmental, economic, or scientific developments may have on the future growth and development of the United States and on the future quality of life of its citizens; and

(2) the promotion of coordination of a balanced national growth and development policy in the United States and the avoidance of unnecessary duplication or overlapping of research activities in the development of such a policy or programs or activities designed to implement such a policy.

(b) Section 3(b) of the National Science Foundation Act of 1950, as amended, is amended further by inserting "The Congressional Office of Policy and Planning and the Foundation on the American Future," immediately following the phrase "Office of Technology Assessment."

ADMINISTRATIVE POWERS OF THE CONGRESSIONAL OFFICE

Sec. 809. (a) In the performance of its functions under this title, the Congressional Office is authorized—

(1) to make, promulgate, issue, rescind, and amend rules and regulations governing the manner of the operations of the Congressional Office;

(2) to employ and fix the compensation of such employees, and purchase or otherwise acquire such furniture, office equipment, books, stationery, and other

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supplies, as may be necessary for the proper performance of the duties of the Congressional Office and as may be appropriated for by Congress;

(3) to obtain the services of experts and consultants, in accordance with the provisions of section 3109 of title 5, United States Code, at rates for individuals not to exceed that provided for Grade 18 of the General Schedule in such title; and

(4) to use the United States mails in the same manner and upon the same conditions as other departments and agencies of the United States.

(b) Each department, agency, and instrumentality of the executive branch of the Government, including independent agencies, is authorized and directed, to the extent permitted by law, to furnish to the Congressional Office, upon request, made by the Director, such information as the Director considers necessary to carry out the functions of the Congressional Office.

(c) Section 2107 of title 5, United States Code, is amended by—

(1) striking out "and" at the end of paragraph (8);

(2) striking the period at the end of paragraph (9) and inserting in lieu thereof a semicolon and the word "and"; and

(3) adding at the end thereof the following new paragraph:

"(9) the Director, Deputy Director, and employees of the Congressional Office of Policy and Planning."

UTILIZATION OF THE GENERAL ACCOUNTING OFFICE

Sec. 810. (a) Financial and administrative services (including those related to budgeting, accounting, financial reporting, personnel, and procurement) and such other services as may be appropriate may be provided by the General Accounting Office.

(b) Such services and assistance to the Congressional Office may include, but not be limited to, all of the services and assistance which the General Accounting Office is otherwise authorized to provide to the Congress.

(c) Nothing in this section shall alter or modify any services or responsibilities, other than those performed for the Congressional Office, which the General Accounting Office under law performs for or on behalf of the Congress.

(d) Services and assistance made available to the Congressional Office by the General Accounting Office in accordance with this section may be provided with or without reimbursement from funds of the Congressional Office, as agreed upon by the Director of the Congressional Office and the Comptroller General.

Title IX—Requirements With Respect to the Location Impact of Federal Facilities, Activities, and Federal Procurement

LOCATION OF FEDERAL FACILITIES AND ACTIVITIES

Sec. 901. (a) The Congress authorizes and directs that to the fullest extent possible:

(1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act, and

(2) all departments and agencies of the Federal Government shall include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the growth of the United States a detailed statement by the responsible official on—

(A) the population distribution impact of such proposed action as to—

(i) the necessary additional supportive human services required to support such action;

(ii) the cost of such action;

(iii) the time implementation of both the action and the supportive services;

(iv) the economic and social cost effects on the population; and

(v) the positive and adverse effects on scale, services, environment, life style, employment opportunities, and on the general quality of life of the people affected by such action;

(B) alternatives to the proposed action which are not inconsistent with national growth and development policy; and

(C) any irreversible and irretrievable commitment of resources which would be involved if the proposed action should be implemented.

(b) Each department or agency of the Federal Government shall, prior to the location or construction of any new, or relocation of any existing, Federal facility, structure, or installation, or the initiation of any activity which will have any economic or environmental impact, file a report with the Office with respect to—

(1) its consistency with balanced national growth and development policies;
(2) its regional and local environmental impact;
(3) its national, regional, and local economic impact;
(4) its general effect on balanced regional development; and
(5) the Federal capital and operating costs involved.

(c) The Office through its multistate regional representative shall give prompt consideration to such reports, and may recommend disapproval of such facility or activity, and the reasons therefor, to the head of the department or agency submitting such report and to the Administrator of the General Services Administration. Any such recommendation shall also be submitted to the President, and the Joint Committee on Balanced National Growth and Development through the Congressional Offices on Policy and Planning. No such action shall go into effect until it has been specifically approved by the President.

(d) The Office shall promulgate such rules and regulations as it determines to be necessary for the effective implementation of section 901(b) of title IX of the Agricultural Act of 1970 as amended.

(e) The provisions of this section shall be effective on such date as is established in regulations prescribed by the Office for the purposes of this section.

FEDERAL PROCUREMENT POLICIES

Sec. 902. (a) The Office shall promulgate through the Office of Management and Budget in the Office of the President, such regulations as are necessary to assure that in all procurement costing in excess of prescribed amounts by Federal departments and agencies, including the award of contracts for research or development, and in any cooperative agreement signed between the Federal Government and State or local government, or with private profit, or nonprofit entities, proper consideration is given to—

(1) balanced national growth and development policies;
(2) environmental impact;
(3) balanced regional development;
(4) Federal cost; and
(5) State and local economic and social impact.

Such regulations shall provide for the use of alternative sources in such procurement, if costs are not excessive in order to promote the purposes of this Act, and shall establish criteria for determining all considerations for the purpose of this section. In applying the provisions of this section to the award of research and development contracts and in applying cooperative agreements, due considerations shall be given to the balanced national growth purpose to be served.

(b) Regulations pursuant to this section shall not be promulgated until proposals therefor have been submitted to the Joint Committee on Balanced National Growth and Development through the Congressional Office with an adequate time, not to exceed 90 days, for such committee to consider such proposals prior to promulgation.

Title X—Foundation on the American Future

ESTABLISHMENT OF FOUNDATION

Sec. 1001. (a) There is established an independent agency of the Federal Government to be known as the Foundation on the American Future (hereinafter in this title referred to as the Foundation).

(b) The Foundation shall be subject to the supervision and direction of a Board of Trustees. The Board shall be composed of nineteen members, nine of whom shall be appointed by the President by and with the advice and consent of the Senate, two of whom shall be appointed by the President pro tempore of the Senate, two of whom shall be appointed by the Speaker of the House. The nine members appointed by the President shall be appointed from among individuals who are engaged in educational, research, or other scholarly or scientific activity relating to developments (economic, environmental, demographic, or social) affecting the quality of life in the United States, and the two members appointed by the President pro tempore of the Senate and the two members appointed by the Speaker of the House shall be appointed from among individuals from the general public and who by virtue of their residence, interest, or vocation, are specially qualified to serve on the Board. In making these appointments, the President, the President pro tempore of the Senate and the Speaker of the House are requested to give due consideration to the appointment of individuals who, collectively, will provide appropriate regional, interest, organization, age, sex, and political balance on the board.

(c) The term of office of each appointed trustee of the Foundation shall be six years; except that (1) the members first taking office appointed by the President shall serve as designated by him, five for terms of two years and four for terms of four years; and (2) any member appointed to fill a vacancy shall serve for the remainder of the term for which his predecessor was appointed. No member may serve for a period in excess of eight years.

(d) Members of the Board who are not regular full-time employees of the United States shall, while serving on business of the Foundation, be entitled to receive compensation at rates fixed by the President, but not exceeding the rate prescribed for GS-18 of the General Schedule under title 5 of the United States Code, including traveltime; and while so serving away from their homes or regular places of business, they may be allowed travel expenses, including per diem in lieu of subsistance, as authorized by section 5703 of title 5, United States Code, for persons in Government service employed intermittently.

(e) The Director of the Office, the Director of the Congressional Office, the Director of the Office of Technology Assessment, the Director of the National Science Foundation, the Chairman of the National Citizens Council, and the Chairman of the Advisory Commission in Intergovernmental Relations shall serve as regular members of the Board, but none of whom shall be permitted to serve as Chairman or Vice Chairman of the Board.

(f) The Vice President shall call the first meeting of the Board, at which the first order of business shall be the election of a Chairman and a Vice Chairman, who shall serve one year after the date of their appointment. Thereafter each Chairman and Vice Chairman shall be elected for a term of two years. The Vice Chairman shall perform the duties of the Chairman in his absence. In case a vacancy occurs in the chairmanship or vice chairmanship, the Board shall elect an individual from among the members of the Board to fill such vacancy.

(g) (1) A majority of the trustees of the Foundation shall constitute a quorum.

(2) The Board shall meet at least four times a year.

OFFICERS

Sec. 1002. There shall be a Director and a Deputy Director of the Foundation who shall be appointed by the Board. Under the direction of the Board, the Director shall be responsible for carrying out the functions of the Foundation, and shall have authority and control over all personnel and activities thereof. The Deputy Director shall perform such functions as the Director, with the approval of the Foundation, may prescribe, and be acting Director during the absence or disability of the Director or in the event of a vacancy in the Office of the Director. The Director and the Deputy Director shall each serve for a term of six years unless previously removed by the Board. The Director shall be compensated at a rate equal to the rate prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code. The Deputy Director shall be compensated at a rate equal to the rate prescribed for level V of the Executive Schedule.

PURPOSE OF FOUNDATION

Sec. 1003. (a) The purpose of the Foundation shall be to conduct projects, studies, investigations, and forecasts to determine the interactions, social benefits and costs, rates of national change, and present and likely future patterns of important scientific, social, and economic programs and activities; to evaluate the effects of national development policy, or its lack, on these interactions, social benefits and costs, rates of national change, and patterns; and to determine and formulate alternative future national growth patterns, and development of policy recommendations which can bring them into existence.

FUNCTIONS OF THE FOUNDATION

Sec. 1004. (a) The Foundation shall develop and review and update an agenda and budget to carry out the purposes of the Foundation in consultation with the Office, the Congressional Office, the Citizens Council, the National Science Foundation, the Office of Technology Assessment, and the Advisory Commission on Intergovernmental Relations outlining research and forecasts which are being and will be undertaken by the Foundation.

ANNUAL REPORT

Sec. 1005. (a) The Foundation shall prepare as soon as practicable, but not to exceed ninety days following the end of each fiscal year, a summary report of the findings and results of all major or significant studies, and investigations conducted by, or caused to be conducted by the Foundation during the preceding fiscal year. This report shall be submitted to the Office, the Congressional Office, the National Citizens Council, the Advisory Commission on Intergovernmental Relations and made available to the general public.

ADMINISTRATIVE POWERS

Sec. 1006. (a) In addition to any authority vested in it by other provisions of this title, the Foundation, in carrying out its functions, is authorized to—

(4) establish such facilities as it deems necessary to be operated by the personnel of the Foundation. With a view to obtaining additional scientific and intellectual resources available, the Director shall, whenever feasible, enter into contracts with public or private profit or nonprofit educational or research institutions for the purpose of undertaking any particular study or research project authorized by this title.

(2) prescribe such regulations as it deems necessary governing the manner in which its functions shall be carried out;

(3) receive money and other property donated, bequested, or devised, without condition or restriction other than that it be used for the purposes of the Foundation; and to use, sell, or otherwise dispose of such property for the purpose of carrying out its functions;

(4) at the discretion of the Foundation, receive (and use, sell, or otherwise dispose of, in accordance with paragraph (2)) money and other property donated, bequeathed, or devised to the Foundation with a condition or restriction, including a condition that the Foundation use other funds of the Foundation for the purposes of the gift;

(5) appoint one or more advisory committees composed of such private citizens and officials of Federal, State, and local governments as deemed desirable to advise the Foundation with respect to its functions under this title;

(6) appoint and fix the compensation of such personnel as may be necessary to carry out the provisions of this title without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, but no more than three individuals so appointed shall receive compensation in excess of the rate prescribed for GS–18 in the General Schedule under section 5332 of title 5, United States Code;

(7) Obtain the services of experts and consultants in accordance with the provisions of section 3109 of title 5, United States Code, at rates for individuals not to exceed the rate prescribed for GS–18 in the General Schedule under section 5332 of title 5, United States Code;

(8) accept and utilize the services of voluntary and noncompensated personnel and reimburse them for travel expenses, including per diem, as authorized by section 5703 of title 6, United States Code;

(9) enter into contracts, grants, or other arrangements, or modifications thereof to carry out the provisions of this title, and such contracts or modificationst thereof may, with the concurrence of two-thirds of the members of the Board, be entered into without performance or other bonds, and without regard to section 3709 of the Revised Statutes, as amended (41 U.S.C. 5);

(10) provide for the making of such reports (including fund accounting reports) and the filing of such applications in such form and containing such information as the Director may reasonably require;

(11) make advances, progress, and other payments which the Board deems necessary under this title without regard to the provisions of section 3648 of the Revised Statutes, as amended (31 U.S.C. 529); and

(12) make other necessary expenditures.

(b) Each member of a committee appointed pursuant to clause (5) of subsection (a) of this section who is not an officer or employee of the Federal Government shall receive an amount equal to the maximum daily rate prescribed for GS–18 under title 5 of the United States Code, for each day he is engaged in the actual performance of his duties (including traveltime) as a member of a committee. All members shall be reimbursed for travel, subsistence, and necessary expenses incurred in the performance of their duties.

COORDINATION WITH THE NATIONAL SCIENCE FOUNDATION AND OTHER AGENCIES AND INSTITUTIONS

Sec. 1007. (a) The Foundation shall maintain a continuing and close liaison with the National Science Foundation with respect to—

(1) grants, contracts, and projects, formulated or activated by or through the National Science Foundation which are for purposes of understanding, assessing, or determining the long-range impact that certain social, environmental, economic, or scientific developments may have on the future growth and development of the United States and on the future quality of life of our Nation's citizens; and

(2) the promotion of coordination in areas that may affect the formulation of a balanced national growth and developmental policy in the United States and the avoidance of unnecessary duplication or overlapping of research activities in the development of such a policy or programs or activities designed to implement such a policy.

(b) The Board of Trustees of the Foundation through its Director, and the National Science Board through the Director of the National Science Foundation, are hereby authorized and directed to conduct a joint study of all research activities by the executive branch and by other agencies, organizations, or institutions receiving Federal funding assistance which research activities have among its purposes understanding, assessing, or deterring the long-range impact that certain social, environmental economic, governmental, or scientific developments may have on the future growth and development of the United States and on the future quality of life of our Nation's citizens. This study shall contain recommendations as to which of these research activities either in whole or in part, should be transferred to the Foundation on the American Future for the purpose of carrying out the purposes of this Act. These recommendations shall be submitted to the Congress, through the Congressional Office of Policy and Planning within two years after the date of enactment of this Act. Such recommendations shall be effective at the end of the first period of ninety calendar days of continuous session of Congress after the date on which the recommendations are submitted to it unless, between the date of submission and the end of the ninety-day period, either House passes a resolution stating in substance that that House does not favor the recommendations. For the purpose of this subsection—

(1) continuity of session is broken only by adjournment of Congress sine die; and

(2) the days of which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the ninety-day period.

Title XI—Establishment of Agency for Population and Demographic Analysis Within the Bureau of Census, Department of Commerce

ESTABLISHMENT OF AGENCY

Sec. 1101. (a) The Secretary of Commerce shall establish within the Bureau of Census an Agency for Population and Demographic Analysis. Such Agency shall be headed by a Deputy Director for National Population and Demographic Analysis.

(b) Such Agency shall include—

(1) the existing office headed by the Associate Director for Demographic Fields;

(2) the existing office headed by the Associate Director for Research and Methodology, and

(3) a new office which shall be established by the Secretary and shall include Divisions of Demographic Analysis, Economic and Social Analysis, and Political and Fiscal Analysis.

(c) In addition to carrying out the functions placed within it pursuant to clauses (1) and (2) of subsection (b) such Agency is hereby authorized and directed to carry out programs to—

(1) provide an analysis of population level and distribution trends and governing forces, including the likely future impact that changing population levels and distribution patterns may have on public programs and private activities;

(2) analyze existing and proposed incentives for influencing population distribution;

(3) analyze the impact of existing and proposed population control methods and trends to determine their impact on the economic, environmental, and social impact on the future growth or stabilization, and development of the Nation; and

(4) assist the Office, the Congressional Office, the National Citizens Council, the Foundation, and the Advisory Commission on Intergovernmental Relations in carrying out the purposes of this Act and includes, but not necessarily limited to, assistance—

(A) to determine the economic, environmental, and social impacts of existing and alternative Federal policies, programs, and tax incentives affecting population distribution;

(B) in analyzing Federal, State, and selected local government costs of public services to determine economies and diseconomies of scale, both as they relate to per capita costs and quality of such services; and

(C) to assess Federal, State, and selected local government tax resources and expenditure requirements under existing and alternative population levels and distribution patterns.

Title XII—Authorization for Appropriations Authorization

Sec. 1201. In addition to specific authorizations in this Act, there are authorized to be appropriated such other amounts as are necessary to carry out the provisions of this Act.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS,
Washington, D.C., August 9, 1973.

A PROPOSAL FOR DEVELOPING A CAPABILITY AT THE NATIONAL LEVEL FOR STRATEGIC POLICY ASSESSMENTS

"There is every reason why a state should make use of forethought. A century is as nothing in its life, and yet how many acts do legislatures, congresses and parliaments pass for the benefit of coming ages? We seem willing that the earth should be largely used up in a generation or two."—J. B. Clark.

INTRODUCTORY NOTE

This paper argues for developing a Strategic Policy Assessment function within the Executive and Legislative Branches and presents a proposal for organizing staffs within each Branch to undertake this function.

The paper has its genesis in a Government Policy Forum held at the Woodrow Wilson Center on May 10. A working group from among the participants of that Forum met on three occasions to engage the issue and, in due course, a paper was prepared to serve as a focus for a subsequent Government Policy Forum which met on July 30. The discussion and the proposals below reflect the sense of the working group and is responsive to many of the views expressed at the larger meetings of May 10 and July 30.

Annex I contains a brief exposition of an alternative institutional approach discussed, but not adopted, by the working group as a whole. Annex II contains the list of the participants of the May 10 and July 30 Forums (Members of the working group are identified by an asterisk).

Both the proposal and Annex I, of course, reflect the personal views of the working group members and are in no sense departmental, agency or Woodrow Wilson Center positions.

THE PROBLEM

The United States (and other industrially advanced countries, as well) is confronting a wide range of problems, some already acute and some evoking the proverbial cloud that is "no bigger than a man's hand," some known in detail and some whose dimensions are still only vaguely perceived. As will become apparent, these problems have three distinctive characteristics: they call for a long-range perspective; they call for interdisciplinary analysis; they call for inter-departmental action. This is not necessarily a new phenomenon. We now see with the clarity of hindsight that problems of this nature have been confronting us for many decades. But our society has become increasingly complex and interdependent. There is now a growing recognition that problems with long-term implications and broad dimensions cannot continue to be dealt with on a day-to-day, ad hoc, piecemeal basis.

It is fair to say that, despite the plethora of "planning staffs" scattered throughout the Federal structure and despite certain formal or informal mechanisms established for inter-agency discussion, no arrangements for systematic, integrated, long-range planning exist within the United States Government—nor, except in times of great crisis, have they ever existed. Rather, for reasons of inertia, jurisdictional jealousies, the demands of our four-year election cycle, and perhaps even an innate suspicion of the planning process itself, Americans have typically waited until a warning signal evolved into a problem and then escalated to crisis proportions before undertaking remedial measures. Quick fixes, crisis management, and damage limitation have been the operative concepts. Our current energy "crunch" is a dramatic case in point.

EXISTING ARRANGEMENTS

We should acknowledge that our policy process is not dominated by a capricious, mindless, wishful approach to the present and the future. The Mr. Micawbers rarely reach positions of responsibility in our society; our system of government is neither atomistic nor strait-jacketed. Able and far-sighted officials are served by highly professional researchers, planners and statisticians. Many elements of the government (the Department of Agriculture, the Federal Highway Administration, the National Park Service, the Census Bureau to name a handful) have long been engaged in long-range projections and planning. A Federal Council Committee on Forecasting Models was established in 1972 to monitor the quality of forecasting throughout the government. A new responsibility for science and technology policy has recently been given to the National Science Foundation. The new Energy Bill provides for long-range research and development in this critical area. And, of course, there are a host of inter-agency task forces and committees to say nothing of the President's Domestic Council, CEQ and CEA, Cabinet meetings and informal communications among administrators and analysts.

Congress, for its part, recently established the Office of Technology Assessment and has before it, or has in preparation, a host of relevant legislation including bills by Senators Jackson, Humphrey, Mondale, and Hartke and Congressman Dingell.

But having made these genuflections in the direction of the worthy efforts long extant or now in train, it remains the lugubrious case that no systematic inter-agency, long-range planning with respect to major national domestic problems is taking place. It is to this proposition that the following discussion is addressed.

A STRATEGIC POLICY ASSESSMENT STAFF FOR THE EXECUTIVE BRANCH AND FOR CONGRESS

The basic objective of an Office of Strategic Policy Assessments[1] ("OSPA"?) in the Executive Branch and its counterpart in Congress should be to improve national decision-making as it relates to longterm policies. More specifically,

[1] The term "Strategic Policy Assessments" rather than "Long Range Planning" has been selected for two reasons—one frankly tactical, the other substantive. There is a long-standing and probably justifiable popular suspicion attached to national "planning"; it appears to evoke an image of a centralized ordering of American life much in the way it occurs in countries that have "planned economies." More importantly, what is conceived of here is not the development of detailed tactics and closely adhered-to-targets, but rather a more analytical and conceptual process.

these groups should endeavor to identify emerging longterm trends and problems, formulate and evaluate alternative courses of action to deal with them, and evaluate the effects of actions that have been put in train. This objective presupposes, of course, a continued assessment of social values and preferences.

The specific types of problems that call for Strategic Policy Assessment have several things in common:

They involve actions which although taken now, will bear results only after a substantial period of time, or actions which, although taken now, limit the range of actions which can be taken in the future. The time focus will normally be in the five to twenty-five year range.

They are multi-faceted and interrelated national issues of consequential domestic importance which require an integrated (e.g., interagency) approach for their analysis and solution as distinct from those amenable to narrow disciplinary or departmental analysis and action.

They involve a wide, but not an indiscriminate array of domestic issues of significance to broad segments of the American society as opposed to narrow sectoral or local questions.

Although they are primarily domestic issues, they may be, in the last analysis, created or at least exaggerated by international events or trends and their resolution may have important international implications.

SOME EXAMPLES

(a) Water resources. There is need for "strategic assessment" of the long-term water resource problem. Water resource policy is directly related to growth and environmental policies and, to a lesser degree, urban land use (e.g., use of flood plains), agriculture (e.g., irrigation), transportation (e.g., waterways), recreation, etc. There is even an international dimension in terms of American relations with Canada and Mexico.

(b) Forests. A "strategic assessment" of forests would examine long-term needs for wilderness and recreation compared to the commercial need for lumber both for domestic and export purposes. It would also examine the potential productivity of private and public land, opportunities for increased productivity on the best lands, technology changes (e.g., use of hardwoods to replace soft-wood uses), increased costs if supply lags behind demand, substitution potentials, foreign trade and environmental implications of various choices.

(c) Agriculture. The issues here, as in other examples, are complex in character and long-term in implication. Environmental considerations, overall growth policy, demographic trends, research and development with respect to production as well as distribution and consumption, energy use, population distribution, water availability, metropolitan growth policy (and thus transportation), foreign trade, international monetary issues, foreign aid and overall foreign policy issues must be addressed.

(d) Energy. Perhaps the most dramatic current example of a long-range issue calling for the kind of analysis and evaluation we have in mind is the energy problem. The energy issue involves not only technological, research and development policies, but a mix of environmental, economic, social and foreign policy considerations.

(e) Economic Growth. This would involve a "strategic assessment" of the mix of probable future demands for energy and selected raw materials, population growth, private and public services, foreign and domestic, fiscal and economic policy, and other factors affecting and affected by changing patterns and rates of economic growth.

(f) Growth of Metropolitan Areas. A policy for planned growth of metropolitan areas should examine the carrying capacity of various environments across the country in an effort to determine whether a more optimum population distribution is desirable and feasible. If it were determined that a metropolitan growth strategy is desirable, an assessment should be made of such tools as preference for Federal contracts, water resource projects, transportation facilities, and the like.

(g) Housing. A "strategic assessment" of long-range housing policy choices would involve, inter alia, an examination of the relationships among urban and inter-urban transportation programs, forest policy, new technologies, labor issues, demographic trends, recreational facilities, and social programs. It would also entail close dove-tailing with policies relating to economic growth and growth of Metropolitan areas.

(h) Transportation. The development of a long-range strategic transportation policy obviously entails an examination of the appropriate mix of various urban, inter-urban and long distance approaches to the movement of passengers and freight. In addition, long-range pollution and energy issues must be factored in as well as considerations of national economic growth, the long-term development of new communities, and the problems of existing metropolitan areas.

(i) Social Programs. Clearly there is a need here for "strategic assessment." Crime prevention, recreation, health services, education, housing, demographic trends, growth issues, the challenge of more leisure time all affect the choice evaluations.

(j) Changing work patterns. A "strategic assessment" would examine the implications of a greater amount of leisure time as a result of a shorter work week and earlier retirement. Effects on the work force and the full employment doctrine, and requirements for recreational facilities, health services, and educational programs must be considered.

Where the Strategic Policy Assessment function should be placed within the Executive Branch and within the Legislative structure is by no means a trivial bureaucratic issue. Two alternative arrangements in the Executive Office and a suggested arrangement for Congress are presented below.

WITHIN THE EXECUTIVE BRANCH

The Office of Strategic Policy Assessments should be placed in the Executive Office by the President. Whichever of the two following organizational options is selected, the internal structure of OSPA would be generally the same.

It would be premature and possibly even presumptious to attempt in this brief compass and at this preliminary stage to spell out in detail the internal organization of OSPA. On the other hand, some discussion of the recommended size and composition of the group may provide a sense of how the organization will carry out its functions and a feel for its operative style and thrust. What is contemplated is a lean, high quality staff with an overall annual budget of approximately $10 million and with an additional $2.5–$5 million annual budget for external research and consultants.

Since OSPA will address selected important problems from an interdisciplinary, or at least a multi-disciplinary approach, its leadership and its staff should be drawn from a broad mix of quantitative and qualitative backgrounds. Technologists, sociologists, economists, social accounting specialists, political scientists, environmentalists, systems analysts and perhaps many more types of experts will all play important roles. The Office should be headed by a respected expert in one of these fields who, obviously, is also familiar with the intricacies of the Washington policy formulation process. He should have as his principal deputies, two or three outstanding and broad-gauged representatives from the relevant fields (assuring a good balance between the "hard" and the "soft" disciplines).

The staff should be small (more than 30 but less than 50) comprising an appropriate mix of substantative expertise. The staff would function primarily as managers of policy-oriented research projects carried on by personnel in appropriate government agencies and/or outside contractors. As part of its regular responsibilities and as a way of maximizing its impact on emerging policy problems and issues it should have an opportunity to review and comment on the President's budget as well as the longer term implications of resource allocation decisions, major Presidential policy statements (e.g., the Energy Message and the Economic Message), and legislation which has significant long-term policy implications (e.g., the Clean Air Act and the Land Use Bill).

There are two alternative organizational arrangements within the Executive Office which seems to hold promise: Placing OSPA within the Office of Management and Budget; or creating a new independent Agency within the Executive Office of the President.[2]

Within OMB

The rationale for placing OSPA within OMB is that OMB has responsibilities for resource allocation, legislative clearance and departmental coordination. The close organizational tie between these functions and the function of strategic assessment would probably increase the effectiveness of OMB in its decision-

[2] But see, also Annex I for a third option suggested by one member of the Working Group.

making role. Certain changes within OMB would, of course, be necessary if the strategic assessment function was assigned there. For example, since Congressional and public interest groups should play an important role in the strategic choice assessment process,[3] OMB would have to be restructured to insure that this communication is encouraged. Presumably, the strategic assessment function would be organized as a separate group within OMB, but possibly located physically away from the high pressure atmosphere of the Office.

An independent agency within the Executive Office

As noted above, the organizational structure for OSPA would probably be the same whether it was placed within OMB or functioned as an independent agency. Aside from more flexibility, the principal argument for organizing a separate entity is that the identification of emerging problems and the formulation of policy options might best be conducted by a staff removed from day-to-day decision-making responsibilities and by an official with direct access to the President. The OMB Director, for example, might find it difficult to devote adequate attention to longer-term problems given the pressure for near-term budget and management decisions.

The trade-offs

Putting OSPA into OMB would provide it with direct access to the important related budget and legislative processes. But the strategic assessment function might become a residual claimant for the time and attention of the Director and his principal subordinates.

The creation of a new separate agency has, on the face of it, certain obvious disadvantages. Moreover, there is a danger that the group might become isolated from the gut-aspects of decision-making and from the decision-makers themselves—the "ivory tower" syndrome. (This should also be reckoned with if the group is placed within OMB by physically located outside of Washington.) But there would be a significant merit in having the strategic assessment function become the sole responsibility of a prestigious "Council" whose head reported directly to the President.

RESEARCH AND ANALYSIS SUPPORT

Whichever organizational arrangement is selected, it is clear that a group of the size contemplated would be unable to undertake a major research effort on its own. Indeed, it is doubtful whether this would be appropriate. OSPA should, rather, stimulate and sponsor supporting research and analysis from organizations and institutions within and outside the Federal government. (We have already noted that OSPA should have a budget ranging from $2.5 to $5 million for such purposes.)

Substantial facilities for research within the public and private sectors already exist and some of the necessary research activity is already going on. The RANN Program of NSF, the Institute of Education, the research programs sponsored by HEW and other government agencies might prove fruitful.

What is needed is focus and direction of current and new research. This implies an organized and interrelated network of research and analysis institutions, covering each major broad area (land use, resources, environment, transportation, health, etc.). OSPA would have as one of its major tasks the encouragement, possibly even the development of such a research capability outside the government structure.

In addition to supporting research focussed on the problems entailed in strategic assessment, there is a need for close contact with analytical efforts being undertaken elsewhere in the government. The effectiveness of a strategic assessment function at the Executive Office level would be increased with the establishment of departmental and agency staffs with responsibility for identifying emerging problems and policy alternatives within the jurisdiction of their own organizations. These groups could feed their analyses and findings up to the OSPA as well as to their own departmental superiors.

ORGANIZING A STRATEGIC ASSESSMENT FUNCTION IN CONGRESS

The very nature of the problems addressed here implies a close partnership between the Executive and the Legislative Branches. However the assessment

[3] This is discussed in fuller detail in a later section.

function is organized within the Executive Branch, a companion organization should be established to serve the requirements of Congress.

Since Congress is, if anything, more fragmented than the Executive Branch, and since the professional capabilities of Congressional Committees need substantial upgrading, the strategic assessment function should not be grafted on to any of the existing Congressional Committees. A possible exception here would be the Joint Economic Committee whose charter could be broadened and staff strengthened for this purpose.

A new Committee along the lines of Senator Humphrey's proposal,[4] a "Joint Committee on Balanced National Growth and Development," might be the answer. On balance, however, it would seem preferable to assign the assessment function to the new Office of Technology Assessment. OTA, although its direction is not yet clear, includes within its mandate not only technological, but also many of the social concerns contemplated in the term "strategic assessment." For a variety of historical and other reasons, neither the Congressional Research Service nor the General Accounting Office, the other central staffs of Congress, seems as suitable a base.

It is likely that the OTA will employ a combination of direct staffing and contract operations which could give it access to a broad range of analyses bearing on longterm strategic choice. The Office will function under a statutory Board of Technology Assessment composed entirely of members of the House and Senate; the Board is essentially a joint committee. Thus the work of the Office will be fed into the direct operations of Congress through a board of serving members, an arrangement which could prove a highly constructive link between the research community and the decision-making community.

The establishment of a strategic assessment staff as a distinct entity within OTA and operating, preferably, under its own Deputy Director could provide a logical focus for overseeing and filtering the output of a parallel group in the Executive Branch. Such a group could disseminate its assessments, to Congress at large. In addition, since OTA's Board members represent a cross section of important legislative interests, its analyses would probably be widely circulated among a number of Congressional committees.

As the first new information arm of Congress in half a century, the OTA affords a rare opportunity to invest the strategic assessment function in an institution with symmetrical objectives and substantial resources.

The complexity of the matters at issue will exceed the research and analysis capabilities of any Congressional Committee staff and even those of a highly professional Office of Technology Assessment. And so OSPA's Congressional counterpart, like OSPA itself, will need outside substantive support. An annual budget (in the range of $2.5 to $5 million previously suggested for OSPA) for external research and for consultants would be required if Congress is to be as well-served in this Area as the Executive Branch under either of the options presented above.

The effectiveness of an Assessment Office in the Executive Office of the President and of a counterpart staff on Capitol Hill will depend, in large part, on close and frequent consultation between the two. One important link might take the form of an annual Presidential Message on Growth and Development along the lines suggested in Senator Humphrey's Bill. Such a Message would contain specific legislative proposals discussed in advance between the strategic assessment staffs of both Branches of government. On a more routine, day-to-day basis, there might be a joint "watch tower" effort to identify emerging problems. A joint approach to contracting outside research might be another device to insure close cooperation between the assessment staffs.

BROADENING THE BASE OF STRATEGIC ASSESSMENT

Whether OSPA is located within OMB or takes the form of a separate new entity, and whether the strategic assessment function is performed in Congress by OTA or a special committee, rigorous efforts must be made to avoid an inconoclastic, "elitist" mode of operation—"OSPA (or OTA) knows best."

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[4] A Proposal for Achieving Balanced National Growth and Development, a proposal submitted to the Sub-Committee on Economic Progress of the Joint Economic Committee, Congress of the United States, Feb. 26, 1973. U.S.G.P.O. 1973.

Although there is no substitute for the determination of senior officials and staff members to seek guidance and share their wisdom widely throughout the government and the private sectors, certain arrangements might help to stimulate and institutionalize this kind of communication. What follows is primarily directed toward a strategic assessment function within the Executive Office, but similar arrangements with appropriate modifications could apply to Congress, as well.

The establishment of a Federal Advisory Board, consisting of senior representatives from relevant Departments and Agencies, would help to prevent OSPA from becoming isolated from the rest of the government and would provide a high-level, two-way channel for the flow of guidance and information. In addition, a Public Advisory Board would assure communication with the world outside of Washington. Such a Board should consist of representatives from universities, foundations, industry, environmental groups, labor, and other relevant groups.

Aside from the more formal contacts with advisory groups, it is essential that the strategic assessment staff be aware of the interests, aspirations, activities and writings of representative groups in the world outside the bureaucracy and Capitol Hill. For this reason, both OSPA and its Congressional counterpart should maintain close links with state and local governments and with such non-government sectors as industry, labor, consumer and environmental groups.

Finally, both OSPA and the Congressional staff, but especially the former, should keep apprised of the activities of long-range assessment functions being performed in other industrially-advanced countries. Aside from the usefulness of exchanges with respect to methodology and substance, it will be prudent to exchange advance warnings of major new shifts in long-range national economic and social policies.

Annex I

Proposed Organizational Placement of "Strategic Choice Assessment Group"

Considering the objectives and functions of the "Strategic Choice Assessment Group" it is vital that organizational arrangements for such a group meet the following criteria:

1. The group should be isolated from political pressures but sensitive to differing political views in arriving at proposals for alternative policies and actions.
2. The group should not be identified solely with one particular branch of Government or segment of the public (i.e. Executive and legislative branch, industry, universities, State and local governments, etc.)
3. The group should be housed in a parent organization which has continuity beyond the term of the incumbent President or Congress.
4. The group—through its parent organization—must have "clout" whereby its proposals for alternative policies and actions will be seriously weighed in the executive and legislative branch of Government. Such "clout" is enhanced if the organization is strong and is directed by prestigous individuals.
5. The group must have access to information on strategic choices being developed in the various Federal departments and agencies and outside the Government.

Commission on National Policy Choices

The group should be placed under an independent commission whose membership would reflect broad representation from various sectors. The members would be comprised of the following:

Executive Branch

Chairman, Council of Economic Advisers.
Director, Office of Management and Budget.
Executive Director, Domestic Council.

Legislative Branch

Chairman, Joint Economic Committee.
Ranking Minority Member, Joint Economic Committee.
Comptroller General of the United States (who would serve both as the head of GAO and as a member of the Technology Assessment Advisory Board).

Other Groups

Five representatives from:
Industry.
Universities.
Labor.
Consumer groups.
Non-Federal governments (e.g., Council of Governments).

The President would appoint the five members from outside the Federal Government for a term of 6 years.

The Commission would prescribe broad policies to be followed by the group and provide guidance and advice to it. The Commission would be required to publish such staff reports on policy and action choices as are periodically developed by the group and may append its views as it considers appropriate to such reports. An annual report it to be made by the Commission to the President and the Congress.

Legislation establishing the Commission would authorize and direct Federal departments and agencies to assist the Commission. The President would be required to report annually to the Congress on actions taken with respect to the group's proposals for alternative policies and actions.

Annex II(a)

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS,
Washington, D.C.

PROJECT OF SUSTAINABLE GROWTH—DINNER FORUM, MAY 10, 1973

GUEST LIST

Speaker: Honorable Russell Train, Chairman, Council on Environmental Quality.

Mr. Alvin Alm*, Staff Director, Council on Environmental Quality.

Dr. Gerald Barney, Third Century in America, New York.

Mr. Wallace Bowman, Chief, Environmental Policy Division, Library of Congress.

Mr. David Beckler*, Office of Science and Technology.

Mr. Richard Carpenter, Executive Director, Environmental Studies Program, National Academy of Sciences.

Mr. Pilander Claxton, Special Assistant to the Secretary for Population Matters, Department of State.

Mr. Charles J. di Bona, Special Consultant to the President.

Congressman John D. Dingell of Michigan.

Mr. Henry Eschwege*, Director, Resources and Economics Division, Comptroller General's Office.

Dr. Stanley Greenfield, Assistant Administrator, Office of Research and Monitoring, Environmental Protection Agency.

Mr. Richard Gerson, Research & Development Incentives, National Science Foundation.

Mr. Ken Gray, Administrative Assistant to Senator H. H. Humphrey.

Senator Philip A. Hart.

Mr. Dean Hinton, Deputy Executive Director, Council of International Economic Policy, The White House.

Senator Hubert H. Humphrey.

Dr. George Jaszi*, Director, Bureau of Economic Analysis, Dept. of Commerce.

Mr. Roger LeGassie, Deputy Director, Office of Planning and Analysis, Atomic Energy Commission.

Mr. Ellis Motur, Office of Technology Assessment.

Mr. Bernard Nagelvoort, Administrative Assistant to Congressman Guy Vander Jagt of Michigan.

Mr. Neal Peterson, Attorney at Law (after dinner).

Mr. Frank Potter, Subcommittee on Fisheries and Wildlife Conservation and the Environment.

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* Members of the Working Group.

Mr. John Sawhill,* Office of Management & Budget.
Mr. Gary Seevers, Special Assistant to Herbert Stein, Council of Economic Advisors.
Mr. Julius Shiskin, Office of Management & Budget.
Congressman Alan Steelman of Texas.
Mr. Arnold Steinberg, Special Assistant to Senator James L. Buckley of New York.
Mr. James Thornton, Subcommittee on Agriculture & Forestry (after dinner).
Dr. William A. Vogley, Director, Office of Economic Analysis, Department of Interior.
Mr. Maurice Williams, Deputy Administrator, Agency for International Development.

Woodrow Wilson Center Staff

Mr. Albert Meisel, Acting Director.
Mr. William M. Dunn, Administrative Officer.

Woodrow Wilson Center Fellows

Mr. Harry Blaney,* Foreign Service Officer, was Special Assistant to Chairman, Council on Environmental Quality.
Mr. Chester L. Cooper,* Coordinator, WWICS Growth Study Program, former government official, research administrator, author.
Mr. C. Alton Frye,* political scientist, arms control specialist. Legislative context of American foreign policy.
Mr. Lincoln Gordon, political economist, former Professor of International Economic Relations, Harvard University, former Ambassador to Brazil.
Mr. Robert H. Walker, Professor of American Civilization, George Washington University.

WWICS growth project staff

Mrs. Judith Corson,* Research Assistant.
Miss Anne Gault, Research Assistant.
Mrs. Sue Gerson, Administrative Assistant.

Annex II(b)

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS,
Washington, D.C.

PROJECT ON SUSTAINABLE GROWTH—GOVERNMENT FORUM DINNER—JULY 30, 1973

Chairman: Chester L. Cooper,* Coordinator of the Sustainable Growth Project and Fellow of the Woodrow Wilson Center.
Mr. Alvin Alm,* Environmental Protection Agency.
Mr. Jack Alterman, Assistant Commissioner, Economic Trends and Labor Conditions, Department of Labor.
Mr. Tim Barnacle, Leigslative Assistant to Senator Humphrey.
Mr. John Barnum, Undersecretary, Department of Transportation.
Mr. David Z. Beckler.*
Mr. Harry Blaney,* Member, Planning and Coordination Staff, Department of State.
Mr. Wallace Bowman, Chief, Environmental Policy Division, Library of Congress.
Mr. Richard Carpenter, Executive Director, Environmental Studies Program, National Academy of Sciences.
Mr. Charles di Bona, Special Consultant to the President.
Congressman John D. Dingell of Michigan.
Mr. Henry Eschwege,* Director, Resources and Economics Division, Comptroller General's Office.
Mr. Richard Gerson, Research and Development Incentives, National Science Foundation.
Mr. Gerald Grady, Select Committe on Committees, House of Representatives.
Dr. Stanley Greenfield, Assistant Administrator, Office of Research and Development, Environmental Protection Agency.

* Members of the Working Group.

Mr. Dean Hinton, Deputy Executive Director, Council of International Economic Policy, The White House.

Dr. Peter House, Environmental Protection Agency.

Senator Hubert H. Humphrey of Minnesota.

Mr. William B. Irwin, Assistant Secretary of Agriculture for Rural Development.

Dr. George Jaszil,* Director, Bureau of Economic Analysis, Department of Commerce.

Dr. Sidney Jones, Assistant Secretary for Economic Affairs, Dept. of Commerce.

Mr. Roger LeGassie, Deputy Director, Office of Planning and Analysis, Atomic Energy Commission.

Dr. Lawrence E. Lynn, Jr., Assistant Secretary for Program Development and Budget, Department of Interior.

Mr. Dudley Mecum, Assistant Director, Office of Management and Budget.

Mr. Ellis Motur, Office of Technology Assessment.

Mr. Bernard Nagelvoort, Administrative Assistant to Congressman Guy Vander Jagt of Michigan.

Dr. Mancur Olson, Department of Economics, University of Maryland.

Mr. Frank Potter, Subcommittee of Fisheries and Wildlife Conservation and the Environment.

Mr. Barry Riordan, Staff Member, Council on Environmental Quality.

Mr. Claus Ruser, Deputy Director for Policy Analysis and Resources, Department of State.

Mr. John Sawhill,* Office of Management and Budget.

Mr. David Scheffer, Intern, Council on Environmental Quality.

Mr. Elmer Staats, Comptroller General of the United States.

Dr. H. Guyford Stever, Director, National Science Foundation.

Mr. James Thornton, Subcommittee on Agriculture & Forestry.

Mr. Maurice Williams, Deputy Administrator, Agency for International Development.

Woodrow Wilson Center Staff

Mr. William M. Dunn, Administrative Officer.

Woodrow Wilson Center Fellows

Mr. S. Alton Frye,* political scientist, arms control specialist. Legislative context of American foreign policy.

Mr. Robert H. Walker, Professor of American Civilization, George Washington University.

WWICS Growth Project Staff

Mrs. Judith Corson,* Research Assistant.

Miss Anne Gault, Research Assistant.

Mrs. Sue Gerson, Administrative Assistant.

THE LAND USE POLICY AND PLANNING ASSISTANCE ACT OF 1973

(By Archibald C. Rogers, FAIA, First Vice President, the American Institute of Architects)

Mr. Chairman, I am Archibald C. Rogers, FAIA, First Vice President of The American Instiute of Architects, Chairman of its National Policy Task Force, and a practicing architect and urban planner in Baltimore, Maryland. Accompanying me are Michael Barker, Adminstrator of the Institute's Department of Environment and Design, and Tom Bennett, Director of Congressional Liaison.

Today, The American Institute of Architects, the national society for the architectural profession representing 24,000 licensed architects, wishes to express its views on the subject of national land use policy and planning, with emphasis on the bills currently pending before the Committee, H.R. 91, H.R. 2942, and H.R. 4862.

* Members of the Working Group.

We believe that the legislation resulting from these hearings can be an important step toward a national commitment to sound land use planning within the context of a national growth policy. Declining central cities surrounded by affluent suburbs, deteriorating rural areas, ugly strip development and sprawl, the shortage of housing, the lack of public transportation, pollution of air and water, and the mismanagement of our priceless natural resources are but symptoms of the present lack of this commitment. For examples of what nations can do to control the quality of the human environment, we, the wealthiest democratic nation in the world, must look to other less affluent nations for leadership.

The many American architects, planners, engineers, and developers, and indeed, Members of Congress, who have visited Eastern and Western Europe are impressed by examples of orderly and well-planned new town development and natural resource management. In the course of the deliberations of the AIA's National Policy Task Force, one of the Task Force members visited national capitals abroad to determine the role that other national governments play in the management of national and urban growth and natural environments. He found that there was a significant role played by the national governments, especially in those countries with very good records in preserving the human environment such as the Netherlands, Great Britain, and Finland.

Based on this and other research, the National Policy Task Force of The American Institute of Architects strongly recommends that our Federal Government response to increasing citizen demand for a higher quality of life by developing a national growth policy, coupled with a strategy and the necessary mechanisms to implement such a policy.

Over the past five years The American Institute of Architects has worked to develop a national growth policy and strategy for its implementation. While the focus of this hearing is much narrower in scope than the national growth question *in toto*, we would like to submit for the record AIA's Plan for Urban Growth, "America at the Growing Edge." In brief, the new policies recommended in this report would change the "ground rules" that now shape, and distort the shape, of American communities; create a new and useful scale for planning and building in urban areas; and commit the nation to a major land acquisition policy to guide development in and around key urban centers. We will not discuss the entire report at this time, but will use it to set the context for our testimony.

Drawing from our report, we recommend the following steps to meet the objectives of the pending legislation:

1. The creation of a policy board on national growth within the Executive Office of the President;
2. The establishment of legislative committees to deal with national growth policy in both the House of Representatives and the Senate;
3. The adoption of state land use and development plans and programs as a matter of national policy;
4. The creation of new governmental institutions and mechanisms to implement state land use and development programs, as elements of a national growth policy;
5. The use of Federal incentives and sanctions as essential ingredients to stimulate the preparation of state land use and development plans and programs and their successful implementation; and
6. The provision for adequate public participation in state land use and development plan-making through the distribution of information and potential alternatives well in advance of public hearings and subsequent decision-making.

NATIONAL GROWTH POLICY BOARD

In the past three or four years the need for a growth policy council or board at the national level has been recognized through two major pieces of enacted legislation. The first, the National Environmental Policy Act of 1969, created a Council on Environmental Quality in the Executive Office of the President. The second, Title VII of the 1970 Housing and Urban Development Act, required the President to prepare a biennial report to Congress covering legislative and administrative aspects of implementing an urban growth policy and established an identifiable unit of the Domestic Council to develop such a report and policy. In the pending land use bills, we see that a "National Advisory

Board on Land Use Policy" is proposed to assist in the coordination of state land use and developmental plans and programs.

Reading the legislative charges to the Council on Environmental Quality, to the Urban Growth Unit of the Domestic Council, and to this proposed National Advisory Board on Land Use Policy, one cannot help but note the similarities of their responsibilities. Yet none of them has adequate scope and authority to discharge the full responsibilities with which they are charged. We envision a more broadly based national growth policy board that would absorb and combine the responsibilities of the Council on Environmental Quality and the Urban Growth Unit of the Domestic Council and most certainly include the functions of the proposed National Advisory Board on Land Use Policy. Specifically, we recommend that a National Growth Policy Board be established with the following functions:

1. Establishment of National Development Goals. The Board would be an extension of the Executive Office of the President and would be the focus of the President's legislative and administrative plans for establishing and meeting national development goals. The Board would be the Administration's spokesman for its policies and proposals before Congress and the nation on these issues.

2. Coordination of Federal Programs. The Board would be charged with coordinating and reviewing Federal programs affecting state and local land use. This function would be similar to the Section 102 requirements of the National Environmental Policy Act of 1969 except that the definition of "environment" would be expanded to include the social and economic issues inherent in urbanization, and which are now of secondary importance to the Council on Environmental Quality.

3. Review of State Plans and Programs. The Board would have the responsibility for reviewing state land use and development plans and programs on a regular basis to insure that they were compatible with national policy. While programs providing assistance to state and local governments would continue to be administered in the various Federal agencies, the policy board would have an overall coordinative function within the Executive Office of the President.

4. Coordination of Incentives and Sanctions. The Board would have the responsibility for applying both incentives and sanctions to encourage states to develop and implement land use and development plans and programs.

Thirty years ago this nation experimented with a national growth policy board in the form of the National Resources Planning Board. It went out of existence in 1943. We see this, the NRPB, as a pertinent historical example. A child of the Depression, it studied our natural resource problems, our urban growth and economic problems, and our social problems. But it was ahead of its time and died prematurely after ten years of useful and promising work. Perhaps the reason for its demise was that it was not built adequately into the administrative structure of he Federal Government. Its power to influence administrative decisionmaking was minimal. Our proposal for a National Growth Policy Board would remedy this lack of involvement in decisionmaking by giving the Board authority for Federal program coordination, state plan and program review, and the coordination of incentives and sanctions.

CONGRESSIONAL COMMITTEES

As a professional society seriously concerned with the quality of the environment, one of our major problems has been the distribution of concern for these issues among several Congressional Committees. We see duplication, lack of coordination, and piecemeal approaches to complicated, interrelated problems which must be dealt with as a whole.

In 1971 the Senate and the House approved separate resolutions to create a Joint Congressional Committee on the Environment. Even though the Joint Committee was never established, it represented a step in the right direction. However, we believe that these issues could be dealt with more effectively if there were one committee in each Branch of Congress with jurisdiction over environment and national growth policy. We hope that the House of Representatives will act on this matter in conjunction with their current review of Committee jurisdiction and operation and that the Senate will follow suit.

STATE LAND USE AND DEVELOPMENT PROGRAMS

The American Institute of Architects strongly supports the creation of land use and development programs at the state and metropolitan level. Here is where the primary responsibility and constitutional authority for land use planning and management exist. It is government close to the people. It can be responsive to the needs of its citizens. It should be pointed out, however, that there are national policies enacted by Congress in the fields of housing, environmental quality, and civil rights, as well as others, and these should be taken into account in any state or metropolitan land use and development programs.

We believe that state programs should provide for the following:

1. The protection of areas of critical environmental concern;
2. The planning for areas impacted by key facilities;
3. The planning for development and land use of regional significance;
4. The planning for large-scale subdivisions and other large-scale development;
5. The creation of mechanisms to assure compliance with standards and regulations relating to air and water quality, solid waste disposal, and resource recovery.
6. The creation of mechanisms to assure compliance with planning housing, public facilities, growth, and development objectives in existing housing and urban development statutes;
7. The creation of mechanisms to assure equal social, educational, and economic opportunities for all citizens;
8. The conservation and preservation of natural, historical, and scenic resources;
9. The conservation of agricultural land of high productivity;
10. The restriction of use of wetlands, watersheds, and flood plains;
11. The planning for open spaces and recreation;
12. The planning for transportation systems;
13. The planning for power and water supply;
14. The determination of desirable locations of centers for economic development;
15. The planning for balanced population distribution;

The definition in each of the above of "areas of critical environmental objectives" is excellent but has a serious omission. There is no reference to the problems of the central cities or metropolitan areas. A state land use and development program can not ignore central city problems. We believe state programs should address themselves to land conversion on the edges of metropolitan areas as well as the rebuilding of central cities. We recommend that the language of the bill be amended to reflect this concern.

NEW INSTITUTIONS AND MECHANISMS

The Federal Government cannot and should not prescribe methods for shaping growth on the state and local level because it is too far removed from state and local problems. The most creative solutions must and will come from the cities and states themselves. These can be aided by state and local institutions serving as price mechanisms for implementing state land use and development programs. For example:

1. The state and local capital budgetary process should be closely tied to state programs so that the state expenditures are consistent with land use and development goals. Indeed, public infrastructure which controls and shapes growth should be located and installed as a conscious public decision which reflects state and local development goals. Indeed, public infrastructure which controls and shaps growth should be located and installed as a conscious public decision which reflects state and local development objectives. Capital infrastructures such as utilities, roads, social services, education and recreational facilities should be installed in advance of urbanization to control and shape urban form and services.
2. State chartered development corporations with the power of eminent domain, and public borrowing authority should be encouraged. Such institutions are the New York Urban Development Corporation and the seven-county Minneapolis-St.Paul Metropolitan Council. We are interested in what George

Rommey has dubbed "the real city' and what public institutions can do to control and shape growth.

3. An elected metropolitan planning and development agency should be encouraged to plan and control the patterns of urban development.

4. Aggregation of the scale of development should be encouraged. Section 303(a) of H.R. 2942 calls for state land use programs which assure "that any large-scale subdivisions and other proposed large-scale development within the state of more than local significance in its impact on the environment is not inconsistent with state land use programs." We would like to go beyond this matching of large-scale development to state plans, which we believe is essential, to another more significant point. We believe that a basic state planning process should include programs, both public and private, to aggregate the scale of community development. In the First Report of our National Policy Task Force we call for the creation of urban growth units as a new mode for urbanization. For too long we have been trying to deal with the quality of urban growth in a piecemeal, uncoordinated and haphazard series of arrangements between public agencies and private developers. We would like to see the restraints to the aggregation of the scale of developments removed, and incentives added to encourage the building of neighborhoods rather than simply houses.

5. The unearned increments in land value due to public investment should be returned to the public. Section 303(f) of H.R. 2942 states "any person having a legal interest in land of which a state has prohibited or restricted the full use and enjoyment thereof may petition a court of competent jurisdiction to determine whether the prohibition diminishes the use of the property so as to require compensation to be awarded therefore." We believe this language covers only one side of the ledger; that is, the side where public actions constrain the free use of private property, in effect, the taking of some development or use right. The other side of the ledger, where public investments create significant benefits to private property owners, should also be considered. We recommend that the state planning process should study and find means to capture unearned increments in the value of land accruing to private property owners due to public investments on or near their porperties. We believe that if the public is to capture some of the unearned increments or the so-called windfall profits from private owners, these profits must be clearly related to specific public investments such as freeways, interchanges, rapid transit stations, major recreation facilities, water and sewer systems.

The Douglas Commission in Urban Problems studied this question in 1967. They found that 72 billion dollars worth of real estate changed hands in 1967. Twenty-four billion dollars of that value was in the capital gains category, due in fact to both public and private investment. Twenty billion dollars was in the appreciation of raw land. The Federal Government, was able to capture one billion dollars in capital gains tax receipts. We believe methods could be worked out whereby the public could recover through its investments in public infrastructure. We hope that the state planning process would address itself to this question and seek creative solutions.

FEDERAL INCENTIVES AND SANCTIONS

We fully appreciate the difficulties that this legislation may impose in view of the difference in state capabilities to (1) developed a planning process, (2) prepare a land use program, and (3) create the mechanisms to implement the program. Consequently, we recommend that during the first five-year period all states be funded on an equal per capita basis. Hopefully those that find themselves with larger tasks will have an opportunity to catch up. The Federal Government should continue to support program development, which is a useful activity in and of itself, separate from implementation. However, those states which concentrate solely on the creation of plans should progress at a rate proportionate to their capabilities.

The authorization of 40 million dollars for each of the first two years and 30 million dollars a year for the following three fiscal years seems low when compared to the Department of Housing and Urban Development's Section 701 Comprehensive Planning Assistance Program. It expended about 100 million dollars per year for the last three years in providing planning assisttance for state, regional, and local governments. And this did not keep pace with the demand for Section 701 funds.

To adequately fund this land use planning effort, we would suggest the 100 million dollar annual authorization contained in the Senate Committee-approved bill last year, with up to a 90% Federal share available to assist state to develop their land use planning capacity and prepare and implement their land use programs.

We recommend that the legislation be revised to make it mandatory for all states to prepare state land use and development programs in order for them to continue to be eligible for Federal assistance in program areas which significantly affect land use patterns.

As H.R. 2942 is presently written, the only sanction for a state is ineligibility for the land use planning and management grants provided by the legislation. States will develop land use planning processes and land use programs if they realize that the flow of other Federal funds may be stopped if they do not.

Several of the categorical assistance programs to state and local governments may be replaced by proposed revenue sharing and block grants. Therefore, we suggest that the program-making requirements of this legislation be a condition for continued state eligibility for special forms of revenue sharing, particularly rural and urban development.

In addition, we support the approach contained in the 1972 House Committee-approved bill and endorsed by the Administration to highway, aviation, and land use and water conservation fund sanctions. After the initial five-year period is over, states which have not produced an effective use program and which have not moved toward creating the mechanisms necessary to carry out plans should be penalized by Federal withholding of 7% of each of the following Federal programs: water and sewer, highway, aviation, and land and water conservation funds to a cumulative total of a maximum of 21% of each. In essence, the Federal Government will inform the states that unless they provide for the planning and control of their growth, it will reduce the amount of Federal money being provided to that state in programs which sustain and encourage growth (i.e., water and sewer and transportation). This is a realistic way to interest the states in preparing the plans and in creating the implementary mechanisms.

PUBLIC PARTICIPATION

Our final recommendation deals with informed citizen participation in the development and implementation of state land use planning processes and programs. We strongly recommend public disclosure of the information pertinent to the development of the state land use planning process and programs, including potential alternatives. The discosure should be well in advance of any hearings or decision-making. It should be in a form easily understood by the general public and be widely publicized. In this fashion, the public will have an opportunity to consider and analyze the options available and present informed positions during public hearings. Public participation after government officials have already made tentative or binding decisions is meaningless. In addition, an appeals procedure is needed for reviewing objection and reservations after the initial state plan is prepared. We do, however, recognize that the responsible public body must be the one that makes the final decision.

We reconize that the land use legislation now pending before Congress has already traveled down a long road and has many obstacles yet to overcome before it can be enacted into law. The American Institute of Architects believes that land use and national growth are two of the most vital issues facing our nation today and are ones that must be dealt with comprehensively. To do less will not achieve a lasting solution. For this reason we trust that Congress thorough our review recommendations and are favorably on them. Thank you.

Chairman BENTSEN. We have gone to a great deal of effort to get witnesses to start these hearings that have a depth of knowledge in the subjects with which we are dealing and have experience and expertise. And we are very pleased to have these four witnesses with us this morning. It is my privilege to introduce these distinguished members of our panel. Each of them has a different aspect of the problem of economic growth to talk about, which will confront us over the next decade.

Our first speaker is Mr. Reginald Jones, who is chairman of the board of the General Electric Co. General Electric has undertaken a great deal of research on long-term economic outlook and in particular on capital investment needs. We are very fortunate that Mr. Jones could be here this morning to present the results of these studies and to give us his advice on policies relating to capital investment.

Mr. Jones, if you would come forward, please.

Following Mr. Jones our next panel member will be Mr. Lester Brown, who is a senior fellow at the Overseas Development Council. Mr. Brown was formerly with the Agriculture Department. He is the author of a number of books and articles on world food needs and on the supply of and the demand for both food and nonfood commodities. He will present his analysis of the commodity outlook and his recommendations for the steps which should be taken to deal with the current and the potential shortages. If you would come forward, Mr. Brown.

Our third panel member is the Honorable Norman Mineta, mayor of San Jose, Calif. Mr. Mineta is taking an active leadership role in a number of organizations including the U.S. Conference of Mayors and the National League of Cities. We have asked him to summarize for us some of the economic problems which are likely to be encountered by our major cities over the next decade, and some of the steps that might be taken to handle urban needs. I am very pleased that he is able to take this assignment. Mayor Mineta, if you would come forward and take a chair.

Our final panel member is Mr. Arthur Ross, the executive vice president and managing director of the Central National Corp. Mr. Ross has served on the U.S. delegation to the Economic and Social Council of the United Nations, and has participated in other international economic forums, such as those sponsored by the North Atlantic Assembly. We are most pleased to have him here this morning to discuss some of the social implications of economic growth and capital availability. If you would come forward, Mr. Ross.

We have a number of issues obviously to cover and questions to ask. I would appreciate it, with the limitation of time, if the witnesses would limt their initial opening statements to 10 or 15 minutes, and then we will follow with free-flowing discussion to try to go into greater depth.

If you would proceed, Mr. Jones.

STATEMENT OF REGINALD H. JONES, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, GENERAL ELECTRIC CO.

Mr. JONES. My name is Reginald H. Jones. I am chairman of the board and chief executive officer of the General Electric Co.

We are of course deeply honored by your invitation to be one of the first witnesses to offer testimony before the new Subcommittee on Economic Growth. May I begin by offering my sincerest compliments to you, Senator Bentsen, and your distinguished colleagues, for establishing this very important new instrument of national policy determination. My associates and I in General Electric heartily concur in the need for a long-range look at the economic needs of this country, the obstacles that may stand in the way, and the policy options that are open to us.

In response to your invitation, I have a prepared statement on the matter of business capital requirement, and I respectfully request that the full statement be entered into the record. But in the interests of brevity, I'll summarize orally.

Chairman BENTSEN. Without objection, it will be placed in the record at the end of your oral summary.

Mr. JONES. Thank you, Senator Bentsen.

Since the great depression of the thirties, the United States has become an increasingly consumer-oriented economy. National policy has been directed primarily toward stimulating consumer demand, redistributing wealth, providing for social welfare, and increasing government services.

While much good has flowed from these policies favoring consumption over production, they have, over time, created an unbalanced situation which threatens continued national progress. We now have an economy whose tax structure and economic policies tend to discourage savings and capital investment.

Other industrialized countries, our competitors for world markets, have made much more aggressive policies to encourage investment.

Here are some comparative rates of capital investment: Gross private domestic investment as a percentage of GNP for 1973. United States, 15.7 percent; Germany, 26 percent; France, 28 percent; Japan, 37 percent.

The consequences of underinvestment are catching up with us. Shortages of fuel, raw materials, transport, and industrial commodities are forcing us to reexamine our national priorities. Unless we want to live with ever-worsening shortages, and all the unemployment and inflation and Government controls that would result, we will have to establish policies that once more encourage savings and investment.

First, let's take a realistic look at the capital needs and resources of the United States between now and 1985. Our economists at General Electric have made a year-by-year projection of the economy to the year 1985.

This is not an idealistic projection, but one that recognizes how deeply inflationary forces are imbedded in our total system at the present time. It anticipates that we will have an overall inflation rate of about 5 percent a year between now and 1985—high by historical standards, but less than the present overheated rate.

It further assumes that, because of the long-term decline in industry's return on investment, the continuing pressures of inflation, and the demands of our social problems, we will not be able significantly to increase the proportion of gross national product devoted to capital investment, desirable though that may be.

With these conservative assumptions, they realistically project a 4 percent average annual growth in real GNP, or 9.1 percent growth in current dollars. That would yield a gross national product of $3.6 trillion in 1985, expresed in then-current—not constant—dollars.

Table I, attached to my prepared statement, summarizes the capital investment needed to attain such an economy, as well as the historical record of the previous 12 years.

In the period 1962 through 1973, a total of $1.5 trillion was invested. But in the coming 12 years, we'll have to raise and invest a staggering $4.5 trillion! And most of that will have to be raised by the business community.

The $1.5 trillion invested in 1962–73 amounted to 15 percent of our GNP in that period, and the $4.5 trillion projected for the next 12 years will similarly amount to about 15.8 percent of GNP.

In my personal opinion, we'll have to invest a larger proportion—perhaps 18 to 20 percent—if we want to lick inflation and maintain a socially acceptable level of unemployment.

But I must also say that, given present national policies and tax structure, industry will be very hard put to raise its share of the conservatively projected $4.5 trillion—let alone any more than that.

Governments also make capital expenditures, and on table II of my prepared statement, we present our projection of Government investment spending, as against the historical record.

In the period 1962 through 1973, Federal, State, and local governments invested $357 billion in equipment and construction for education, highways, resources, and other public services. In the coming 12 years, that will increase to $779 billion in actual dollars.

The point of this table is to remind the committee that Government capital expenditures, which are paid through taxes rather than voluntary investments, reduce the amount of money available to individuals and corporations for savings and investment.

The committee is interested in knowing also where the funds for investment will come from. In rather general terms, I suppose that we could say that savings represent the source of capital—or put another way, that portion of our output that is not consumed is available to our capital markets.

The prevailing Keynesian view since the depression has been that in the United States, to quote John Kenneth Galbraith:

> Not a shortage of savings but a recession resulting from the failure to use all available savings is the spectre that haunts all policymarkers. For investment to exceed savings, at least in peacetime, is thought exceptional.

Well, then these are exceptional times. My thesis is that this country has drifted into a situation where its investment needs may exceed its savings, and what we need are incentives and policies that will divert more funds from consumption to investment.

In any forecast, investment and savings obviously have to match, and on table III of my prepared statement our economists have prepared a projection of the sources of funds which can be utilized to finance our private investment.

Gross private savings totalled $1.6 trillion in the past 12 years, and are projected to total almost $4.3 trillion between now and 1985.

That almost matches our private investment needs of $4.5 trillion, and we do not attach much significance to the difference because of the uncertainties inherent in any forecast.

But will these potential savings and investments actually be forthcoming? The answer is by no means certain.

Business faces very substantial financing problems in view of the relentless decline in return on investment, the weakness of equity markets, the already heavy burden of corporate debt, the rising costs of credit, and the destructive effects of inflation.

The basic problem is the long-term decline in return on investment.

We've all read the business page and know that company after company has announced record profits for 1973. But those proudly announced profits are actually overstated because of the hidden impact of inflation.

Analysis by our GE economists drives this point home with a vengeance.

In order to adjust for the actual cost of replacing plant and equipment that is worn out, depreciation allowances should have been 31 percent higher in 1973, reflecting the rise in plant and equipment prices. Correcting depreciation for replacement costs drops corporate profits to $39 billion, not the $50 billion actually reported by nonfinancial corporations for 1973.

Applying current tax rates, nonfinancial corporations' profits after taxes yield only 4.7 percent on total investment in equipment and facilities compared to 7.8 percent in 1965. And if phantom inventory profits are eliminated—based on a Commerce Department method—the 1973 return in investment falls to a dismal 3.6 percent! With interest rates above 8.5 percent—which amounts to a 4.1 percent after taxes—there clearly is little incentive to invest in expanded facilities.

With profit rates declining and depreciation rates inadequate to cover replacement, producers have had to increase their debt to finance modernization and growth.

Corporate debt has doubled since 1966, and is estimated to have passed a trillion dollars in 1973. The cost of managing that heavy burden of debt has become a major deterrent to further expansion.

The regulated industries, with their high capital needs, are especially hard hit. Average coverage of interest charges of electric utilities declined from about four times in 1964 to about two times in 1973, and is still headed downward.

The situation is further clouded by the depressed condition of the stock market which has reduced and in some instances may have eliminated opportunities for new equity investment.

Returning to the problem of depreciation rates, capital recovery allowances do not compensate for the confiscation of capital by inflation.

Accelerated depreciation rates, combined with investment credit, have narrowed the gap between United States and foreign capital recovery allowances. But our practices are still behind those of other industrialized nations.

Whereas the U.S. cost-recovery figure for the first 3 years stands at 55 percent, Canada is 100 percent; France, 90 percent; Italy, 65 percent; Japan, 64 percent; Sweden, 96 percent, and the United Kingdom, 100 percent. These countries recognize the realities of inflation.

So we have a picture of business going deeper into debt, faced with declining return on investment, unable to attract sufficient equity funding, unable to keep up with inflation in its depreciation charges, and subsisting on a thinner and thinner diet of retained earnings.

The problems are serious for all of industry, but especially for the regulated industries—electric and gas utilities, railroads, airlines, and communications companies—which have extraordinarily high needs for capital.

What can be done? We do have a number of policy recommendations that can be quickly summarized.

First, we need tax reform. Not the kind that regards every legitimate incentive to invest as a "loophole," but just the reverse—reforms that will encourage savings and investment.

Some specific recommendations are presented in my prepared statement, but basically we should have the good sense to stop penalizing those willing to risk their savings on business venture and the wisdom to help business earn the money needed to finance the future.

A second basic step is better control of government spending. It is sobering to realize that the share of gross national product taken by governments at all levels has risen from 10 percent in 1929 to 32 percent today, and is headed even higher.

A third basic step is to redirect the government spending that is necessary toward more productive ends—energy research and development, for example. Where the development of new technologies requires enormous sums and enormous risks, joint business-government ventures would be in order.

A fourth step is to assure an atmosphere that welcomes foreign investment capital—especially those petrodollars that have been flowing to the oil-producing nations.

The increased prices of petroleum have been an unpleasant form of enforced savings, and we should be sure that a goodly share of those funds comes back to work in the U.S. economy as a capital investment.

And finally, the adequate formation of real capital depends on profit prospects which are more attractive than long-term interest rates—just the reverse of recent trends.

You might consider the following ways to assure more adequate profits:

Develop more realistic statistics that measure corporate profits as adjusted for inflation. And we are not talking indexing, but, specifically include principles of "inflation accounting" in Federal statistics.

Steps should be taken to encourage an accelerated bow of equity capital into regulated industries, which are closely tied to the economy's infrastructure.

Specifically, you might consider guidelines to the State regulatory commissions which would permit these industries to raise prices simultaneously with inflationary cost increases. Such speedy price adjustments would provide the necessary earning for railroads, airlines, and utilities to assure adequate equity financing.

Government economic policies can also improve the profit climate for our hard-pressed basic industries, which must expand to meet the Nation's needs.

The price mechanism is the best means of bringing supply and demand into balance, and we should by all means avoid price controls when shortages finally push prices to a level where they encourage expansion.

In the past 3 years, we have had an expensive lesson in the futility of economic controls, and the mischief they cause by creating shortages and inequities throughout the system. The controls are gone, but the inflation they were intended to protect us against is with us still.

Mr. Chairman and members of the subcommittee, let me thank you again for giving me this opportunity to appear before you on this crucial question of the Nation's business capital requirements.

I shall be pleased to undertake to answer any questions you may have at the appropriate time.

Chairman BENTSEN. That is a very provocative and interesting testimony and contribution. I am going to withhold questions until we get through the entire panel, but you are going to get some questions on your statement.

[The prepared statement of Mr. Jones follows:]

PREPARED STATEMENT OF REGINALD H. JONES

BUSINESS CAPITAL REQUIREMENTS, 1974–85

My name is Reginald H. Jones. I am Chairman of the Board and Chief Executive Officer of the General Electric Company.

We are of course deeply honored by your invitation to be one of the first witnesses to offer testimony before the new Subcommittee on Economic Growth. May I begin by offering my sincerest compliments to you, Senator Bentsen, and your distinguished colleagues, for establishing this very important new instrument of national policy determination. My associates and I in General Electric heartily concur in the need for a long-range look at the economic needs of this country, the obstacles that may stand in the way, and the policy options that are open to us.

Let me comment first on the present environment for business capital investment, then move to a specific analysis of the nation's needs between now and 1985, and finally offer a few policy recommendations for the fulfillment of those needs.

ENVIRONMENT FOR CAPITAL INVESTMENT

Since the great depression of the Thirties, the United States has become an increasingly consumer-oriented economy. National policy has been directed primarily toward stimulating consumer demand, redistributing wealth, providing for social welfare, and increasing government services. Except for the periods of World War II and the Korean War, the *production* side of the equation and the *creation of capital* have had much lower priority.

While much good has flowed from policies favoring consumption over production, they have—over time—created an unbalanced situation which threatens continued national progress. We now have an economy whose tax structure and economic policies tend to discourage savings and capital investment. The popular attitude toward profits—the means by which business finances this country's future—is one of grudging acceptance and little understanding. This attitude was manifest in legislation during the Sixties which, for example, twice reduced personal tax rates while leaving the corporate tax unchanged.

Other industrialized countries, our competitors for world markets, have had more aggressive policies to encourage investment.

Here are the comparative rates of capital investment: gross private domestic investment as a percentage of GNP for 1973:

	Percent
United States	15.7
Germany	26.0
France	28.0
Japan	37.0

Now those figures are greatly affected by the differing institutional arrangements in these countries, and the American people probably would not, for example, want to emulate the Japanese way, with its emphasis on production for export and lower standards of living at home.

Nevertheless the United States has, for decades, been investing comparatively less of its wealth in capital for the future. And the consequences of underinvestment are catching up with us in those basic industries that undergird the national economy and its expensive social services. Shortages of fuel, raw materials, transport, and industrial commodities are forcing us to re-examine our national priorities. Unless we want to live with ever-worsening shortages, and all the unemployment and inflation and government controls that would result, we will have to establish policies that once more encourage savings and investment.

U.S. CAPITAL NEEDS 1974–85

First, let's take a realistic look at the capital needs and resources of the United States between now and 1985. Our economists at General Electric, utilizing a computerized econometric model of the economy into which they can feed varying assumptions, have made a year-by-year projection of the economy to the year 1985. This is not an idealistic projection, but one that recognizes how deeply inflation forces are imbedded in our total system at the present time. It anticipates that we will have an overall inflation rate of about 5% a year between now and 1985—high by historical standards, but less than the present overheated rate. It further assumes that, because of the long-term decline in industry's return on investment, the continuing pressures of inflation, and the demands of our social problems, we will not be able significantly to increase the proportion of Gross National Product devoted to capital investment, desirable though that may be.

With these conservative assumptions they project a 4% average annual growth in real GNP, or 9.1% growth in current dollars. That would yield a Gross National Product of $3.6 trillion in 1985, expressed in then-current (not constant) dollars.

Table I, attached, summarizes the capital investment needed to attain such an economy, as well as the historical record of the previous twelve years.

Look at the first line, which presents the grand totals of gross domestic private investment—a category that includes residential structures and inventory accumulation in addition to business fixed investment for structures and equipment.

In the period 1962 through 1973, a total of $1.5 trillion was invested. But in the coming twelve years, we'll have to raise and invest a staggering $4.5 trillion. And most of that will have to be raised by the business community.

The chart also presents the data in constant dollars. It's interesting to note that the total in current prices for the twelve years ahead, $4.5 trillion, is triple the total for the previous twelve years, $1.5 trillion, while in constant prices it is only about 69% higher. The ravaging effects of inflation are apparent and will greatly complicate our financing problems in the years ahead.

As I indicated, this projection does not expect the nation to devote much more of its GNP to investment. The $1.5 trillion invested in 1962–73 amounted to 15.0% of our GNP in that period, and the $4.5 trillion projected for the next twelve years will similarly amount to about 15.8% of GNP. In my personal opinion, we'll have to do better than that—perhaps 18% to 20%—if we want to lick inflation and maintain a socially acceptable level of unemployment. But I must also say that, given present national policies and tax structure, industry will be very hard put to raise its share of the conservatively projected $4.5 trillion—let alone any more than that.

Table I also shows the components of this projection of gross private domestic investment. Look at the fourth line, business fixed investment. This investment in plant and equipment, including the agribusiness, will have to be more than triple the level of the earlier period, $3.3 trillion versus $1.1 trillion in current dollars. The biggest increases occur in electric utilities and other energy industries, which will have to raise and invest about $770 billion, almost four times their investment in the past twelve years.

These projections include investment for a number of basic purposes:

For the necessary replacement and modernization of facilities and equipment which account for about half of the total.

For increasing industrial productivity not only to assure domestic growth and restrain inflation, but also to keep our country competitive in world markets.

For environmental pollution control, which does not add to productive capacity but has the commitment of the public and is necessary to maintain our quality of life.

For the development of alternative sources of energy. I should emphasize to the Committee that as we move from the easy to the more difficult and expensive sources of energy, the investment required is much more substantial and the risks are several orders greater than for more normal business investment.

Governments also make capital expenditures, and on Table II we present our projection of government investment spending, as against the historical record. Again look at the totals on the first line. In the period 1962 through 1973, federal, state, and local governments invested $357 billion in equipment and construction for education, highways, resources, and other public services. In the coming twelve years, that will increase to $779 billion in current dollars. In *constant* dollars our economists estimate that government investment may be only slightly higher than in the past twelve years, because of lower requirements for school and highway construction. In view of the constantly increasing dimensions of governmental activities, I think our economists may be overoptimistic about holding down government capital outlays. We also add, for your information, a projection of military requirements that may or may not be characterized as investment. The point of this Table is to remind the Committee that government capital expenditures, which are paid through taxes rather than voluntary investment, reduce the amount of money available to individuals and corporations for savings and investment. And to the degree that tht government does not raise enough taxes to cover its expenditures, it must create new money through the process of financing dficits. The result is inflation that undermines the value of *all* dollars available for investment.

SOURCES OF CAPITAL

The Committee is interested in knowing not only what the nation's capital needs will be, but also where the funds will come from. In rather general terms, I suppose we could say that *savings* represent the source of capital—or put another way, that portion of our output that is not consumed is available to our capital markets.

The prevailing Keynesian view since the Depression has been that in the United States, to quote John Kenneth Galbraith, "Not a shortage of savings but a recession resulting from the failure to use all available savings is the spectre that haunts all policy makers. For investment to exceed savings, at least in peacetime, is thought exceptional."

Well then these are exceptional times. My thesis is that this country has drifted into a situation where its investment needs may exceed its savings, and what we need are incentives and policies that will divert more funds from consumption to investment.

In any forecast, investment and savings have to match, and on Table III our economists have prepared a projection of the sources of funds which can be utilized to finance our private investment. In the interests of simplicity and because our needs are for *dollars* year-by-year, the data are presented in current or actual dollars.

Again look at the first line. Gross private savings totalled $1.6 trillion in the past twelve years, and are projected to total $4.3 trillion between now

Tax provisions that penalize savings and investment should be carved out of our tax laws. For example, the minimum tax on tax preference income has no logical application to corporations engaged in normal business activities. Although such corporations should be exempted from this punitive levy, Congress, in any event, should not yield to the pressures of those who would deny to corporations the right to offset income taxes actually paid against preference income.

Further, existing capital gains rates for individuals and corporations should be reduced to the levels effective prior to the 1969 Act. This would include deletion of capital gains from the list of tax preference items. Denomination of a capital gain as a tax preference is in itself anomalous.

Finally, under this heading of tax reform, I would like to point out that some European countries with very high rates of capital formation—for example France and Germany—have found ways of reducing the pernicious effect of double taxation of profits, first on the corporate level, and then on the individual when he receives a dividend.

A second basic step is better control of government spending. It is sobering to realize that the share of gross national product taken by governments at all levels has risen from 10% in 1929 to 32% today, and is headed even higher. Taxes reduce the amount available for private investment, the bedrock on which our economy rests.

A third basic step is to redirect the government spending that is necessary toward more productive ends—research and development, for example, that would open up new sources of fuel and more efficient energy conversion systems. Where the development of new technologies requires enormous sums and enormous risks, joint business-government ventures would be in order.

A fourth step is to assure an atmosphere that *welcomes* foreign investment capital—especially those petro-dollars that have been flowing to the oil-producing nations. The increased prices of petroleum have been an unpleasant form of forced savings, and we should be sure that a good share of those funds comes back to work in the U.S. economy as capital investment.

And finally, the adequate formation of real capital depends on profit prospects which are more attractive than long-term interest rates—just the reverse of recent trends. Specifically, you might consider the following ways to assure more adequate profits:

Develop more realistic statistics that measure corporate profits as adjusted for inflation. Specifically, include principles of "inflation accounting" in Federal statistics—for example depreciation charges that are based on replacement costs of worn-out equipment. The Financial Accounting Standards Board should be supported in its efforts to establish new rules for reporting corporate earnings to share owners which, in effect, adopt similar standards of inflation accounting. The FASB might utilize Federal statistics to develop standard indexes for use by industry in such reporting.

Steps should be taken to encourage an accelerated flow of equity capital into regulated industries which are closely tied to the economy's infrastructure. Specifically, you might consider guidelines to the state regulatory commissions which would permit these industries to raise prices simultaneously with inflationary cost increases. Such speedy price adjustments would provide the necessary earnings for railroads, airlines, and utilities to assure adequate equity financing.

Governmental economic policies can also improve the profit climate for our hard-pressed basic industries, which must expand to meet the nation's needs. The price mechanism is the best means of bringing supply and demand into balance, and we should by all means avoid price controls when shortages finally push prices to a level where they encourage expansion. In the past three years we have had an expensive lesson in the futility of economic controls, and the mischief they cause by creating shortages and inequities throughout the system. The controls are gone, but the inflation they were intended to protect us against is with us still.

Mr. Chairman and members of the Subcommittee, let me thank you again for giving me this opportunity to appear before you on the crucial question of the nation's business capital requirements. I shall be pleased to undertake to answer any questions you may have at the appropriate time.

TABLE I.—PROJECTION—GROSS PRIVATE DOMESTIC INVESTMENT

[In billions of dollars]

	Cumulative 1962–73		1973	Cumulative 1974–85		1985
	Current	1974	current	Current	1974	current
Total	1,546	2,005	202	4,492	3,396	587
Of which:						
Residential	406	562	58	1,132	802	145
Business inventories	90	118	8	110	88	12
Business fixed investment	1,050	1,325	136	3,250	2,506	430
Without business fixed investment:						
Agriculture	71	90	10	188	147	21
Nonagricultural plant and equipment spending	802	1,012	100	2,508	1,935	335
Of which:						
Electric utilities	98	120	16	451	346	64
Other energy industries	104	132	11	321	247	42
Transportation	61	79	6	170	130	23
Basic process	104	132	13	350	274	47
Other manufacturing	151	204	20	488	371	64
Other services	273	345	34	729	565	95
Noncorporate, cultural services, educational and nonprofit organizations	177	223	26	554	424	74

TABLE II.—PROJECTION—GOVERNMENT INVESTMENT SPENDING

[In billions of dollars]

	Cumulative 1962–73		1973	Cumulative 1974–85		1985
	Current	1974	current	Current	1974	current
Total—Nonmilitary	357	518	39	779	573	94
Equipment	70	84	9	195	161	26
Construction	287	434	30	584	412	68
Construction detail:	62	98	7	104	71	12
Other public services	49	78	6	148	102	19
Highways	105	156	11	192	140	21
Resources, environment, renewal, other	71	102	6	140	99	16
Total	287	434	30	584	412	68
(Addendum: Military construction, RDTE and procurement not included above)	308	506	25	407	293	38

TABLE III.—PROJECTION—PRIVATE SAVINGS

[In billions of dollars]

	Cumulative 1962–73	1973	Cumulative 1974–85	1985
Gross private savings	1,609	190	4,279	560
Personal Savings	468	55	1,241	159
Corporate retained earnings less inventory profits	240	25	660	88
Allowance for depreciation—corporate and noncorporate sectors	901	110	2,377	313

Chairman BENTSEN. Our next witness is Mayor Norman Y. Mineta, the mayor of San Jose, Calif. Mayor, we are delighted to have you with us this morning. You may proceed.

STATEMENT OF HON. NORMAN Y. MINETA, MAYOR, SAN JOSE, CALIF.

Mayor MINETA. Thank you very much, Mr. Chairman.

I am Norman Y. Mineta, mayor of San Jose, Calif.

I am pleased to be here representing the U.S. Conference of Mayors and the National League of Cities to discuss the vital issues of the urban condition and the need for a national urban growth policy.

My presence here as a mayor is indeed significant. Significant in that it highlights the growing recognition and understanding by many local officials of the impact a piecemeal set of Federal policy decisions are having, and have been having on the growth and shape of this country.

As local officials, we have been the recipients of the product produced by a whole range of national policies, all of which are intimately related to the conditions of the cities.

It is our contention that these Federal laws and policies which have been enacted in a piecemeal and at times haphazard fashion, have resulted in an advertent or hidden national urban growth policy.

As local leaders, we are now being able to equate and document the relationship between these national policies and local conditions.

Local officials now understand the consequential significance of the limitation of the range of choices available to them—a severe narrowing of options and decisions which are made not in their own localities but are products of policies promulgated mainly in Washington.

Due to the absence of a coordinated set of national policies with a common direction, these local officials, no matter their expertise and available resources, are severely limited in what they can do to reshape and control the shape and quality of their cities.

The Housing and Urban Development Act of 1970 requires the President to prepare a biennial report on national urban growth.

The first such report prepared by the President's Domestic Council Committee on National Growth, issued in 1972, took the position that it is neither desirable nor possible to formulate a national growth policy. This report missed an important point—the fact that a de facto national growth policy does exist.

We local leaders await the second report, due several months ago, to see if the administration continues to ignore the fact that such a policy exists, the effects of which are visible no matter where one looks.

The loss of economic and social vitality of the central city with the accompanying deterioration and decay of facilities and services is evident to us all.

The accompanying sprawl of houses and industrial plants ringing the core continues. Huge amounts of public expenditures are required to provide and maintain the underutilization urban system of the core city. At the same time, duplicate services must be provided at the edges. We are confronted with costly decay at the center, and costly expansion at the fringe.

Some would say that the "deterioration, abandonment, and sprawl" cycle is a consequence of the normal operations of the private economy.

I would argue that the private market has not been operating normally. Instead, it has been responding to a series of active but separate and uncoordinated interventions by the Federal Government which has had the dominant influence on how this Nation has grown.

The total of these policy elements is a powerful national urban policy. Federal procurement activities is one of the elements of our current inadvertent national urban policy.

Federal procurement activities alone, directly or indirectly, account for approximately 17 percent of the GNP. The patterns of procurement can create an economic boom situation in one part of the country and undermine community viability in another.

Now add to this the additional elements of mortgage insurance policies, Federal tax policy and the federally financed highway system and you have a national urban policy which sets up economic pressures working through politics to create public policy.

A major element of this de facto policy has been the powerful mortgage insurance programs of FHA and VA.

These programs facilitated the departure of the middle class from the cities resulting in the erosion of central cities' tax bases and the creation of suburban sprawl.

Now, I would not argue that mortgage insurance singlehandedly caused the exodus from the cities. Many families, because of their desire to own their own homes with some green space, would have moved outward after World War II. The motivation existed and so did the money because of the postwar prosperity.

But what happened in addition was, that Federal mortgage policy under FHA and VA supported this movement by facilitating individual moves, ignoring any consequences of the overall movement aside from the ability of the average citizen—the average white citizen—to get his little house in the suburbs.

FHA and VA programs effected such movement by revolutionizing the home financing. Mortgage insurance and loan guarantees encouraged financial intermediaries to lend more and for longer terms. Smaller downpayments and longer repayment periods on Government insured and guaranteed loans as well as on conventional FHA mortgages resulted.

Many families, because of this loosening up of terms, could now buy when before they could not. Not only were families beneficiaries —large developers of housing subdivisions were recipients of FHA-facilitated insured loans.

Another key element is our de facto national policy and a major contributor to the deterioration, abandonment, and sprawl cycle is the Federal tax policy. Taxes are far from neutral in their effect on urban growth and development.

Homeowners are subsidized by the Federal Government through the mortgage interest and property tax deductions claimed on their income tax returns. This subsidy is not available to renters, many of whom are low-income families, even though their landlords usually charge them this mortgage interest and property tax in the rent—charges that the landlord can deduct from his taxable income. In 1971 alone, this homeowner subsidy amounted to $5.7 billion.

Because such personal income tax deductions are a potent incentive for buying homes, it also results in an indirect subsidy to builders and realtors who are able to build and sell more houses at higher prices than would be possible if the deductions were not permitted.

Undeveloped areas with lower land costs have been the sites where this increased activity has occurred. Their personal tax benefit from a high mortgage teamed with FHA and VA insurance have provided a substantial financial incentive for suburban development.

The cost of providing these incentives however have been generally borne by everyone. I am referring to the fact that this random process of a suburban land development has required expanded infrastructure support.

The out-reach of sewer and water lines, highways and utility lines has generally been a costly price which the entire community has had to pay, through higher property, sales and other taxes, and higher utility rates. This homeowner subsidy is also a disincentive to rehabilitation and continued use of an older no mortgage home, thus facilitating deterioration and abandonment.

Let me skip, Mr. Chairman, if I might, through the prepared statement to the paragraph beginning:

If you add FHA and VA insurance, and Federal tax policy to such community shaping activities as Federal procurement practices and the federally financed highway system, you can clearly see, gentlemen, just how this country has been shaped and molded by our current powerful inadvertent de facto national urban policy.

A conclusion I believe we can draw from this is that we now recognize that all of the revenue sharing and categorical grants in aid in the world will not save America's cities as long as our inadvertent national urban policy remains the same.

I do not disregard, of course, the immediate need for more Federal money going into many of our cities. But the implication of the HUD-FHA and Federal income tax examples I have given is that the real impact of the Federal money that is being spent is significantly less than the Federal leverage on the spending of private money—the incentives created by public policy that influence private decisions.

The point is that Calvin Coolidge's statement that, "The business of America is business" still holds true. The really big fiscal impacts on urban and other social conditions in the United States today are the impacts of private spending.

To illustrate this point, we did a little back of the envelope calculation that showed that the total HUD expenditures in the San Jose metropolitan area in a recent year were less than the capital gains tax break on the appreciation of land values in the area in a similar year.

This figure does not measure the relative impact of such expenditures—it is difficult to match direct expenditure against leverage—

but the point is that the break of only one of many tax loopholes in the "real estate shelter" was, on an initial basis, greater than the conscious attempt of the Federal Government to affect housing and community development.

I do not want you to infer from my comments thus far that I am against the programs which make up the elements of our current national urban policy. The contrary is true.

But I am suggesting that if Federal programs are to be really effective and equitable, they must be so designed to address not only their primary objective, but they must also accommodate the often-times powerful effects they have on the economy, the environment, and society.

In other words we, as a nation, need an overall framework which provides a common direction within which our urban policies and programs can operate.

Because we do not now have such a framework, constant demands are made upon the Federal Government for programs and monies to correct situations caused by our inadvertent policy.

The organizations I represent here today function within such a framework so that all their policy elements have the general theme of "urban conservation." Their goal is to eventually formulate a national urban policy statement, one calculated to meet the problems I have mentioned today.

The premise of "urban conservation" is that the resources of the urban world are limited, not infinitely renewable and are valuable in themselves. Currently, these resources are being misused and underused.

"Urban Conservation" has a broad meaning which includes land, the environment, and energy. It includes: Housing, highways and sewer systems and even more broadly all of that which is distinctly urban—the very complex sets of relationships or systems that make the creators and preservers of civilization—the economic system, the social system, the Government system.

It is this set of resources which comes together to make, as Mr. Russell Train recently noted, "the city * * * the greatest conservation device ever invented by man." It gives people the access to opportunities and activities without having to expend large amounts of energy, time or money to get them.

The utility of the "urban conservation" approach is that it provides a general policy orientation.

A question should be asked, at least in principle, of each government program or policy—"Does this existing or proposed government action, by itself or in combination with others, encourage the best and fullest use of existing urban resources?"

Mr. Chairman, at this point let me submit the rest of my prepared statement as a part of the record.

And in conclusion, let me point out that the array of policies and programs which now combine to form an inadvertent, destructive, but none the less de factor national urban policy should be reconstructed to constitute an international policy of urban conservation. Failure to initiate such a restructuring means that public and private investment will continue to be wasted on underutilization and misused urban systems.

Moreover, the dependence of policymakers upon measures of the quality of life should be lessened and supplemented by improved techniques for assessing the quality of life. For, it is this goal toward which all elements of a national urban policy should be directed.

And, finally, the effects of managing the national economy can not be averaged out across the Nation. Intervention on purely economic ground has more than economic effects and has impact on particular places. A critical examination of possible and probable impacts that economic programs will have on urbanization patterns is essential.

Thank you, Mr. Chairman.

Chairman BENTSEN. Thank you, Mayor Mineta. Let me say that so far the panel does not speak with one mind. It seems to me that at least on some of the tax considerations, there will be a difference as to what social objectives are and should be.

Without objection, your prepared statement will be included in the record at this point, Mayor Mineta.

[The prepared statement of Mayor Mineta follows:]

PREPARED STATEMENT OF HON. NORMAN Y. MINETA

Mr. Chairman and members of the Committee, I am Norman Y. Mineta, Mayor of San Jose, California.

I am pleased to be here representing the United States Conference of Mayors and the National League of Cities to discuss the vital issues of the urban condition and the need for a national urban growth policy.

My presence here as a mayor is indeed significant. Significant in that it highlights the growing recognition and understanding by many local officials of the impact a piecemeal set of federal policy decisions are having, and have been having on the growth and shape of this country.

As local officials, we have been the recipients of the product produced by a whole range of national policies, all of which are intimately related to conditions of the cities.

It is our contention that these federal laws and policies which have been enacted in a piecemeal and at times haphazard fashion, have resulted in an inadvertent or "hidden" national urban growth policy.

As local leaders we are now being able to equate and document the relationship between these national policies and local conditions. Local officials now understand the consequential significance of the limitation of the range of choices available to them . . . a severe narrowing of options and decisions which are made not in their own localities but are products of policies promulgated mainly in Washington. Due to the absence of a coordinated set of national policies with a common direction, these local officials, no matter their expertise and available resources, are severaly limited in what they can do to *reshape* and *control* the shape and quality of their cities.

The Housing and Urban Development Act of 1970 requires the President to prepare a biennial Report on National Urban Growth. The first such report prepared by the President's Domestic Council Committee on National Growth, issued in 1972, took the position that it is neither desirable nor possible to formulate a national growth policy. This report missed an important point—the fact that a *de facto* national growth policy does exist. We local leaders await the second report, due several months ago, to see if the Administration continues to ignore the fact that such a policy exists, the effects of which are visible no matter where one looks. The loss of economic and social vitality of the central city with the accompanying deterioration and decay of facilities and services is evident to us all. The accompanying sprawl of houses and industrial plants ringing the core continues. Huge amounts of public expenditures are required to provide and maintain the underutilized urban system of the core city. At the same time, duplicate services must be provided at the edges. We are confronted with costly decay at the center, and costly expansion on the fringe.

Some would say that the "deterioration, abandonment, and sprawl" cycle is a consequence of the normal operations of the private economy. I would argue that the private market has not been operating "normally." Instead it has been responding to a series of active but separate and interventions by the federal government which has had the dominant influence on how this nation has grown. The total of these policy elements is a powerful national urban policy. Federal procurement activities is one of the elements of our current inadvertent national urban policy. Federal procurement activities alone directly or indirectly account for approximately 17 percent of the GNP. The patterns of procurement can create an economic boom situation in one part of the country and undermine community viability in another. Now add to this the additional elements of mortgage insurance policies, federal tax policy and the federally-financed highway system and you have a national urban policy which sets up economic pressures working through politics to create public policy.

A major element of this *de facto* policy has been the powerful mortgage insurance programs of FHA and VA. These programs facilitated the departure of the middle class from the cities resulting in the erosion of central cities' tax bases and the creation of suburban sprawl. Now, I would not argue that mortgage insurance single-handedly "caused" the exodus from the cities. Many families, because of their desire to own their own home with some green space, would have moved outward after the Second World War. The motivation existed and so did the money because of the postwar prosperity. But what happened in addition, was that federal mortgage policy under FHA and VA supported this movement by facilitating individual moves, ignoring any consequences of the overall movement aside from the ability of the average citizen—the average white citizen—to get his little house in the suburbs. FHA and VA programs effected such movement by revolutionizing home financing. Mortgage insurance and loan guarantees encouraged financial intermediaries to lend more and for longer terms. Smaller downpayments and longer repayment periods on government insured and guaranteed loans as well as on conventional FHA mortgages resulted. Many families, because of this "loosening up" of terms, could now buy when before they could not. Not only were families beneficiaries—large developers of housing subdivisions were recipients of FHA-facilitated insured loans.

To the extent that there was a policy beyond the simple facilitation of the individual moves, the policy was one which we now recognize as highly perverse. In the time period beginning in the 1930's and not ending until five years after the Second World War—the period that shaped today's suburban America—the explicit policy of FHA and VA was segregation—restrictive covenants and so-called homegeneous neighborhoods. After 1950, the explicit policy changed, but as we know, public promotion of segregation held on implicitly much longer—up to today to some degree.

Replacing this explicit segregation was the FHA practice of "red-lining" entire areas of cities, making it virtually impossible for residents to secure mortgages on existing urban housing. This, then, was an additional force "pushing" people out and permitting decay to set in.

Another key element in our *de facto* national policy and a major contributor to the "deterioration, abandonment, and Sprawl" cycle is the federal tax policy. Taxes are far from neutral in their effect on urban growth and development. Homeowners are subsidized by the federal government through the mortgage interest and property tax deductions claimed on their income tax returns. This subsidy is not available to renters, many of whom are low-income families, even though their landlords usually charge them this mortgage interest and property tax in the rent—charges that the landlord can deduct from his taxable income. In 1971 alone, this homeowner subsidy amounted to $5.7 billion. Because such personal income tax deductions are a potent incentive for buying homes, it also results in an indirect subsidy to builders and realtors who are able to build and sell more houses at higher prices than would be possible if the deductions were not permitted. Undeveloped areas with lower land costs have been the sites where this increased activity has occurred. The personal tax benefit from a high mortgage teamed with FHA and VA insurance have provided a substantial financial incentive for suburban development.

The cost of providing these incentives however have been generally borne by everyone. I am referring to the fact that this random process of suburban land development has required expanded infrastructure support. The out-reach of sewer and water lines, highways and utility lines has generally been a costly price which the entire community has had to pay, through higher property, sales and other taxes, and higher utility rates. This homeowner subsidy is also a disincentive to rehabilitation and continued use of an older "no mortgage" home thus facilitating deterioration and abandonment.

Just as the mortgage interest and property tax deductions to home owners encourage sprawl, other tax policies encourage decay. Much greater tax breaks are available to those with large incomes if they invest in a commercial venture such as apartment buildings or office buildings. Such investors can deduct from their taxable income a substantial amount annually to compensate them for the supposed value of the building. These investments, then, become "tax shelters" for the moneyed investors.

Gains realized, moreover, on the resale of such investment property are taxable at reduced capital gains tax rates. This is half the ordinary rate for individuals.

Any losses suffered in the resale are fully deductible against income which is subject to regular tax rates. A poorly maintained slum building, as long as it is occupied by tenants paying some rent, can be as valuable because of sale, mortgage or tax depreciation as standard and safe housing.

The federal income tax structure has proved to be more effective in encouraging new construction than improvements or remodelling of existing housing, thus encouraging substandard maintenance in the "declining" housing areas. And, up to the present, it has been a factor encouraging low-density, that is sprawl, rather than high-density residential development.

If you add FHA and VA insurance, an federal tax policy to such community shaping activities as federal procurement practices and the federally-financed highway system, you can clearly see, gentlemen, just how this country has been shaped and molded by our current powerful inadvertent *de factor* national urban policy.

A conclusion I believe we can draw from this is that we now recognize that all of the revenue sharing and categorical grants in aid in the world will not save America's cities as long as our inadvertent national urban policy remains the same. I do not disregard, of course, the immediate need for more federal money going into many of our cities. But the implication of the HUD-FHA and federal income tax examples I have given is that the real impact of the federal money that is being spent is significantly less than the federal leverage on the spending of private money—the incentives created by public policy that influence private decisions.

The point is that Calvin Coolidge's statement that "The business of America is business" still holds true. The really big fiscal impacts on urban and other social conditions in the United States today are the impacts of private spending.

To illustrate this point, we did a little back of the envelope calculation that showed that the total HUD expenditures in the San Jose metropolitan area in a recent year were less than the capital gains tax break on the appreciation of land values in the area in a similar year. This figure does not measure the relative impact of such expenditures—it is difficult to match direct expenditure against leverage—but the point is that the break of only one of many tax loopholes in the "real estate shelter" was, on an initial basis, greater than the conscious attempt of the federal government to affect housing and community development.

I do not want you to infer from my comments thus far that I am against the programs which make up the elements of our current national urban policy. The contrary is true. But what I am suggesting is that if federal programs are to really be effective and equitable, they must be so designed to address not only their primary objective, but they must also accommodate the often-times powerful effects they have on the economy, the environment, and society. *In other words, we as a nation, need an overall framework which provides a common direction within which our urban policies and programs can operate.*

Because we do not now have such a framework, constant demands are made upon the federal government for programs and monies to correct situations caused by our inadvertent policy.

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The utility of the "urban conservation" approach is that it provides a general pilicy orientation. A question should be asked, at least in principle, of each government program or policy—*Does this existing or proposed government action, by itself or in combination with others, encourage the best and fullest use of existing urban resources?*

This is a subject too complex and serious for sloganeering *but* I would contrast this "urban conservation" approach to policy with our current approach which amounts to a policy of "throw-away" cities.

It goes without saying that a policy should have a goal. Currently, many individually worthy programs do not coalesce naturally and *will* not because there is no goal for a national urban policy. "Urban conservation" needs something beyond it to justify it. Let me recommend quality of life to fill that role. It takes a little nerve to offer as a goal a phrase which is fast becoming a cliche. But "quality of life" need not and should not become just another phrase. It can have more than rhetorical value in public conversations.

First and most generally, it orients policy thinking toward judging success by the real outputs—the consequence for people—rather than the inputs—the money, the time, and the energy—which may be well-intended but never delivered. For too long, we concerned ourselves with the amounts of money we spent for new schools, new hospitals, and bigger and better public safety equipment. It is time to assess our efforts by how well our students are being educated, whether or not the patient's health has improved, and how safe our citizens are in their homes and in their neighborhoods.

Second, it offer an alternative to the narrow, *quantity* of life approach. The capacity to assess the economic state of the nation has grown and developed so that today there are many, more or less dependable tools available for the policy-maker. But, a serious, systematic effort to assess the *quality* of life has only begun. This effort most recently represented by the Office of Management and Budget's social indicator report, should be encouraged, until a capacity for *quality* assessments exists which can complement that for quantity.

Third, and most specifically, within a quality of life orientation, standards for evaluating specific programs can be and are being developed such as criteria for judging the effectiveness of housing programs and garbage pickup, and more. These standards move disputes over these matters from the area of conjecture and rhetoric to the arena of evidence.

What I have said about "urban conservation" and the quality of life should not be interpreted as an anti-growth statement. It has been said that Americans naturally split into two groups is disputes over big questions. In the beginning, the Federalists and the anti-Federalists, today Republicans and Democrats or conservationists and anti-conservationists.

Or, in this case, when the question is "growth?" the answer is often either "yes" or "no."

But, the question is not "growth." Permit me to digress. Even at the currently unprecedented low birth rate, the population of this country will be about 50 million greater in the year 2,000 than it is now.

Where will these people live? They will live in urban areas. 70 percent do now. More people and a greater percentage of people will in the future. One estimate has the urban regions occupying 1½ times as much land in the year 2,000 as they did in 1960. More people, more land, more houses and more jobs.

The question, then, is not growth. The answer is growth. The questions are: How much? What kind? Where? In what proportions? The great social questions are: Who profits and who loses? And the political question is: Who decides?

At the present time, local governments can decide very little in this regard They are compelled to make decisions on growth in situations largely not of their making. The list is growing—Ramapo, Petaluma, Boulder. Each of these cities,

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[1] Remarks by the Honorable Russell E. Train, Administrator, Environmental Protection Agency, before Town Hall of California, December 18, 1973.

when faced with the issue of growth and all that would accompany increases or expansions of their communities, have unilaterally moved to deal with it. These and others are examples of local governments trying to cope with situations that are national in extent and cause. The efforts are admirable. The strength of the federal system is exhibited in its capacity to contain a great variety of experiments in growth policy. But, local governments are sure losers if the federal government does not produce and follow a national growth strategy.

Federalism, new or old, means a sharing of governmental responsibilities. A national growth policy cannot be simply an addition of local policies. It must be a combination of national direction and local specification. The national direction does not now exist, and as a consequence, most of the local efforts can only be holding actions.

The economy is the engine of this society. But, the passengers in the car are in danger if it is raced or idled without regard for their safety, comfort or destination. Or, if you will bear with another figure of speech, the economy is like a locomotive. It drags the train and without it none of the cars will reach the station. But if its pace is erratic, if it stops or starts abruptly, or races around corners, the consequences multiply as they pass back through the train.

In the cities, we often feel as though we are in the back seat of that car or in the caboose of the train.

A national rate of unemployment of 4.5 or 5 percent may be declared acceptable. But that national rate includes cities where the figure is 10, 12 or 15 percent, and those cities include areas where it may be 30 percent and those areas may include groups within which the rate is 60 percent. That situation is not acceptable, but is beyond the control of local governments.

Viewing the national economy in the aggregate and treating it as a single system leads to the view that the results are equally distributed. In connection with the recent budget, "budget-busting" was discussed as a possibility if the economy needed some inspiration. Increased defense spending was the most often mentioned possibility. Regardless of the merits of the case, it is clear that the intention was simply to affect the economy by spending public money and that the specific character of the expenditures and their side-effects would be quite secondary considerations if considered at all. This is at a time when $18 million of sewage treatment money is still impounded. And there can be no doubt that when and if this money is spent, little or no thought will be given to its impact in the locales where it is spent. There will be no thought given to patterns, rates and varieties of growth because there is no policy on growth.

Gentlemen, I have ranged across a number of issues here today. Let me pull together what I have said into several statements.

The array of policies and programs which now combine to form an inadvertent, destructive, but none the less de facto national urban policy should be restructured to constitute an intentional policy of urban conservation. Failure to initiate such a restructuring means that public and private investment will continue to be wasted on under-utilized and mis-used urban systems.

Moreover, the dependence of policy-makers upon measures of the quantity of life should be lessened and supplemented by improved techniques for assessing the quality of life. For, it is this goal toward which all elements of a national urban policy should be directed.

And, finally, the effects of managing the national economy can not be averaged out across the nation. Intervention on purely economic grounds has more than economic effects and has impact in particular places. A critical examination of possible and probable impacts that economic programs will have on urbanization patterns is essential.

Chairman BENTSEN. Our next witness will be Mr. Arthur Ross, executive vice president and managing director of the Central National Corp. Mr. Ross, please proceed.

STATEMENT OF ARTHUR ROSS, EXECUTIVE VICE PRESIDENT AND MANAGING DIRECTOR, CENTRAL NATIONAL CORP.

Mr. ROSS. Thank you. My name is Arthur Ross and I am the executive vice president and managing director of the Central National Corp.

Chairman BENTSEN. I might say that Senator Javits had hoped to be here to introduce you much more properly and extensively than I have done.

Mr. ROSS. Thank you very much. My firm is a private investment firm based in New York, and also engaged in the international distribution of pulp and paper products.

It is a privilege for me to appear before this committee today. As one involved in finance and industry, I would like to present my thoughts on the Nation's shortage of capital and the serious crisis it will create unless specific measures are undertaken. I wish to thank the committee for the opportunity to do so.

IMPENDING CRISIS OF CAPITAL AVAILABILITY

The capital shortage, like the oil shortage, has been building up for some time. The present crunch has its roots in the vast capital wastage of the Vietnam war and the failure to reduce domestic spending during this period. The erosion of our capital base started there, and during this period were sown the seeds of inflation.

The float of the dollar on August 15, 1971, with its inflationary impact, the 1972 failure of the Russian and Chinese wheat crops and the Soviet purchases of grains in our markets, the bizarre but tragic disappearance of anchovies—an important protein source in cattle feed—off the Puruvian coast, the further devaluation of the dollar in February 1973, and finally the Mideast War and the forward in energy costs, resulted in 1973 in a startling rise of 13.7 percent in the wholesale price index compared to 4.5 percent in 1972.

It is now expected that the increase for 1974 will exceed that of last year. I expect a significant subsidence in the inflationary rate next year, but it will rest at a level substantially higher than heretofore. The battle to hold inflation to the 2 to 3 percent level of the decade of the 1950's and 1960's has no doubt been lost.

It is now urgently necessary for our capital base to be increased to make possible the replacement of existing facilities at the new cost levels as well as plant additions to quench the inflation. The challenge is to repair and improve our capital markets so that once again they can carry out their proper functions and make those goals realistic.

THE ROLE OF THE CORPORATION

The corporation—that ingenious of English jurisprudence—with its immortality, creativity, and efficiency, has provided us with the means to satisfy consumer needs on an effective scale unequalled by those societies that have adopted a different economic system.

Companies, in order to survive, let alone progress, are driven by powerful forces outside their own control, to spend vast sums to maintain their property accounts, to remain competitive, to meet ever-rising labor rates, and finally to finance increasing receivables and inventories that sponge up inflated dollars. This desperate struggle for survival, to which a few of us are witnesses, is unfortunately unseen and unknown by the general public.

It is obvious that a few companies have been callously indifferent to social objectives in their overzealous pursuit of profit, and others have violated proper business and legal codes. Guilt by association, however, has become rampant, but this is no time for panic as regards our free-enterprise system.

The Nation's system of capital formation via savings institutions. life insurance companies, private pension plans, and the policy of retained earnings on the part of corporate society, is the capstone of our free-enterprise system and the envy of other nations—particularly those that live under other economic systems. It is they who are most anxious to tap this country's resources.

Corporate profits have become bad words, despite the fact that it is through retained profits, thriftly reinvested in the business by stockholders rather than taken out in dividends, that corporations largely finance their needs. In addition, for every dollar retained. our companies may borrow as much again for plant, equipment, and working capital needs.

There is the strong tendency to think that profits are something a business does not really need, or at least something that can be reduced without serious consequences. This is irresponsible because these earnings are the essential elements in capital formation.

WHAT CAN BE DONE ABOUT THESE PROBLEMS

One, corporate capital recovery allowances should be increased.

At the present time, the U.S. has the lowest ratio of investment in productive facilities in relation to CNP of any major industrialized country: Our ratio is 10 percent, while Japan's, for example, is 20 percent. No wonder capital investments have been declining during the last 10 years from 52,000 to 42,000 per worker.

The United States also has the highest percentage of obsolete production facilities of any of the leading industrial nations, and a relatively low capital recovery tax allowance, as shown in the table attached to this statement.

[The attached table follows:]

AGGREGATE COST RECOVERY ALLOWANCES

[Percentage of cost of assets]

	Representative cost recovery periods (years)	First taxable year	First 3 taxable years	First 7 taxable years
Belgium	10	20.0	48.8	89.0
Canada	2	50.0	100.0	100.0
France	8	31.3	67.5	94.9
Italy	6	20.0	65.0	100.0
Japan	11	34.5	56.9	81.4
Luxembourg	10	28.0	60.4	94.4
Netherlands	5	10.0	50.0	100.0
Sweden	5	60.0	95.7	130.0
Switzerland	8	12.5	50.8	84.4
United Kingdom	1	100.0	100.0	100.0
West Germany	9	16.7	49.6	88.8
United States:				
1962 law	13	21.7	47.9	80.1
1969 law	13	7.7	33.9	66.1
1971 law	10½	23.5	54.7	88.5

Source: Price Waterhouse & Co.

Mr. Ross. Note from that table that Sweden, which is supposed to be socialistic and therefore less supportive of business enterprises, is among the highest. As a matter of fact, Sweden permits a writeoff of 130 percent in 7 years, thus providing an added incentive to corporate investment.

Two, savers, investors, and corporations should receive some inflation protection.

We have come to accept cost-of-living pay increases in contracts for American workers and are moving in that direction for all fixed-income benefits. In other words, we are coming to accept inflation as a reality. But surely this concept and these kinds of benefits to some degree ought to be extended to savers and investors and to industries as well. I do not recommend, as has a well-known economist recently, that we follow Brazil's extensive pattern of price-level indexing.

Brazil's history and political system is not ours. For their program to be effective here, no doubt we would have to give up many of our democratic concepts and freedoms. Also, Brazil does not have our major role in world economic affairs Any steps that we take in this direction must be studied in terms of the impact they would have on our trading partners and the world at large.

Some protection against inflation, however, must be instituted for those who still hold to the characterful concepts of thrift. Paul McCracken has suggested that the personal exemptions and bracket limits of the personal income tax could be adjusted automatically for changes in the consumer price index, and the Government could obligate itself to pay holders to savings bonds a contractual "real" rate.

Three, regulatory agencies should be more supportive.

Our Federal regulatory agencies, in full view of Congress, have undermined, and some areas destroyed, vast segments of our corporate society because of their inability to understand the role of profits in the maintenance and development of the economic areas under their control. In particular:

The ICC, with its unbelievably protracted hearings, has contributed greatly to placing much of our railroad industry into receivership: Contemplate, if you will, the absurdity of 12 years of hearings on the Rock Island merger. The railroad industry presently earns 3 percent on its capital and so, of course, is cut off from any new equity money.

The CAB, in its obsession with enforced duplication of facilities and low fares, has brought the airlines to the verge of bankruptcy. The debt of the five largest U.S. airlines is now $4 billion, almost three times what it was 10 years ago. Five of our eight major trunk-line carriers are unable to pay dividends, and the market value of seven of these eight carriers is only 79 percent of the original book values.

Four, the tax structure should be modified.

It has been unfair to subject corporate earning to taxes at three different levels—the 48 percent corporate earnings tax, the tax on dividends to recipients and, finally, the capital gains tax.

Canada and Britian permit companies to deduct from taxes what they pay out in dividends. This permits companies to distribute larger dividends, make stock investments more attractive, and still retain earnings for capital expansion. Why should not the United States adopt similar policies?

The proposals of our chairman, Senator Bentsen, and former Secretary of the Treasury Fowler, to reduce capital gains taxes and holding periods deserve careful congressional attention.

I do believe, though, that these proposals are inadequate, and that the schedule of reductions is too protracted. The patient must not die on the operating table. As long as an ultimate redress in these taxes is the goal, I strongly urge that the problem be fully rectified at the outset. Saving must be made more attractive then spending.

Five, structural changes are needed in our securities markets.

Congress has before it important legislation dealing with structural changes in the securities markets.

I find Senator Bentsen's proposals most attractive. I think they are essential to breaking up the excesive concentration of institutional stock ownership in a relatively few giant corporations.

I would strongly oppose attempts to do away with over-the-counter and third-market transactions on the grounds that they are efficient and necessary for competition.

I believe the commission price structure needs drastic overhauling. Institutions pay, perhaps, four-tenths of 1 percent commissions for the purchase and sale of shares—similar transactions by individuals are burdened by approximately a 4 percent charge. No wonder the number of stockholders in our American enterprise has declined by 800,000 in 1972 and by the same number again in 1973.

Six, Congress should compensate for present monetary policy.

The Federal Reserve Board's monetary could extend the period of inflation and have a disasterous effect on our capital markets—unless, and I would underscore the word unless, offsetting steps are taken by Congress. The Board's present policy of limiting the money growth to 6.6 percent, in an attempt to lean heavily against this year's expected inflationary price rise of over 15 percent, might be appropriate if that were our only task.

We are, however, faced with the additional formidable difficulty of raising $30 billion for private account this year in the bond and stock markets and upwards of $200 billion in equity money alone in the next 10 years. With soaring interest rates, that will be impossible, and without a strong and buoyant capital market, the country will be able to build the facilities necessary to finally halt the price rise in raw materials and manufactured goods.

Congress must act promptly and use the tools previously recommended. I might say here that too much power has moved to the executive branch and the regulatory agencies. Senator Jarvit's recent proposal for Congress to recover the initiative is most timely.

In conclusion, in planning for the future, if I may be permitted an overview, priorities cannot be determined by the profit motive alone—profits are the means, not the ends in themselves.

The Government must establish the social objective and goals of our Nation and the sound economic framework within which they are to be achieved. Our corporations, rightly spurred on by the profit motive, can then help us realize our vision of a better society.

Thank you very much, Mr. Chairman.

Chairman BENTSEN. Thank you very much, Mr. Ross, for your comments.

Mr. Brown, if you will proceed with your testimony.

Senator JAVITS. Mr. Chairman, before Mr. Brown proceeds, I intended to be here when Mr. Ross started, and I know him very well, and I introduced him to the staff of the committee through the kind offices of Mr. Stark. And he is really kind of an intermediate between big and small business, very successful, and really an economic philosopher, as we have just heard, and I am very pleased that this is sort of his entry into our national affairs. He has been utilized on the international scene, and I am delighted to see him this morning.

Mr. Ross. Thank you.

Chairman BENTSEN. Mr. Brown.

STATEMENT OF LESTER R. BROWN, SENIOR FELLOW, OVERSEAS DEVELOPMENT COUNCIL

Mr. BROWN. Thank you, Mr. Chairman.

I have submitted a pamphlet, which is the product of some research and analysis at the Overseas Development Council where we have been concerned with the problem of resource scarcity at the global level. With your permission, I will submit this paper for inclusion.

Chairman BENTSEN. Without objection, it will be accepted and placed in the record at the end of your oral statement.

Mr. BROWN. And I will sum up a few points and add a few things which the pamphlet did not include at the time of printing.

One of the most important questions that we need to be asking as part of this exercise, and particularly as it relates to Senator Mansfield's proposals, is why we have not done a better job of anticipating some of the resource scarcities which have affected us so dramatically in recent months. And I would like for a moment to speak from the vantage point of the economics profession and suggest some of the reasons why I think we have missed the mark so badly.

One is that within economics as a profession we are somewhat arrogant. We tend, for example, to think of ecology as a subdicipline of economics. In reality, I suspect it would be more accurate to think of economics as a subdicipline of ecology. Those of us in economics forget that all of the economic activities in which we engage are entirely dependent on the earth's natural resources and cycles. This is most evident in agriculture, where you cannot produce anything without the functioning of the nitrogen cycle, the sulfur cycle, the hydrological cycle, and others.

Within economics, we have reached a degree of abstraction in our thinking where all too often we think that economic activity is independent of the natural systems upon which it is dependent.

Also, within economics we have often made the point that we need not worry if commodity A becomes scarce because we will substitute commodity B or C for it. And that is quite true. But, if we had turned over that coin and read what it said on the other side, I think we would have been much better off, because the other side says beware, commodity scarcity may be contagious. And this is the situation in which we find ourselves today. We are seeing a domino effect of resource scarcity begin to operate. Natural gas becomes scarce, so nitrogen fertilizers become scarce, and the price of food soars.

Fresh water becomes scarce, and we find that although we have enormous reserves of coal in the Northern Great Plains—in Northeastern Wyoming, Montana, and the Dakotas—there are already court battles under way to see who gets control of the limited available water supplies: Whether it will be the energy interests who want to develop the coal resources and coal gasification resources, or whether agriculture will continue to control the water resources.

With petroleum being in short supply, synthetic fibers have become scarce. The price of cotton has climbed and cotton is beginning to compete with soybeans for land, particularly in the southern Mississippi Valley. The result is that our soybean prices have climbed.

I think that within economics, we have become unduly impressed with what technology can do, and that is in part because most economists today have lived during a generation, or roughly the period since 1940, in which technological advances have been most impressive, beginning with splitting the atom and extending through new contraceptives, breakthroughs in agriculture, control of polio and finally to landing a man on the moon in 1969. And we began to think that we could do anything with technology if we set our minds to it. There were quick fixes. All we had to do was identify the need, put the scientist to work, and within a very short time they would be back with the answers to the problem.

But what we are now beginning to discover is that there are some very important problems facing us to which there are no quick and easy technological fixes. Most of us in this room would like to turn back the clock to the cheap energy prices of just a couple of years ago. But the scientist tell us that the prospects for cheap energy are probably at least the better part of a generation away. And that is an assumption predicated on a breakthrough in fusion power that can, by no means, be taken for granted.

We are hopeful that we will make that breakthrough. We cannot be certain.

We have seen the world protein market converted from a buyers' to a sellers' market during the past 3 years. There are a number of reasons for this. One is that we have not been able to expand the supply of beef and soybeans rapidly enough. Why? In beef production, we are still saddled with a production level of one calf per cow per year. And as you know, in Texas, for every calf that goes into the production cycle, you maintain one full cow for 1 year.

Chairman BENTSEN. I wish we could get a calf per cow per year.

Mr. BROWN. You are right. In fact, we do not even get quite that. But that happens to be the level of productivity of the original domesticated animal several thousand years ago. We have not been able to move that one bit.

Likewise on soybeans, we desperately need a breakthrough on soybean yield. Both we and the Chinese, incidentally. We are not alone. We have not been able to get the breakthrough. We have scientists working on it, but no one that I know thinks that we are going to get a breakthrough soon.

The fourth problem which I think has hindered economic analysis of resource scarcity is that we have said we do not have to worry if a commodity becomes scarce, because the price will rise, and that rise in price will encourage additional production. And in most cases that is certainly true. But we forgot to look at what happens on the demand side when the price rises. And in the world now we are faced with a situation where all of the basic resources used to produce food, land, water, energy, and fertilizer are in short supply. None of these can be described as abundant today. In order to get more land or to establish more irrigation projects, we have to move further and further out on the marginal return curve, and we are now in a situation where our idle capacity has disappeared—where in order to get more of these resources, we have to keep raising the price to get new water supplies, new energy supplies, additional land under cultivation. And as the world price of food goes up, we have forgotten that there are several hundred million people who are already spending 80 percent of their income on food. As the price of food begins to go up, it simply moves out of their reach. And what this will lead to is a period of political instability in the world, perhaps unlike any we have seen in our lifetime.

I made the statement earlier this year in a conference here in Washington that I fully expected that the rise in prices of food, energy, and fertilizer, affecting particularly the developing countries but not only them, would overturn at least 10 or 15 governments by the end of calendar 1974.

As of early May, I have begun to think that this is probably a conservative estimate, and we may see far more government topplings than that. We are now seeing these economic forces beginning to override the traditional concerns of national security. We are in a situation where political instability is rising from basic economic change—particularly inflation, and particularly among the poor people throughout the world. These instabilities resulting from inflation and energy prices may offset the billions that we have spent in the military field in trying to maintain some semblance of political stability throughout the world.

I mentioned this because these relationships are complex but terribly important. At the rate at which things are unfolding, it leads me to think that it is going to be increasingly difficult for political decisionmakers, whether in the business world or in the political world, to make responsible, intelligent decisions.

Over the past several months, I have been working on a book commissioned by the United Nations for World Population Year, which is this year, and for the population conference in Bucharest, which will be held in August. The opening chapter of this book—"On the Human Interest: A Strategy to Stabilize Population"—has as its theme the idea that we may be on the verge of one of the great discontinuities in human history, and that very few of us at this point are perceiving it. I would first cite the reason for this basic discontinuity, as I see it, between the third and final quarters of this century, derives from the changing relationships between man and the natural systems on which his economic activities depend.

During the third quarter of this century, the global economy expanded about 4 percent per year. In 1970 dollars it roughly tripled from $1 trillion in 1950 to about $3 trillion at present. The addition of that third trillion dollars has brought with it untold resource scarcities and ecological stresses.

If you were to have picked up the New York Times in 1950 and looked at the index of articles on the front of the second section, you would have found very few stories dealing with ecological stresses and resource scarcities. Many days you would not have found any at all. But as of today, since global output of goods and services has tripled, you can pick up the New York Times any day of the week, at random, and find anywhere from 3 to 4 or 5 or perhaps as many as 10 articles dealing with resource scarcity, ecological stresses, and political stresses or conflict deriving therefrom.

Anyone who thinks that the final quarter of this century simply is going to be an extrapolation of the third is going to miss the boat by a very wide margin. I doubt very much that the global economy can continue to expand at 4 percent per year between now and the end of this century. If it did, it would mean going from a gross world product—GWP—of $3 to $9 trillion in real terms. I do not think that this is in the cards, and I think that it is time we began to recognize this and ask ourselves what some of the alternatives are.

I think a similar kind of discontinuity is in prospect demographically. Existing projections of world population show roughly a doubling within a generation span to 6½ billion by the end of the century—and at sometime during the latter part of the next century to 10 to 16 billion. I do not think that is in the cards either. I simply do not think we can stay on our present demographic path without incurring costs that will become far greater than those we will be prepared to pay. And those costs mount, whether they be rise in unemployment in Mexico, political disintegration in India, or collapse of the oceanic fisheries and the pressures of fishing, I believe we are going to turn from this path.

Another major discontinuity that I see between the third and the final quarter of this centry is a shift in emphasis from production to distribution. During the third quarter of this century, the name of the game has been growth, and it has been production on which we have been focusing. The expansion of production has become an objective of every government in the world. The only difference is in the rate of economic growth to which national governments aspire. For some it is only 4 percent per year, for others it may be 7, 8, or even 10 percent.

A fourth major discontinuity flowing from this change between man and the natural systems of resources on which economic activity depends is a shift in political power in the world. From the beginning of the industrial revolution until quite recently, political power in the world has been concentrated in those hands which controlled capital and technology, including importantly the United States in that group of early industrial countries. But what we are now seeing is the transfer of a substantial degree of political power to countries which control raw materials, who historically have not had any leverage at all in the international and political system. Not only are they gaining political leverage, but a great deal of economic leverage as well.

And I would suggest that we are only on the edge of this fundamental shift in political power. While we have been concerned with it and have been experiencing the international, conomic and political convulsions that derive from that shift, I do not think we have yet begun to fully comprehend it. We have begun to understand what happens when someone begins to turn off the tap on our energy supplies. We have not yet begun to grapple with the problem of what happens when a small handful of countries, the oil exporting countries, gain control of a disproportionately large share of the world's liquid capital. We heard testimony this morning stating that we are begining to recycle some of that back into the United States and describing the advantages of doing so. But as foreign investment capital comes into the United States on a large scale, we find ourselves in a very different political situation than any that this country has known, and it must be taken into account in decisionmaking at the national level.

Senator Mansfield's proposal of a National Economic Commission or Board may be too late. The international economic forces that effect us are so great, so dramatic, so overwhelming in some cases that we must start at the global level and then work back to the national level if we are going to make intelligent, responsible decisions.

Another major shift that I see between the third and fourth quarters of this century is in the emphasis on the traditional way we have balanced supply and demand. The emphasis has been almost always on expanding supply as rapidly as possible. We are now moving into a situation where we must continue to expand supply without question, but where we will also begin to pay much more attention to demand conservation. We see one example of this coming from the Council on Environmental Quality on the energy front. The idea that the earlier projected growth in energy consumption can now be met, half of that by expanding energy supplies and half by practicing demand conservation, indicates a new period. This is an example of this sort of shift that I see coming.

The final point in terms of these discontinuities is whereas since the end of World War II the overriding objective of national trade policy, including our own trade policy, has been to assure access to markets abroad for our exports, whether industrial or agricultural products, we now suddenly see this issue beginning to shift. Increasingly, international trade relations will be governed not so much by the question of access to markets abroad for exports as by access to supplies abroad of needed imports.

Concluding points: One, we have to be very careful that in this period of rapid change we do not end up treating symptoms rather than causes. That is as risky in the economic field as in medicine, because if you are not careful, sometimes you treat the symptoms rather than the causes and you end up exacerbating the illness. And that is, I think, a very real risk.

I mention the fact that it is very difficult now for us to view this problem in national terms. We must start first with an international or global framework and work back to our national policies within that.

A third point I would mention—and it relates to much of the testimony that has preceded mine this morning—is that whether or not you have a capital shortage depends very much on what you assume about the desired future rate of economic growth. If you are thinking of the 7 percent rate of economic growth, you need much more capital than if you are thinking of a 3 percent rate of economic growth. The question I would raise is what should be our future rate of economic growth?

Now to summarize—with three concluding points—1: On population. I think we very much need in this country a national population policy, particularly as we go to the conference in Bucharest, where this question is going to loom large. We have been pressing other countries to adopt national population policies, in particular, policies to stabilize population growth, and we ourselves are yet without a policy. We are moving toward population stability, but cannot take full political credit for doing so because we do not have a policy. I would urge you to focus on this.

The second point: One of the great issues that is going to dominate international affairs is the extent to which those in the rich countries can continue to consume more and more of common scarce resources. I think someone in the political arena should tell Americans that the consumer joyride is over. The notion that we can consume more and more of everything is not going to hold up for much longer. I think we need to seriously reexamine the link between the level of material goods consumption and our actual well-being. That is to say, if you and I and others double our consumption of material goods, will we be twice as happy as we are now, will we be 20 percent more happy, or will our happiness increase at all? I think we have reached the point where for many of us in this society we may need to ask that question.

I am reminded of a philosophical comment by Schopenhauer, who said that, "There are two sources of unhappiness in the world. One is not having what we want and the other is getting it." I think we are at the point where we need to think a little about Schopenhauer.

The third and final point: The question of how resources are shared among countries is going to dominate international affairs for years to come. We are now in a situation in the world where, at least for some resources in the short-run, if some of us consume more, others of us must, of necessity, consume less. This is a relatively new situation. Reference was made earlier this morning to our standing in line or sitting in line at service stations for an hour or two, particularly in this part of the country, during the early months of 1974. What we have not been aware of is that in India, in northern India, farmers were sitting in line also, sitting on the ground with 5-gallon cans, hoping to get some gasoline to take back and put in their irrigaton pumps with which they produce their food supply on their 6–acre farms. Unfortunately, some of them sat for days waiting for the petroleum to come and it didn't come. The result is, according to the USDA estimates, a short-fall in the Indian wheat crop this spring of more than 1 million tons, solely because of a lack of energy to run irrigation pumps. That doesn't include the effects of fertilizer scarcity.

In the year immediately ahead, the question of economic growth and resource avalability is going to emerge in a new and very different form because of the fertilizer shortage in Asia. It affects almost every major country in that region. It now appears likely that the fertilizer shortage during the next harvest in Asia will be less than the last harvest. The result is going to be an enormous food deficit in Asia, beginning in late 1974 and more importantly in 1975, when the 1974 crop will be consumed. With this situation unfolding when world food reserves are at a modern low, about this time next year political leaders in the more affluent countries will have to decide whether to in effect cut Asia adrift with this massive food deficit that will unfold, or whether the political leader will ask consumers to do the food equivalent of turning down the thermostat 6°, to consume less food and to free additional food to attempt to fill what is certain to be the largest food deficit in Asia in history.

The question of how to accommodate ourselves to this worldwide situation will loom large in the years immediately ahead. The time has come to examine some of the fundamental values that we hold and some of the fundamental principles underlying our economic system. The issues that your committee is focusing on are not trivial; they are among the most fundamental that this country will face in the years ahead.

Chairman BENTSEN. Thank you very much, Mr. Brown, and I will look forward to reading the pamphlet that you have presented for the record. Without objection, the pamphlet will be placed in the record at this point.

[The pamphlet follows:]

the global politics of resource scarcity

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introduction

From the perspective of ten years hence, many may remember 1973 more for its energy and food scarcities than for Watergate and the Arab-Israeli War. The tight supply situations characterizing energy and grain in 1973 and continuing into 1974 probably will be viewed less as an historical accident and more as marking the beginning of a new era dominated by issues of economic and political interdependence. These crises, triggered by events such as droughts in the case of food and by the Middle East conflict in the case of oil, will be seen as essentially the product of continuing rapid global economic growth within the constraints of a finite physical system.

The 25-year period since World War II has been characterized largely by material surpluses. It has been an era in which the overriding objective of national trade policies has been *access to markets* abroad for exports. But in a situation of scarcity—whether of energy, minerals, grain, fish, soybeans, timber, or fertilizer—an equally or even more important set of issues is beginning to emerge relating to reasonable international *access to resources.*

The need to develop global approaches to the new worldwide problems arising from scarcity in the marketplace is now urgent. The shift from traditional buyers' markets to global sellers' markets for a lengthening list of commodities is bringing a host of far-reaching changes, many of which are still only remotely sensed. This new phenomenon will have profound implications for global politics of the last quarter of this century; the scarcity headlines of 1973 and 1974 should be viewed not as unique events but rather as forerunners of more to come in the years ahead.

Most statesmen and foreign offices in the Western industrial countries have been slower than leaders in the oil-exporting countries to recognize the fundamental character of the change in progress—a change which in a period of less than twelve months resulted in energy shortages throughout much of the world, soaring food prices everywhere, a host of related shortages, and the emergence of a non-industrial country, Saudi Arabia, as a new world power. The first reaction has been in the direction of the law of the jungle—each country for itself—rather than toward cooperation with others. As a result, most countries are suffering unnecessarily—with the poorest countries and the poor *within* all countries bearing most of the brunt.

Self-sufficiency ultimately may be possible for the United States in the case of energy, but it will not be feasible with other important commodities, ranging from essential minerals to fish and tropical foodstuffs. Even in the energy field, economic independence can only be achieved, if at all, at a significant cost to our standard of living. More important, self-sufficiency is not an alternative in the foreseeable future for Western Europe, Japan, or other countries with which the United States has ties of special responsibility and concern. How then can we cope with these new and troubling circumstances? Let us begin by examining the underlying forces which have brought about this historic change.

Note: The author is indebted to Erik P. Eckholm, a colleague at the Overseas Development Council, for assistance in the preparation of this manuscript.

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pressure on resources

Economic growth does not occur in a vacuum. It depends on the earth's capacity to supply energy fuels and minerals; to produce forest products, marine protein, and agricultural commodities; to absorb waste, and to supply fresh water—and to do so in ever increasing amounts. These capacities are modified, of course, by the level of available technology and by the world's political and economic organizational capacity. As the global scale of economic activity expands, pressure on the earth's finite or scarce resources increases, and competition among countries for these resources intensifies.

Growth in global economic activity since World War II has been explosive. In 1950, when annual worldwide production of goods and services totaled roughly a trillion dollars, there were relatively few signs of stress on the system. By 1970, however, evidence of environmental stress all about us was reported daily in the press. Addition of the third trillion dollars of global output in recent years generated far more pressure on the system and much more competition for scarce resources than did that of the second trillion. And so it is likely to be for subsequent trillions.

Not only is pressure on resources mounting but the daily headlines also remind us that increasingly we are dependent on *common* global resources. As the scale of economic activity presses against some of the earth's limited resources, interdependence among countries rises. As long as there were more fish in the ocean than man could possibly catch, the addition of a few ships to existing fishing fleets was of little consequence. As long as fresh water supplies dwarfed most potential uses, there was little international competition for the water of common river systems and no need to manipulate rainfall patterns. As long as the ecosystem could easily absorb all the waste man could generate, there was no need to be concerned about limiting the discharge of waste, either locally or globally. But today even marginal increases in claims on some of the earth's resources can generate serious international problems.

An understanding of this growing interaction and interdependence among countries is central to our understanding of international relations in the years ahead. Resource scarcities are altering the economic and political relationships among countries, changing the relative position and influence of countries in the international hierarchy. A given country may find its position abruptly strengthened in one sector of economic activity and weakened in another. Thus world food scarcity has greatly improved the terms on which the United States makes foodstuffs available to the rest of the world, but its negotiating position in the world energy economy has deteriorated sharply. The converse is true of the Soviet Union, which is highly vulnerable in the food sector because variability in weather causes wide swings in its annual crop output, but is in a commanding position with respect to energy, which it produces in surplus.

Efforts by individual countries to expand their share of global output, employment, and wealth are taking new forms. Linkages between global scarcities and internal policies affecting economic growth, inflation, and employment are becoming both more numerous and more direct. Stresses on the international political fabric are increasing.

The consequences of growing pressure on the earth's limited resources are best understood by examining the present and prospective supply-demand situation for some of the principal ones. While energy and food have filled the headlines in 1973 and 1974, many other essential resources also are in short supply and must increasingly receive the attention of decision makers. After briefly inventorying factors contributing to the shortage of several key resources, we will examine the effects of global resource scarcity on the economic and political relationships among countries.

Water

One essential resource which is beginning to constrain the expansion of both agricultural and industrial activity in substantial areas of the world is the availability of fresh water. This is now the principal limitation on the spread of the new high-yielding dwarf wheats in countries ranging from Mexico to Afghanistan. It is hamstringing Soviet efforts to meet expanding consumer demand for more livestock products. In the developed countries, industrial activity is being curbed in numerous locations by the limited capacity of existing lakes and streams to absorb industrial waste.

Looking ahead, one can only see growing scarcity for this most basic of resources. The rate of increase in the availability of water for new irrigation works is slowing, since the most easily developed sites were exploited in the 1950s and 1960s, generally leaving only more difficult and expensive sites for development in the last quarter of the century. Water rationing could become commonplace in much of the world as both population growth and spreading affluence press against supplies. Recent projections by the Food and Agriculture Organization show future global demand for fresh water climbing 3 per cent per year, increasing 140 per cent above current levels by the end of the century.

Within recent decades, competition among countries for river waters has become a matter of more widespread, serious negotiation than ever before. Dividing the waters of the Indus between India and Pakistan required years of negotiation. Sudan and the United Arab Republic had difficulty agreeing on how the waters of the Nile should be divided. The conflict over the division of the Jordan's waters between the Arab countries and Israel is well known. Division of the Colorado River waters between the United States and Mexico is a continuing thorn in the side of U.S.-Mexican relations.

In the Soviet Union, efforts to cope with the chronic shortage of animal protein have been frustrated by the lack of natural rainfall and irrigation water. During the late fifties, the Soviet Union under Krushchev launched the "virgin lands" project—which brought 100 million acres of new land under the plow—only to discover within a few years that this land lacked sufficient moisture to sustain continuous cultivation. Much has now gone back to grass. Failing on this front, the Soviets then decided to intensify production on existing cultivated land area. Since this could not be done without more irrigation water, they devised plans for diverting southward the flow of four major rivers which now empty into the Arctic Ocean.

Once these plans became public, however, the international meteorological community was quick to respond. Meteorologists urged the Soviets to abandon these plans, arguing that to interrupt this flow of warm water into the Arctic would alter the climate in the Arctic and in turn trigger compensatory adjustments throughout the global climatic system. One study estimated that rainfall in central North America would be measurably reduced if the Soviets were to proceed with these plans.

In late 1973, it was reported that construction had begun on a 175-mile canal to divert a portion of the waters of two Siberian rivers into arid central Asia. If the Soviets proceed with the project, it may be decades before the full water diversion plan is implemented. In the meantime, the Soviet government's perception of the dependability of grain import supplies—most of which must come from the United States—may help shape its decision as to whether or not to carry through such an expensive, meteorologically risky program.

In the United States, there are now rain making firms that will contract their services to national governments, local governments, farmers' associations, or any other concerns willing to pay for their services. A few years ago, the state of Florida contracted with a rain making firm to increase rainfall in Florida in order to break an extended drought that was damaging agricultural crops and threatening wildlife in the Everglades. In this case, the rainfall gained through atmospheric intervention was at the expense of the surrounding ocean. But the interesting question is: What if Texas were to sign such a rain making contract? How would this affect relations between the United States and Mexico? That this type of international conflict has become a pressing possibility was underscored in December 1973, when Rhodesia initiated a nationwide cloud-seeding operation which, authorities hoped, would increase the country's rainfall by at least 10 per cent. If the plan is successful, it can only be so at the expense of neighboring African nations, whose share of the region's rainfall will be reduced.

Several years ago the prospect of massively augmenting fresh water supplies with nuclear-powered water-desalting plants was considered to hold great promise. Tnere are now nuclear-powered water desalting plants scattered about the world producing fresh water for industrial and municipal uses. But the amount of water they produce collectively is small—almost infinitesimal relative to that produced by the hydrological cycle or to projected future demand.

With prospects for the massive desalting of sea water not hopeful for at least the foreseeable future due to escalating energy costs, man is still dependent on the natural hydrological cycle. The key question is where growing demand will lead in terms of interventions in the hydrological cycle. The amount of fresh water which the cycle produces cannot easily be altered, since it is determined primarily by the influx of solar energy that fuels it, but technologies can be used to manipulate its distribution. As we have seen, the technologies are now available to cause it to rain in some situations where it otherwise would not. Major rivers can be rerouted and redirected. The combination of growing demand pressures and advancing technology is shifting the prospect of meteorological aggression from the pages of science fiction to the day-to-day conduct of international affairs. The urgent question confronting us is therefore how to ensure regulation of national efforts to expand the fresh water supply which have, or are suspected of having, international or global effects.

Oceanic Fisheries

International competition for oceanic supplies of marine protein is generating even greater and more immediate pressures. From 1950 to 1970, the world fish catch climbed steadily, tripling during the period. Impressive gains in the per capita supply of fish were recorded as the catch expanded nearly 5 per cent annually, far outstripping population growth. Today world fish consumption has risen to half that of meat, with the Japanese, Russians, and Americans annually consuming 71, 23, and 12 pounds per capita, respectively.

Since 1970, however, the global fish catch has declined for three consecutive years, clouding future prospects for oceanic fisheries. Many marine biologists now feel that the global catch of table-grade fish is at or near the maximum sustainable level.

The catch of a large number of the 30-odd leading commercial species of table-grade fish now exceeds the estimated sustainable catch. The result is declining stocks for such key species as tuna, herring, cod, and ocean perch in the North Atlantic, and anchoveta

Table 1. World Fish Catch, Total and Per Capita

Year	Total Catch *(millions metric tons)*	Per Capita Catch *(kilograms)*
1950	21	8
1951	24	10
1952	25	10
1953	25	10
1954	28	10
1955	29	11
1956	30	11
1957	32	11
1958	33	12
1959	36	13
1960	40	14
1961	43	14
1962	46	15
1963	48	15
1964	52	16
1965	52	16
1966	57	17
1967	60	18
1968	63	18
1969	63	18
1970	70	19
1971	69	19
1972 (prel.)	64	17
1973 (prel.)	62	16

Source: 1950-71 data from Food and Agriculture Organization (FAO), *Yearbook of Fisheries Statistics*, various issues. Data for 1972 and 1973 are author's estimates based on preliminary FAO data.

in the Southeast Pacific. Each year the list of overfished species lengthens. In an unregulated situation, the natural course of events is for each fishery to expand beyond its sustainable catch, eventually leading to depleted stocks and severely reduced catches. In some locations—several of them in the Northwest Atlantic—stocks have been virtually wiped out. Even with the necessary international cooperation, it may take years or even decades for the more severely depleted stocks to recover.

The increasingly intense competition in oceanic fisheries is reflected in the rising frequency of conflicts among countries. Among such clashes are the cod war between two NATO allies, Iceland and Great Britain, resulting from Iceland's extension of its offshore limits to 50 miles; the seizure of Soviet fishing vessels by the U.S. Coast Guard within the U.S. 12-mile territorial limit off the coast of Alaska; and threats by the state of Massachusetts to extend its offshore limit to 200 miles in an effort to salvage what remains of its fishing industry. A long-standing example of such conflicts is the tuna war waged off the west coast of Latin America. Within a recent twelve-month period, the Ecuadorian navy seized and fined 56 U.S. tuna trawlers caught within Ecuador's unilaterally established 200-mile offshore limit. Competition between the expanding Soviet and Japanese fishing fleets in the North Pacific likewise manifests itself in frequent clashes. And regular reading of the *U.S. Congressional Record* gives a clear sense of the dire straits of many U.S. fishermen and the resulting political pressures confronting U.S. members of Congress from New England, Florida, California, the Northwest, and Alaska.

How the catch of various species should be allocated among countries is an exceedingly complex issue. The greater the number of countries involved and the more varied they are economically, the more difficult finding an acceptable formula is likely to be. Formulas may be derived from historical shares, coastal proximity, size of fleet, size of population, protein needs, or different combinations of these factors.

Among the earliest efforts to sort through this politically sensitive set of issues in order to protect the fisheries from Rhode Island northward along the North American coast to Greenland is that occurring within the International Commission for Northwest Atlantic Fisheries—a group of fifteen countries actively engaged in fishing in the area. Among other things, the Commission proposes to member governments joint regulatory actions designed to keep stocks at levels permitting maximum sustainable yields. The overall quotas established are often far below the catch of recent years. Fishing for some species in selected subregions has been banned.

National shares of the overall quota in the Northwest Atlantic are most commonly determined by a formula which allocates 40 per cent of the catch according to the average national catches of the previous ten-year period, 40 per cent according to the average for the previous three years, and the remainder divided between a preference for coastal countries and an allowance for miscellaneous factors such as new entrants into the fishery and the catch of nonmember nations. Thus far the Commission has a mixed record. Not infrequently, one or more of the fifteen member countries refuses to comply with the Commission's recommendations, thereby rendering them useless. For example, inability to get a consensus on a recommendation to restrict the salmon catch has caused stocks to deteriorate to the point where Canada has proposed an absolute ban on salmon fishing. Further conflict is arising as the United States urges relative newcomers to the Northwest Atlantic to limit their fishing efforts in order to avert a continuing decline in its share of the region's yield.

The most successful agreements to limit and allocate catches to date have been those among industrial countries in the more intensely worked northern fisheries. Even in this case, however, the ranks have been broken by Iceland's extension of its offshore limit to 50 miles. It should be noted that fishing, which is of relatively minor overall economic importance to the United States or to the European industrial countries, is of crucial importance to Iceland's economy, accounting for 80 per cent of its export earnings. For example, two successive devaluations of the krona were tied to poor catches in 1967 and 1968.

A serious aspect of the competition among countries for this valuable and finite resource is the fact that the wealthier countries—the Soviet Union, Japan and, to a lesser extent, the United States—are investing huge sums in fishing fleets and new technologies, such as sonar, which permit them to roam the oceans and take fish wherever they find them. For the poor countries, whose protein needs are desperate, this poses a serious problem. Lacking the capital and technology to compete on these terms, they are extending their territorial limits beyond the traditional and widely accepted twelve miles in an effort to obtain a more satisfactory share of the world's marine protein supply. At least twenty-one countries have now extended their claims to control of fishing rights beyond twelve miles, with ten of them going to 200 miles. Their position has been affirmed by China, the only major power to support this departure from the traditional position.

In the context of other constraints on the global protein supply (see below), if the global catch of table-grade fish should not resume its growth and fail to meet the additional demand generated by population growth and rising incomes, the price impact would be felt by consumers everywhere. Added pressures on land-based protein sources would drive up the prices of commodities such as soybeans as well. In this situation, the rich countries, with their superior purchasing power, would likely bid supplies of high-quality protein away from the poor countries, resulting in a decline in protein intake in the latter. (This is what happened with grain in 1973, leading to increased malnutrition for millions of the poorest in many developing countries.)

Waste Absorptive Capacity

Growing pressures on another global resource on which economic activity depends—waste absorptive capacity—is beginning to measurably affect international patterns of trade and investment. Though we have been slow to realize it, the earth's capacity to absorb the various wastes and by-products of human economic activity are finite and to be exploited, used, and shared by countries like any other more tangible resource. When the amount of waste discharged exceeds that which the environment can absorb, it begins to change the environment. Lakes eutrophy, the incidence of environmentally induced illnesses rises, and more species are threatened with extinction. Some changes are temporary and easily corrected; others, such as the extinction of species, are irreversible. The issue is not whether the environment can absorb more waste. It can, and undoubtedly will. The question is what forms the costs will take and who will bear them, and whether the effects will be local or global.

The response of national populations which must bear the brunt of these undesirable changes varies widely, depending on values and priorities. In wealthier countries, the response is usually to enact legislation restricting levels of waste discharge, as in the 1970 Clean Air Act in the United States. At the state or community level, some industries are banned entirely. For example, the state of Delaware has banned both the construction of new oil refineries and the expansion of existing ones. Major legislation limiting the discharge of industrial waste has been enacted in Japan and the industrial countries of Europe as well as in the United States.

One of the industries directly affected is petroleum refining. Within the northeastern United States, there is a projected demand for seven new oil refineries by the end of 1975. Not one of these refineries will be built in the United States, in part because it is cheaper to refine oil in countries where regulations on waste discharge do not yet exist. These refineries are likely to be built in the eastern maritime provinces of Canada, the Caribbean, the Middle East, or, in the case of one firm, possibly in Indonesia.

The phenomenal expansion of industrial activity in Japan has resulted in pollution problems of a dimension unmatched by any other country. Japanese firms are shifting more and more of their new investments in the more pollution-intensive industrial activities to nearby countries with lower levels of industrial pollution and a greater need for jobs, including Indonesia, Thailand, South Korea, and Taiwan. Some investments by Japanese trading firms in feedlots, once planned for Japan, are being shifted to other countries where waste disposal is much less of a problem. France is reexamining the feasibility of importing concentrated ores rather than crude ore in order to alleviate pollution in some of its leading industrial cities.

Poor countries eager to acquire smokestacks and the jobs which they bring are likely to view their unused or underutilized waste absorptive capacities as a resource to be exploited in international economic competition—much like mineral reserves or fertile farm land. Brazil has aggressively courted new investment from the industrialized countries, pointing out to potential investors that there are few regulations on waste discharge by industrial enterprises; government officials argue that multinational corporations can supply their world markets from Brazil. The Shah of Iran has publicly invited pollution-intensive industries to locate in his country.

What is lacking is an exhaustive examination of the potential long-term impact of environmental legislation in the industrial countries on international investment patterns. The information available suggests a gradual long-term global shift of pollution-intensive economic activity into areas of the world with lower pollution levels.

The response of investors to pollution differentials among countries in some ways parallels their response to wage differentials. In effect, firms are beginning to locate pollution-intensive phases of their operations in countries with low pollution levels much as they have located labor-intensive aspects of their operations in low-wage countries—most prominently Mexico, Taiwan, Hong Kong, Singapore, and South Korea—over the past decade.

High pollution industries (and their labor unions) which remain within the developed nations and are forced to absorb the high costs of pollution control can be expected to press for legislation to protect them from "unfair" competition from producers in countries with lower environmental control standards. New kinds of tariff and non-tariff barriers to efficient world trade could arise, causing new international disputes and requiring new international rules. Measures to deal with environment-related trade problems have already received limited consideration within the GATT. As present trends toward industrial relocation continue, further international attention to the problems raised will be required.

Energy

Perhaps the most critical shortage to emerge in recent years is that of petroleum. The current scarcity of petroleum is not an absolute physical scarcity, since there is enough petroleum in the world to last for several decades. Rather, it is caused by a combination of economic, environmental, and political factors. Oil from newer oil fields in central Siberia, the North Sea, or the north slope of Alaska is far more costly than that from the Texas-Oklahoma oil field or the Persian Gulf. Both the cost and potential environmental damage have affected exploitation of the vast oil shale reserves in the western United States and the Athabascan tar sands in Canada. Petroleum is the prime source of energy used to produce the nearly $4 trillion in goods and services which the world now consumes yearly. World demand for energy is today climbing at a record 6 per cent annually, doubling every twelve years.

Table 2. World Proven Crude Oil Reserves, 1972

	Billions of Barrels	Per Cent of Total
Middle East	356	53
Africa	106	16
U.S.S.R., Eastern Europe, and China (est.)	98	15
North America	53	8
Latin America	33	5
Far East and Australia	15	2
Western Europe	9	1
Total	670	100

Source: *Middle East Economic Digest* (October 1973), p. 1182.

The decision by a few countries who hold the greater portion of the world's exportable supplies to withhold oil exports for political purposes, added to the above economic and environmental constraints, has resulted in a worldwide shortage of energy.

Not only are energy consumption and imports climbing rapidly in major deficit countries—Western Europe, Japan, and many developing nations—but the world's leading energy consumer, the United States, is now turning to the world market to satisfy a large share of its petroleum needs. The domestic production of petroleum reached its historic peak in 1969 and has been *declining* slowly since, as demand has continued to rise. Even with Alaskan oil fields in production, the United States is projected to be dependent on petroleum imports for half or more of its supplies by 1985 in the absence of major measures to slow the growth of U.S. consumption and to increase American production of energy. Yet as recently as 1970, the United States was dependent on imported petroleum for only a modest fraction of its needs. Today the United States is the world's largest oil importer, importing roughly one third of its needs.

This exceedingly rapid growth in U.S. import demand, coinciding with a rapid growth of imports in other industrial societies, has exerted great pressure on exportable supplies. It has helped convert the world petroleum market from a buyers' to a sellers' market. The psychology of scarcity which now characterizes the world energy market, combined with the fact that a handful of countries now controls the exportable supplies on which all other countries depend, has given this group an extraordinary leverage, both economic and political, on other countries and the international political system. The Arab oil producing states, for example, have been able to apply far greater effective pressures on the world in 1973 and 1974 than has Japan—a universally acknowledged economic superpower. The doubling, and then tripling, of the world oil price in late 1973 and early 1974 sent shock waves throughout the world economy. Saudi Arabia, a small non-industrial society, had emerged as a global superpower.

There is a lively public debate as to how real the energy shortage or crisis is, and as to how much leverage the exporting countries actually have. But leverage, like beauty, is largely in the eye of the beholder and, if the changing terms on which exporting countries make oil available is any indication, one must concede it is real. The changing psychology of the world energy market has made it much easier for members of the Organization of Petroleum Exporting Countries (OPEC) to bargain effectively as a group. Their initial objective of increasing the returns on their oil exports has been handsomely realized. Further efforts to gain majority control of the subsidiaries of the international oil companies operating within the exporting countries have also been successful. Governments of oil-exporting countries—including Saudi Arabia, Kuwait, and Iran—are now also turning their attention to participation in "downstream" investments (such as oil refining and gasoline service station chains).

Minerals

The global consumption of every important mineral required by a modern industrial economy is also increasing. As those countries which industrialized earliest deplete their indigenous reserves of several basic minerals, the divergence between global areas of production and consumption grows. Western European consumption of several basic industrial raw materials—copper, tin, lead, chrome ore, manganese ore, and phosphate—now must be met almost entirely from imports.

The growing dependence of the United States on imported minerals, closely paralleling that on energy, is becoming a matter of national concern. Of the thirteen basic raw materials required by a modern economy, the United States in 1970 was dependent on imports for more than half of its supplies of six. The Department of the Interior projects that by 1985, the United States will depend primarily on imports for supplies of nine of the thirteen basic raw materials, including the principal ones such as iron, tin, and bauxite. As the industrial countries increasingly turn to non-industrial countries for their imports of vital raw materials, their negotiating position is likely to weaken over time, resulting in changes in the terms on which these raw materials are made available. The United States, unlike many European countries and Japan, does have the alternative of greater domestic

Table 3. U.S. Dependence on Imports of Principal Industrial Raw Materials, With Projections to the Year 2000

Raw Material	1950	1970	1985	2000
		(per cent imported)		
Aluminum	64	85	96	98
Chromium	n.a.	100	100	100
Copper	31	0	34	56
Iron	8	30	55	67
Lead	39	31	62	67
Manganese	88	95	100	100
Nickel	94	90	88	89
Phosphorus	8	0	0	2
Potassium	14	42	47	61
Sulfur	2	0	28	52
Tin	77	n.a.	100	100
Tungsten	n.a.	50	87	97
Zinc	38	59	72	84

Source: Data are derived from U.S. Department of the Interior publications.

production of several minerals, but only at the price of increased economic and environmental costs.

Food

Few scarcities are as critical or as politically difficult to cope with as food scarcity.[1] During the 18-month period from mid-1972 until the end of 1973, world prices of the principal food commodities—wheat, rice, corn, and soybeans—roughly doubled. Among the several short-term factors contributing to this situation were a decline of 4.5 per cent in the Asian rice crop, a steep downturn in the Soviet wheat crop, and the disappearance for several months of the anchoveta off the coast of Peru. But these short-term factors tended to obscure some fundamental changes in the nature and dimension of the world food problem.

During the 1960s, the food problem was viewed primarily as a race between food and population, and throughout the decade the race was close. In the mid-1970s, world population growth continues to be rapid, but in addition, rising affluence is emerging as a major claimant on world food resources. Per capita beef consumption in the United States climbed from 55 pounds in 1940 to 116 pounds in 1972, making the United States the world's leading beef importer. The northern tier of industrial countries—stretching from Ireland and the United Kingdom through Scandinavia, Western Europe, Eastern Europe, the Soviet Union, and Japan—now has dietary patterns that more or less correspond to those of the United States in 1940. In these countries, which contain two thirds of a billion people, increases in purchasing power translate into rising consumption of livestock products, particularly beef. Few of these countries can cope with the growth in protein demand entirely from indigenous resources. At least part of the livestock products, or the feedgrains and soybeans to produce them, must be imported.

As rising affluence in this sizable portion of the world begins to generate a substantial growth in the demand for high-quality protein, difficulties in expanding rapidly the supply of three leading sources of high-quality protein are beginning to emerge. Problems encountered in expanding world fish supplies were referred to earlier. Efforts to expand beef supplies are constrained by our inability to devise a satisfactory commercial technique for obtaining more than one calf per year per brood cow. For every animal that enters the production process, one adult animal must be fed and maintained for one year. With the carrying capacity of several of the world's principal grazing areas—such as the Great Plains, the East African Plateau, and large areas of Australia—being rather heavily utilized, this becomes a worrisome constraint.

A third constraint on the protein supply is the failure so far to achieve a breakthrough in yields of soybeans, which are now a leading global source of high-quality protein. Since 1950, the soybean yield per acre in the United States has risen by only 1 per cent per year, in contrast to corn yield gains of about 4 per cent per year. The dramatic fourfold in-

[1] For a more detailed discussion of this issue, see Lester R. Brown, *Population and Affluence: Growing Pressure on World Food Resources*, Development Paper No. 15 (Washington, D.C.: Overseas Development Council, 1973).

crease in U.S. soybean output since 1950 has come largely from expanding the area planted. With one acre in every six of U.S. cropland now in soybeans, this expansion must eventually come to an end.

Rapid growth in the global demand for high-quality protein and the above-mentioned constraints on expanding production are causing supply to lag behind demand. As a result, we are witnessing the transformation of the world protein market from a buyers' to a sellers' market, much as the world energy market has been transformed over the past two or three years.

The serious decline in world reserves of grain, which provide an essential margin of safety in the world food economy, presents further cause for worry. As Table 4 shows, the food reserves of the principal exporting nations are declining in absolute terms, and even more rapidly as a percentage of world consumption, to a point where they now represent only 27 days of consumption compared with 95 days in 1961.

Table 4. Index of World Food Security

Year	Reserve Stocks of Grain	Grain Equivalent of Idled U.S. Cropland	Total Reserves	Reserves as Days of Annual World Grain Consumption
	(millions metric tons)			(days)
1961	154	68	222	95
1962	131	81	212	88
1963	125	70	195	77
1964	128	70	198	77
1965	113	71	184	69
1966	99	79	178	66
1967	100	51	151	55
1968	116	61	177	62
1969	136	73	209	69
1970	146	71	217	69
1971	120	41	161	51
1972	131	78	209	66
1973	103	20	123	37
1974[a]	89	0	89	27

[a]Projected.
Source: Derived from U.S. Department of Agriculture data.

The extent of world food insecurity is further aggravated by the extreme degree of dependence on one continent—North America—for exportable grain supplies (see Table 5). The United States and Canada (particularly the United States, which provides three fourths of the continent's grain exports) control a greater share of the world's exportable supplies of grain than the Middle East does of oil. This leaves the rest of the world in a very vulnerable position in the event of adverse crop years in North America, since both Canada and the United States are subject to the same climatic cycles.

Table 5. The Changing Pattern of World Grain Trade

	1934-38	1948-52	1960	1966	1973[a]
	(millions metric tons)				
North America	+5	+23	+39	+59	+88
Latin America	+9	+1	0	+5	−4
Western Europe	−24	−22	−25	−27	−21
Eastern Europe & U.S.S.R.	+5	0	0	−4	−27
Africa	+1	0	−2	−7	−4
Asia	+2	−6	−17	−34	−39
Australia	+3	+3	+6	+8	+7

[a]Preliminary.
Note: Plus = net exports. Minus = net imports.
Source: Based on U.S. Department of Agriculture data.

Fertilizer

Chemical fertilizers at present account for perhaps one third of the world food output. Of the principal nutrients in chemical fertilizers—nitrogen, phosphate, and potash—the first is available in the atmosphere, but supplies of the latter two require mining underground reserves, which are located in a limited number of countries. Canada alone accounts for close to 40 per cent of world potash exports. Two countries—Morocco and the United States—account for close to two thirds of production of phosphate rock. If these countries wished to exploit their dominant supplier positions for economic or political purposes in their relationships with the rest of the world, they could easily do so.

The supply of nitrogen fertilizer, which accounts for about half of world fertilizer consumption, is closely related to the availability of energy for two reasons. One is that the basic raw material used to produce 95 per cent of all nitrogen fertilizer is either natural gas or naphtha, a by-product of petroleum refining. In addition, the synthesis of atmospheric nitrogen requires large amounts of power; it is an energy intensive process.

As of the mid-1970s, the world is faced with an acute shortage of fertilizer. One reason for the shortage is a serious worldwide lag in the construction of new fertilizer plants. Another, of course, is the scarcity and high cost of energy, which will keep nitrogen fertilizer prices at higher levels than in the past even if production catches up with demand by the late 1970s. Fertilizer price rises will increase the fertilizer import bill of the developing countries by several hundred million dollars in 1974.

But even more ominous for these countries are the acute shortages of fertilizer which occurred in late 1973. By early 1974, there were signs that many nations—including some very populous ones, such as India, Indonesia, Pakistan, and the Philippines—would be unable to obtain the needed amounts of fertilizer *regardless of price.* Japan, a principal supplier of nitrogenous fertilizers in Asia, was forced to cut production and exports substantially as a result of its energy crisis. Simultaneously, U.S. and European fertilizer exports were reduced substantially. In what amounted to an informal export embargo, in early 1974 U.S. fertilizer producers sharply reduced new sales contracts to foreign buyers in order to maximize domestic fertilizer availability. Although it is impossible to estimate the full impact of this development as of March 1974, it appears certain that reduced fertilizer supplies during the year will result in an absolute decline in the Asian food harvest even with the best of weather. The unfortunate result will be increased food import needs at a time when global reserves are already at dangerously low levels, and food prices are at historic highs.

Timber

Closely related to food in terms of production resources required is the supply of forest products. As the global demand for food climbs, land is shifted from forestry to agriculture. One consequence of this is rising prices of forest products, a trend which appears to be accelerating. The cost of building a home in the United States increased by an estimated $1,200 between 1972 and 1973 as a result of rising lumber prices.

Forest products serve three important needs—lumber, fuel, and newsprint—the relative importance of which varies from country to country. As with many other raw materials, the demand is expanding as a result of both population growth and rising affluence. In addition, the progressive spread of literacy in the developing countries increases the demand for newsprint.

As a result of the expansion of agriculture, residential and industrial development, and the construction of highways, the earth is gradually being deforested. Continuous growth in demand for forest products, coupled with the gradual reduction in the forested area, presents us with the classic problem of exponential growth in demand pressing against a shrinking resource base.

Domino Effect of Resource Scarcity

What is now becoming evident is that shortages in the mid-1970s are not unique to a particular resource or commodity. As the preceding pages demonstrate, the supply-demand relationship of numerous critical resources is being affected in a major way.

The scarcities discussed above are not merely national scarcities affecting a particular country or group of countries. They are *global* scarcities affecting all of mankind. Countries throughout the world are now dependent on common supplies of petroleum, soybeans, copper, marine protein, and tin. As the global economy has become more integrated, both as a result of growing international trade and the even more intimate internationalization of production resulting from the rapid growth and spread of multinational corporations, it has become exceedingly difficult for individual countries to isolate themselves from scarcities elsewhere.

Nowhere has this been more dramatically demonstrated than with food in the United States. If there is any area in which the U.S. economy was believed to be invulnerable, it was in its capacity to provide an adequate supply of low cost food for American consumers. But American consumers are presently finding that they must share food scarcity with consumers in other countries. The United States could have avoided the politically painful food price rises of early 1973 by restricting farm exports, but unfortunately an adequate U.S. energy supply is dependent on expanded farm exports to pay the rapidly rising import bill. Any substantial, sustained restrictions on U.S. farm exports would aggravate the trade balance and further weaken the dollar.

The traditional economic response to resource scarcity has been the substitution of another material for that which is in short supply. Thus when copper prices rose above a certain level, industrialists throughout the world gave increasing attention to substituting aluminum or other metals for copper in their manufacturing processes. When fish meal was in short supply, farmers could replace it with soybean meal in their poultry and pig feed rations.

Substitution of a less scarce resource for a more scarce one is economically logical and, when shortages exist for only a few products, it is a relatively easy way to avoid any seriously detrimental impact from resource shortages. But in a world where many key resources are becoming increasingly scarce, substitution can rarely serve as a panacea for the shortage of any one commodity. Instead, the opportunities for substitution frequently ensure only that scarcity will be highly contagious.

Often, in fact, a domino effect of resource scarcity is in operation. The rising price of petrochemicals, with which synthetic fibers are produced, puts added pressures on the supply of natural fibers. The resulting scarcity of natural fibers in turn pulls American cropland needed for soybean production into cotton production, further aggravating the world protein shortage. The scarcity of water in the vicinity of the coal fields in northeastern Wyoming poses serious constraints on efforts to establish large-scale coal gasification plants, thus aggravating the energy crisis. The list of such extended chains or networks of resource interdependence is virtually endless.

the emerging politics of access to resources

One of the most difficult questions being raised by global shortages is that of the terms on which the world community gains access to products which are controlled by a single country or a small number of countries. This emerging situation contrasts sharply with that prevailing since World War II, when the overriding objective of national trade policies has been that of expanded access to markets abroad for exportable products. The General Agreement on Tariffs and Trade (GATT) was created specifically with this in mind. Six successive rounds of GATT negotiations since World War II have steadily reduced tariff barriers, as evidenced by the healthy growth in world trade throughout the postwar period. More equitable and preferential access to the markets of the developed countries was the principal demand from the developing countries arising out of the three sessions of the United Nations Conference on Trade and Development.

Scarcity is now bringing to the fore the other side of the international trade coin, the question of access to supplies. Highlighting this question is the increasing and disturbing tendency of countries to limit exports of raw materials and other products for a variety of reasons. Countries are limiting exports to better cope with internal inflationary pressures, to extend the foreign-exchange-earning lifetime of nonrenewable resources, to increase the share of indigenous processing, to improve export terms, to take advantage of anticipated future price rises, and for purely political purposes.

Countries with non-renewable resources such as petroleum and minerals are beginning to ask themselves at what rate they want to exploit their resources. Historically, when potential supplies almost always exceeded prospective demand and countries were eager to maximize exports, this issue was seldom raised. But today it is a much more complex issue. Should the growth in world demand determine the rate at which a given resource is exploited, or should it be determined by some longer-term internal development strategy, which may well argue for a much slower rate of exploitation and lower level of exports? Should Venezuela's own longer term foreign exchange needs or the short-term consumption needs of the United States determine the rate at which Venezuela's finite oil reserves are exploited? The former may argue for a much lower level of petroleum production and export than the latter.

Exports of scarce commodities are being banned or restricted by a number of countries in order to cope with internal inflationary pressures. Brazil limited the export of beef in 1973 to levels 30 per cent below those of the corresponding month in 1972. Thailand, a leading world supplier of rice, banned exports for several months in order to prevent inordinate price rises in its national food staple. The United States, which is virtually the sole supplier of soybeans—a critical protein source for the rest of the world—embargoed soybean exports for several months in 1973. And as its domestic lumber prices soared, the United States attempted to negotiate a voluntary import quota with Japan on its imports of forest products from the United States. This represents a dramatic turnabout in U.S.-Japanese trade relationships, where the focus over the past decade or so has been on the negotiation of voluntary quotas with the Japanese to limit their exports of textiles and steel to the United States.

These cases raise some extremely difficult questions for the international community. Under what conditions should a country be permitted to use trade policy to, in effect, export inflation? Should a country be permitted to deny others access to an indigenous raw material of which it is the principal global supplier? If so, under what circumstances? We must begin at least to ask the question of how to cope with export limitations on raw materials which directly affect the well-being of people throughout the world. Guidelines governing terms of access to external markets and penalties for those countries which fail to comply have evolved within the framework of GATT, and have contributed greatly to world prosperity in the past twenty-five years. But there are no meaningful guidelines as to whether or when a country should be permitted to withhold a given resource from the rest of the world—even though that withholding, as by the United States of soybeans in mid-1973, might cause increased malnutrition in many countries or lead to massive economic dislocations in most of the world, as has happened in the case of oil due to the higher prices and limits on oil production imposed by Arab nations after the 1973 Arab-Israeli War. The American embargo on soybean exports had a traditional economic rationale: to hold down soaring costs in the home market. But the Arab production cutbacks and embargoes announced in October 1973 were to advance a political purpose, namely, Israel's return to its pre-1967 borders as called for by the United Nations resolution. Embargoes to advance political objectives are not new. The Allies used them in World Wars I and II under wartime circumstances; and the United States embargoed its products against sale to mainland China for over 20 years and has had an embargo in effect against Cuba for nearly 15 years. But the events of 1973 make it clear that our increasingly interdependent world urgently needs to have the assurance of broadly accepted rules of access to resources if the global economic momentum of the past twenty-five years is to be maintained.

Abandoning the "Hewers of Wood, Drawers of Water" Role

Many developing countries see the improved market outlook for raw materials as an opportunity to substitute exports of semi-processed or processed raw materials for those of raw materials per se. They wish to abandon the "hewers of wood, drawers of water" role they have traditionally occupied in the world economy. A good example to date of the exercise of newly acquired bargaining power is an agreement between Japan and Turkey, wherein Japan has agreed to build a 50,000-ton per year ferrochrome ore alloy plant in Turkey in exchange for agreement to supply a million tons of chrome ore over the next eleven years. In the case of oil, if the Shah of Iran gets his way, more and more of the oil leaving Iran will be refined rather than crude oil. Argentina, Brazil, and India are taking advantage of the global scarcity of cattle hides by restricting or banning exports, thus furthering development of their domestic leather goods industries. In effect, they hope to shift the geographic focus of the leather goods export industry from Italy and Japan to the southern hemisphere. Indonesia is using the combination of its favorable resource situation and mounting Japanese fears of domestic pollution to persuade Japanese firms investing in mineral extraction to ship processed ore rather than crude ore to Japan.

Collective Bargaining by Suppliers

In the wake of the extraordinarily successful, highly visible collective bargaining by petroleum exporters over the past few years, the possibility of collective bargaining by suppliers of other raw materials is being viewed with more than ordinary interest. For them it is a tantalizing model. The prospects for successful collective negotiation by raw material exporters are influenced by a number of factors, including the number of suppliers, their ability and willingness to restrict supply, the availability of possible substitutes, alternative sources of foreign exchange earnings for the supplier, and the possibility of collective bargaining by importing countries.

Efforts to bargain collectively fail more frequently then they succeed, but often a convergence of special circumstances can give the exporting countries the leverage to alter the terms on which a given raw material is made available. A prolonged strike in the mining or transport sector and interference with global transport arteries—such as, for example, the blockage of the Suez Canal, or the severance of a strategic rail or pipeline linking a major supplier with world markets—are but a few examples of factors which can combine to strengthen inadvertently the hands of exporting countries.

The oil crisis of late 1973 has also demonstrated that deeply felt, long unattended grievances can lead even historically bitter rivals to take collective action. Two old grievances—the inability of the Arabs to focus world attention on their case against Israel and the fact that crude oil prices had lagged far behind the prices of industrial goods—were a principal factor in enabling collective action by diverse, distant, or even rival states as Egypt, Indonesia, Saudi Arabia, Venezuela, Algeria, and Iran.

One of the necessary, though far from sufficient, requisites for effective collective bargaining is that a relatively small number of countries control a sizable proportion of the exportable supplies. Four poor countries—Chile, Peru, Zambia, and Zaire—supply most of the world's exportable surplus of copper. Three others—Malaysia, Bolivia, and Thailand—account for 70 per cent of all tin entering international trade channels. Australia, Mexico, and Peru account for 60 per cent of the exportable supply of lead. Cuba and New Caledonia have well over half of the world's known reserves of nickel. Known reserves of cobalt are concentrated in Zaire, Cuba, New Caledonia, and parts of Asia.

Exportable protein feedstuffs are concentrated in even fewer countries. One country, Peru, supplies most of the fish meal entering the world market. The United States supplies nearly 90 per cent of the soybeans. A U.S. decision to limit soybean exports in July of 1973 immediately created a two-tier price, with one price within the United States and a second, much higher price elsewhere in the world. Similarly, as noted earlier, exportable supplies of cereals are largely controlled by the United States.

Suppliers of some raw materials are certain to attempt to emulate OPEC. The four copper-exporting countries are already doing so. There is concern within the aluminum industry that the politics of petroleum are becoming the politics of bauxite. Coffee exporters are now beginning to bargain as a group, whereas in the past they were dependent on the willingness of the importing countries to support coffee prices.

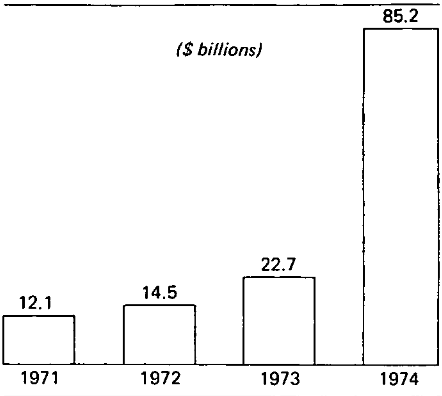
Perhaps the dominant factor influencing the prospects for successful bargaining by suppliers is the changing psychology in the world marketplace. There is a growing realization that exponential demand curves, fueled by both global population growth and rising affluence, are affecting the marketplace for many raw materials and creating a psychology of scarcity and of speculation. A bullish world market for a given commodity of course makes it much easier for its exporters to bargain, either individually or collectively, than when the commodity is in chronic oversupply.

The prevalence of sellers' markets is at the same time enabling some individual raw material supplying countries to improve their market position unilaterally without bothering to bargain collectively. Thus Morocco moved alone to triple the price of phosphate rock in late 1973, and U.S. phosphate exporters followed its lead by raising their prices. Certainly Turkey's initiative with the Japanese on the processing of chrome ore was another such example. The United States does not need the cooperation of any other country to raise the price of soybeans. There is no evidence that the earlier mentioned three countries—Argentina, Brazil, and India—which are restricting or banning the export of cattle hides are doing this on a collective basis.

But few if any countries—whether rich or poor—can afford to contemplate unilateral actions with respect to one resource that would leave them open to retaliatory action in other areas. Clearly, scarcity is affecting the economic and political relationships between the rich and poor countries. Throughout the postwar, post-colonial era, the latter have depended heavily on the former for capital and technology. The relationship has been characterized more by dependence than by interdependence. But as the industrial countries deplete and in some cases exhaust the indigenous raw materials on which their economies depend, they must increasingly turn to the pre-industrial countries, within whose borders lies a large share of world reserves of petroleum, natural gas, and metallic ores. This growing dependence by the industrial countries is creating a more genuinely interdependent relationship between the two groups.

A conspicuous example of this changing situation is provided by the new economic position of the OPEC countries. Rapidly accumulating foreign exchange reserves in these countries, which have large exportable oil supplies but small populations, hold out the virtually certain prospect that pre-industrial countries such as Saudi Arabia, Kuwait, and Libya will become major direct investors of tens of billions of dollars in industrial societies, including the United States. This novel prospect was not widely anticipated even a few years ago. As the OPEC countries have increased their share of the income of a growing market, their government gross revenues have increased sharply—from $12 billion in 1971 to some $23 billion in 1973, and could be over $85 billion by 1974. With swelling foreign exchange reserves already approaching those of industrial countries, these stewards of the world's oil are acquiring an extraordinary leverage on the international monetary system.

Figure 1. Estimated Total Oil Revenues of Eleven OPEC Governments,[a] 1971-1974



[a]The eleven governments are: Saudi Arabia, Kuwait, Iran, Abu Dhabi, Qatar, Venezuela, Iraq, Algeria, Libya, Nigeria, Indonesia.
Source: Figures are based on informal World Bank estimates.

Resource Scarcity and the Development Prospect

The international community needs to recognize that the effect of increasingly frequent global scarcities of a lengthening list of basic resources varies widely among different developing countries. Pre-industrial countries are no longer necessarily poor—or powerless—countries, as evidenced by the rapidly rising average per capita incomes in some of the oil-exporting countries, which are now among the highest in the world. Some Asian, African, and Latin American countries are also gaining increasing importance as prominent raw material suppliers. It is therefore now important to differentiate among the needs of specific developing countries for purposes of both bilateral and multilateral assistance. The foreign assistance needs of resource-rich Nigeria, Algeria, or Brazil can no longer be considered in the same light as those of Bangladesh, India, or Colombia. While some of the newly rich nations will continue to need international technical assistance cooperation, they clearly no longer require large capital transfers on concessional terms.

The recent sudden price increases of food, energy, and fertilizer present the greatest threat to development in those countries which are densely populated and not endowed with large amounts of the critical raw materials that the rest of the world needs. The developing countries as a whole are estimated to have spent $6 billion on their oil imports in 1973, compared to $2.3 billion in 1970, with more than $2 billion of the increment due to price increases alone. With the dramatic further rise in oil prices in late 1973 and early 1974, the developing countries' oil import bill could reach a staggering $15 billion in 1974.

Confronted with a doubling or tripling of prices of energy, food, and fertilizer, a great number of developing countries which import all of these may find themselves in the direst of straits in 1974. In contrast to the rich countries, they have little opportunity to cut back on consumption of energy and food without reducing consumption to sub-survival levels. The process of development and improvement of living levels—always slow and arduous at best—may be not only arrested but reversed.

A poor worker in Bombay or Karachi who already spends 80 per cent of his income on food has no alternative but to lower his nutritional level when there is a sharp increase in grain prices, as happened in 1973. Five dollars for a bushel of wheat and comparable increases in prices of other grains mean inconvenience for most Americans, whose overall standard of living nevertheless continues to rise. But these same price increases signal increased malnutrition and earlier death for millions in the approximately forty poorest developing countries. These countries must be singled out by the community of nations for special attention for concessional financing and technical assistance. Fortunately, it should be possible to do so in a way that assists the global economy as well as these poor countries.[2]

[2]For a discussion of possible remedial measures, see James P. Grant, "Energy Shock and the Development Prospect," in James W. Howe and the staff of the Overseas Development Council, *The U.S. and the Developing World: Agenda for Action, 1974* (New York: Praeger Publishers, 1974), pp. 31-50.

Modifying Life Styles in Developed Countries

One reason that global resource scarcities seriously affect economic and political relationships among countries is of course that they have such a direct impact on living conditions and life styles. The level of protein intake in the Soviet Union, Japan, and Bangladesh, for example, is directly affected by U.S. farm export policy. The level of thermostats and size of automobiles in the United States is inevitably affected by production decisions of Middle Eastern oil countries. It is this dimension of global resource scarcity that makes the terms of access to needed resources such a politically sensitive issue.

The relationship between life styles in individual countries and global resource scarcity is becoming increasingly evident. It has long been part of the conventional wisdom within the international development community that the two billion people living in the poor countries could not aspire to the life style enjoyed by the average North American because there was not enough iron ore, petroleum, and protein in the world to provide it. But even while accepting this, most people in the developed countries, and particularly in the United States, have continued the pursuit of superaffluence, increasing their consumption of resources as though there were no limit to the amount that could be consumed.

Political leaders in the poor countries are beginning to ask why a small segment of mankind living in the rich countries should be permitted to consume such a disproportionately large share of the earth's resources. What right have Americans, now only 5 per cent of the world's people, to consume nearly a third of the earth's energy and minerals? This question is being raised in the various international forums where access to and allocation of resources among countries is discussed.

Within affluent societies, the presumed link between levels of well-being and the volume of material consumption needs to be carefully examined. There is growing evidence that this relationship is at best a tenuous one. At low levels of income and consumption, an increase in material goods consumption does very much affect one's level of well-being, but after a point, improvements in satisfaction are scarcely perceptible.

Many technologies embodied in the U.S. economy, for example, evolved in a situation of resource abundance—of seemingly unlimited supplies of energy, land, and water at a low cost. The time has now come to reexamine these technologies in light of the growing scarcity and higher cost levels. The time has come, for example, to redesign the transportation system, imposing limits on the size of automobiles, and investing more in urban mass transit and less in interstate highways and urban throughways.

As long as the resources consumed within the United States were largely indigenous, the amount consumed was basically an internal matter. But as these resources come more and more from abroad, others will have more and more to say about the rate and terms on which they are consumed. And con-

Table 6. Per Capita Energy Consumption in the Fifteen Most Populous Nations, 1971

Country	Kilograms Per Capita, Coal Equivalent[a]	Energy Use as Multiple of Nigerian Use
United States	11,244	191
United Kingdom	5,507	93
West Germany	5,223	89
U.S.S.R.	4,535	77
France	3,928	67
Japan	3,267	55
Italy	2,682	45
Mexico	1,270	22
China	561	10
Brazil	500	8
Philippines	298	5
India	186	3
Indonesia	123	2
Pakistan[b]	96	2
Nigeria	59	
World Average	**1,927**	**33**

[a]Includes coal, lignite, petroleum, natural gas, hydro- and nuclear electricity.
[b]Including Bangladesh.
Source: *U.N. Statistical Yearbook*, 1972.

sumers everywhere may feel increasingly free to criticize how we use our affluence as our rising import demand—to fuel our gas-guzzling cars, for example—results in soaring prices elsewhere.

A similar situation exists in the case of food. Claims on world food resources by the average American are nearly five times as great as those of the average Indian, Nigerian, or Colombian. Whether Americans can, in a protein-scarce world, continue to consume ever more animal protein (as existing economic projections indicate) is now problematic. It may become necessary for both economic and ecological reasons to begin to substitute high-quality vegetable protein for animal protein much as vegetable oils have been substituted for animal fats over the past generation.

Slowing Population Growth

The prospect of intensifying global resource scarcities and related ecological, economic, and political stresses underlines the threat that continuing global population growth poses for the well-being and security of people everywhere. A 50 per cent rise in population, combined with a 50 per cent rise in average per capita incomes, involves a *125 per cent* increase in the total demand for goods and services. Given the virtually universal desire for increases in personal income, one of the inevitable consequences of scarcity and the realization that it may not be temporary, is a growing doubt as to whether the currently projected world population of 6.5 billion by the end of the century will be considered tolerable. This in turn may impart a new urgency for putting on the demographic brakes, highlighting the importance of the U.N.-sponsored World Population Conference to take place in Bucharest in August 1974, as well as of the world population plan of action that it is intended to produce.

Efforts to slow world population growth cannot be viewed apart from such issues as the sharing of scarce resources, the simplification of life styles among the affluent, and international assistance to encourage the development of the poor nations. Recent history indicates that birth rates do not fall very far until certain basic social needs are satisfied—until an assured food supply and rudimentary health

Table 7. Annual Per Capita Grain Consumption in Selected Nations

Country	Grain Consumed Directly as Bread, Rice, Pastries, and Breakfast Cereals *(pounds)*	Grain Consumed Indirectly as Meat, Milk, and Eggs *(pounds)*	Total Grain Consumed *(pounds)*	Total Grain Consumed as Multiple of Indian Consumption
Canada[a]	152	1,696	1,848	5
United States	143	1,343	1,486	4
U.S.S.R.	344	883	1,227	4
United Kingdom	169	856	1,025	3
Argentina	223	625	848	2
West Germany	160	588	748	2
Mexico	305	242	547	2
Japan	320	211	531	2
China	312	118	430	1
India	288	60	348	1

[a]1959–61 average.
Source: FAO, *Food Balance Sheets, 1964–66 Average.*

services are available, infant mortality is substantially reduced, and literacy is achieved. Fertility in the developing nations is far higher than in the economically advanced nations, but there is little likelihood that it will fall substantially until greater progress is made in eliminating severe social deprivation. At the same time, of course, international efforts to make family planning services available to everyone must be intensified. But the international response to the many difficult resource-related questions emerging will of necessity have an impact on efforts to meet the basic social needs of the world's poor, and thus efforts to slow global population growth.

coping with scarcity: cooperation or competition?

Coping with scarcity of some resources calls for specific new modes of international cooperation. Because this represents uncharted terrain, the questions are many. Should there be a rule against using an oligopolistic position for political blackmail? Should there be some restraints on taking excessive profits during a time of temporary shortage? Have the profits made by the United States and Canada with food and by the OPEC countries with oil been inordinate? Should there be some rules requiring dominant suppliers to consult with their traditional customers before cutting off exports in order to protect their own internal supply situation in cases such as the U.S. soybean and fertilizer export cutoffs? Should there be an effective rule requiring international consultation on internal policies which will give rise to increased demand for imports?

The critical need for, and potential benefits of, new modes of international cooperation are well illuminated by the problem of food scarcity. This area warrants special examination for three reasons. First, the price of food is important for everyone, and in the case of the poor majority of the world, it affects the very prospect of survival. Second, the United States would be in a far stronger position to call on other nations to eschew parochial self-interest and to act in the global interest with respect to the scarce commodities those countries dominate if it were prepared to take the lead in the case of food resources, which it dominates so conspicuously. Third, Secretary of State Kissinger and the developing countries separately proposed in the fall of 1973 that a world food conference be convened in 1974. Since then, the World Food Conference, to take place under U.N. auspices, has been scheduled for November 1974. This meeting offers an unusual opportunity for constructive international action.

The changing world food situation suggests that several important policy initiatives should be emphasized. First, an internationally agreed system of food reserves—on the general pattern proposed in 1973 by Dr. A. H. Boerma, the Director-General of the Food and Agriculture Organization of the United Nations—is now in the self-interest of all nations. In a situation characterized by chronic scarcity and periodic surpluses, the international prices of food commodities could acquire a dangerous volatility, with adverse consequences for consumers, farmers, and food production the world over. Recurrent scarcity would mean high prices for consumers in the affluent countries and greatly increased malnutrition in the poor countries. In the absence of a food reserve system, prices would plummet in years when production exceeded immediate demand, leading to reduced production—which, in turn, would make for more frequent periods of scarcity. Implementation of a decision to rebuild world grain stocks from their present low of less than 100 million tons to above the 160 million ton level of a few years ago would assure a market for at least several years for any excess of grain production over immediate consumption needs.

Second, special international measures need to be developed to help the poor countries participate in a world food reserve system, and to help mitigate the adverse nutritional impact of the recent doubling of international grain prices. It is ironic that the United States Food for Peace program, originally a convenient marriage of American food surpluses and the needs of the world's poor, should be more than halved in 1973 when, on the one hand, food aid needs have increased greatly in the poor countries due to natural disasters and fertilizer shortages, and on the other hand, the United States has sold more grain at higher prices to the affluent countries than ever before. In FY 1974, U.S. agricultural exports increased by more than $6 billion over the previous year due to price rises alone. A new source of concessional assistance is needed, either in the form of an earmarked expansion of the World Bank's "soft loan" window, or a special fund for the FAO to enable developing countries to build up reserves to replace those previously maintained by the United States and Canada at their own expense. In addition, the now withered Food for Peace program provision enabling the sale of food to poor countries on long repayment and low interest terms needs to be revitalized.

Third, and possibly most important, an even stronger case now exists for substantially increasing international efforts to aid agricultural development within the developing nations. Many poor countries have a vast unexploited agricultural potential. Those countries which have been able and willing to exploit the Green Revolution potential in wheat and rice have demonstrated that significant increases in food production are possible in many developing nations at far less cost in terms of additional inputs than comparable increases in many of the more agriculturally advanced nations. There is increasing evidence, moreover, that assistance earmarked for agricultural development should give special attention to the role of small farmers in the production effort. In most developing countries, small farmers—when given effective access to needed agricultural inputs as well as health and educational services—have engaged in more labor-intensive cultivation and have generally achieved higher yields per acre than those with large farms. By improving the access of the poor majority to both income and services, this approach to rural development also contributes greatly to the motivation for smaller families that is the prerequisite of a major reduction in birth rates. The right kind of all-out rural development effort could, therefore, help alleviate not only the world food situation, but also the growing income-distribution, unemployment, and population problems which afflict most poor countries.[3]

This aspect of the global food situation gives additional importance both to the 1973 Congressional initiative to direct an increased share of the U.S. bilateral economic aid program toward such key factors as food production, rural development, and population, and to Robert McNamara's redirection of the expanded World Bank program for the next five years to give far greater attention to the small farmer, food production, and rural development generally. For this reason, U.S. fulfillment of its commitment to help replenish the World Bank's International Development Association will be of particular importance.

Fourth, careful consideration needs to be given to establishing international rules for the circumstances under which—and the means whereby—producing countries are permitted to restrict their exports of vital foodstuffs. In fact, consideration should be given

[3]See James P. Grant, *Growth from Below: A People-Oriented Development Strategy*, Development Paper 16 (Washington, D.C.: Overseas Development Council, 1973).

to the adoption of a set of GATT-type rules, or an expansion of GATT itself, to cover all types of export restrictions on scarce commodities, including foodstuffs.[4]

Fifth, there is a similarly urgent need to evolve a cooperative approach—hopefully at the forthcoming U.N.-sponsored Conference on the Law of the Sea—to the management of ocean fisheries, which provide so much of the world's protein for both human and animal consumption. Failure to develop more effective cooperative mechanisms will result in the continued depletion of stocks, a reduction in catch, and rapidly rising fish prices.[5]

Finally, more thought needs to be given to methods for reducing wasteful use of grain by the affluent in the rich countries to ease global food scarcity. Economic, ecological, and health considerations argue for a reduction in consumption of the less efficiently produced forms of protein, such as beef, and greater use of the high-quality vegetable proteins such as soya protein.

* * *

As the above discussion of food illustrates, many of the new problems of global scarcity brought on by rising affluence and increasing population should be amenable to alleviation, possibly even to solution, through cooperative international action. A U.S. initiative in the food field would be in its humanistic tradition. The costs would be shared in an international effort, and the long-term benefits to the American farmer and consumer could be substantial. Possibly most important, such an effort would contribute greatly to setting the standards by which the world approaches other situations in which sellers dominate and scarcity exists.

The developing countries can be expected to be very wary of agreeing to rules which appear to be designed to assure continued domination by industrial nations without regard for their own new-found power. Raw material suppliers quite naturally wish to increase their share of the benefits of global economic growth, and can be expected to press insistently for high prices to reflect the new situation prevailing in the world marketplace. On the other hand, importers of raw materials—including both poor and rich nations—desire the security of certain access to material supplies at the lowest possible prices. Reconciling these divergent interests will not be easy. Most likely, future commodity arrangements—particularly those involving depletabie resources—that are acceptable to both producing and consuming countries would involve a guarantee of generally higher prices in return for security of supply. But cooperative international arrangements, mutually acceptable to buyers and sellers, can best serve the long run interests of both groups.

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[4]For some concrete proposals, see Roger D. Hansen, "The Politics of Scarcity," in James W. Howe and the staff of the Overseas Development Council, *The U.S. and the Developing World: Agenda for Action, 1974* (New York: Praeger Publishers, 1974), pp. 51-65.

[5]See Mildred Weiss, "The Lawless Depths: The Need for an International Oceans Regime," in ibid., pp. 95-106.

conclusion

The year 1973 has clearly indicated what can lie ahead over the next decade if the law of the jungle is the prevalent international mode of response to scarcity—whether by preference or by lack of foresight. Future improvements in the supply position of some raw materials will undoubtedly occur from time to time in the years ahead, but overall, the prospect for the foreseeable future is for continuing scarcity of many important commodities. For others, substantial price rises may well lead to significant increases in supply and to adequate levels of product substitution. Over the longer term, technological breakthroughs may in some cases dramatically improve the supply situation. The energy crisis may one day disappear, but a technological breakthrough which might permit this—such as the harnessing of fusion power—is not likely to have a measurable global impact until, at best, the end of the century. Advances in the technology of fish farming may some day permit growth in the supply of cultivated fish to offset the inevitable decline in growth in the oceanic catch. But progress on this scale will almost certainly be reserved for some point beyond the current decade, if at all. This is true in the cases of all too many of the resources plagued by global scarcity.

Therefore, despite the potential for overcoming shortage situations through the signals of the price system, product substitution, and further technological advance, the international community must recognize that global scarcity for many of the resources and raw materials on which economic activity depends is becoming an integral part of the international affairs landscape. The immediate circumstances in which we find ourselves call for a broad expansion of global cooperation and systematic attention to devising politically and socially acceptable ways of sharing scarce resources among countries.

Coping with global scarcity must now be recognized as a global problem. The temptation at the governmental level is usually to act in the national interest, narrowly defined, and with a short-term time horizon. Political leaders often will be tempted to blame other countries for inflation, economic stagnation, rising unemployment, or other economic ills deriving from scarcity. All too often, they will be tempted to export inflation and unemployment.

We delude ourselves if we think the years ahead will be an easy period in international relations. The issues which must be resolved, one way or another, will place great stress on the international political fabric. The crucial question is whether we can create a workable world order for an increasingly interdependent world. This will require a level of leadership, understanding, and generosity of spirit which is also in scarce global supply.

Chairman BENTSEN. Mr. Brown, in listening to your comments I cannot help but remember another quote, the old one of Ralph Waldo Emerson, when he said, "This time, like all times, is a very good time, if we but know what to do with it." And that is what we are concerned with right now.

I am going to ask the subcommittee members to limit their questions to 5 minutes each due to the limitations of time. Mr. Jones, I agree with you very strongly on the point of trying to raise capital and the necessity for it, and that many of our policies are resulting in a penalty to the savings and investment we need.

But I have one question that I have not been able to resolve. I do not understand the situation in England, where they have 100 percent charge-off of capital investment within 1 year, as I understand it, and yet I am also told that they have the lowest percentage of capital investment over the last 10 years of any of the major countries in Europe. Now, why would that be, when they have that kind of an incentive to invest? What are the disincentives that are resulting in that policy? There must be some.

Mr. JONES. Yes, there are several. I think it is fair to characterize the economy in the U.K. as having been in stagnation for some considerable period of time, a combination of very high inflation and stagnant as far as growth is concerned. One of the things that has been a major disincentive to the British industry, of course, has been nationalization, and it distorts all of our statistics on their economy. And if you look at their savings versus investment, you have to recognize that a substantial part of the investment that is made is taken from the populace by the involuntary means of taxation, We have had, of course, a number of discussions in our country as to whether we are going to ape the British with our increasing trend toward socialization and hopefully not nationalization of industry.

But, it is true that the profitability of British industry despite the cash flow available to it through these very rapid capital recoveries, has been so low that there has not been the incentive to invest at the rate that is required in that economy.

Chairman BENTSEN. Thank you, Mr. Jones.

Mayor Mineta, you made a number of points here about tax incentives and the results. You used that term on interest paid when you referred to homes and I get the impression from your comments that you actually opposed that, and yet in your prepared statement you say, "I don't want you to infer from my comments thus far that I am against the programs which make up the elements of current national urban policy. The contrary is true."

Does that mean that you still favor the deductibility of the taxes on homes, and interest rates on mortgages?

Mayor MINETA. I think what we are seeing is that there have to be linkages between the kinds of responses, legislative responses that we have to a problem. We have to see the linkages between those legislative responses and what we see is the policy; namely, a tax policy that allows for the migration of people from central cities. And then we have to turn around and have, let us say, a much more expensive policy which is constituted in the form of an urban renewal policy.

Chairman BENTSEN. But you still believe we ought to have an incentive for homeownership?

Mayor MINETA. There is no question but what that incentive is necessary, but what we have to do is build in the linkages between these different policies that I have mentioned so that they do not become counterproductive.

Chairman BENTSEN. Mr. Brown, do I get the impression from what you have stated that you do not really subscribe to the Club of Rome philosophy or "Limits to Growth" treatise. Do you think that is probably just a simple extrapolation into the future of what has happened in the past and do you believe social pressures and economic pressures will result in some favorable change possibly in slowing down population growth, and in producing creative substitutes in the output of the economy?

Mr. BROWN. What the Club of Rome did was to make certain assumptions about economic growth, population growth, and so forth and projected those into the future. I am hopeful that we will not continue until we reach the collapse that they pointed out.

One of the interesting things about the Club of Rome study is, as you know, that it has only been out 2 years and most of the commodity scarcities they were projecting along with the ecology stresses during the early part of the next century have, if I understand the newspaper headlines rightly, already been occurring in energy and food, and ocean fisheries and in a number of other very, very basic areas.

Chairman BENTSEN. Mr. Brown, one of the things I feel very strongly about is the curtailment of research and development funds spent on the development of food and the growing of food and we have been seeing that happen. Where we used to spend 10.1 percent of our agricultural budget back in 1955 on R. & D. for production of food, we now have it down to 2½ percent, and that is counterproductive. We have had incredible breakthroughs in the past on production for palatability and for more plentiful and cheaper food and now we are going in the other direction.

Mr. BROWN. I share your concern fully. We must now reverse this trend of declining funds for agricultural research.

Chairman BENTSEN. Let me comment to you, Mr. Ross. I agree with so much of what you have stated, and I appreciate your comments concerning my Stockholders Investment Act. But, I wonder how you can really build up capital if you encouraged the payment of dividends, as you apparently alluded to as in Canada and Britain? Do you really want to get some retention of capital for investment problems we are facing?

Mr. ROSS. Well, the thrust of that argument is it will attract the saver into making the investments in our corporations because the corporations will be permitted to pay larger dividends.

Chairman BENTSEN. You think it makes the stock more attractive and, therefore, gets the market value up and they can go into the equity markets?

Mr. ROSS. Right.

Mr. JONES. And the dividends become savings for reinvestment.

Chairman BENTSEN. Senator Javits.

Senator JAVITS. Thank you, Mr. Chairman. I will watch the 5 minutes, too, and I wish the staff would let us know when 5 minutes are up. Could they do that, Mr. Chairman, for us?

Chairman BENTSEN. Yes, of course.

Senator JAVITS. On this matter of dividends, I was going to ask you about that, so I think I might as well ask it now.

I would like to ask both. That is the question of whether the incentive will create a socially desirable objective, or whether you need some governmental direction to do it. Therefore, I ask you would you put a limit on the exemption of dividends from taxation in order to hedge the possibility that the recipient of the dividend will buy his wife a new diamond ring, which is building up the price of diamonds, but not helping the economy?

Mr. ROSS. That was addressed to me, Senator Javits? My answer is that it is not aimed so much as collecting the money from the investor again, but it is an incentive to the corporations to pay out larger dividends. And the dividends he pays reduces his corporation tax. Otherwise, you have a double tax action and it does not affect his ability, it does not affect the corporation's ability to accumulate money internally.

Senator JAVITS. I know, but you have justified that impulse by saying that it would produce more money for reinvestment in the market. I challenge that, unless you put a limit on the dividends and I ask you to comment. I get that implication in what Senator Bentsen had said and I agree with him.

Mr. ROSS. Well, I don't think that you should put a ceiling on that because it provides an incentive for the investor to put his savings into the market.

Senator JAVITS. But I just pointed out that his choice may be that he will put it in a diamond ring or great paintings, and that is not going to help the economy.

Mr. ROSS. We assume that there is a natural leveling out among the various resources and what a person can do with his savings. He can put them in the bank or in the market, and there will tend to be automatic adjustments.

Senator JAVITS. Mr. Jones, I will not have time to ask you the many questions I have. You are the president or the chief executive officer of the principal employer in my State, and it is very important and I think it is the stroke of genius that you are here to testify on this panel.

Chairman BENTSEN. Senator Javits, I want all of the members to feel that they can ask questions in writing because of the limitations on time.

Senator JAVITS. Good.

Mr. JONES. We would welcome that.

Senator JAVITS. Thank you very much. I really compliment you on your testimony. It is very perceptive. All of this has been awfully good, but I cannot ask you all of the questions I want. So, I would like now to ask Mr. Ross, if I could, because he made such a strong case for corporate profits in his prepared statement, and I feel very strongly there is no understanding of what corporate profits mean. Indeed, that most profits are tremendously overstated in terms of depreciation allowances and other reserves in view of the present inflation and it costs you lots more than the present figures to replace what you have. So, would you tell us, as I understood it, why profits are socially desirable, in your opinion, Mr. Ross?

Mr. Ross. Well, Senator Javits, to take as an example the oil industry, only because they have been very much in the public limelight here. To read the testimony that they have made in connection with their own profits, I must say from where I sit they do not know how to defend themselves. These profits that the companies have been making in the oil industry have brought them back to a level of about 15 percent on their equity capital. And that has caused a great cry throughout the land.

I might point out that Coca-Cola earns 22 percent on its capital and no one says a word about it. And they do not have the facilities or the responsibilities of capital and personnel as the oil companies have. Standard Oil of California had a 14.5 percent return on its equity capital. The New York Times, one of the less profitable of the major chains earned 14.3 percent.

In 1970, the New York Times earned 13 percent and Standard Oil of California earned 9.8 percent. There is a misunderstanding as to these earnings that our oil companies have reported, only because it was compared to a period when their activities were relatively depressed. But, more important perhaps than that is the money they are making is just in transit, back to the Treasury or the people.

In March, 1974, a few months ago, the oil companies bid a total of $2.2 billion for the right to drill for oil in Louisiana. If they are unsuccessful, they lose the $2.2 billion and if they are successful, they will have to invest many, many billions more, and wait many years before that money comes back to them.

The money that they turned over to the Department of Interior comes back to the U.S. Treasury. It involves the enrichment of no particular group or class, if you analyze it. Similarly, it was only a few months ago that Gulf Oil and Shell combined and invested $200 million for some oil shale. A few years ago the Department of Interior could not have sold that for a few million. That $200 million goes back to the Treasury.

Profits are taxed at all different levels, and some people are able to hold onto it a little longer than others. But, it is all within the framework of our incentive system, and the tax collector is at one level or another to capture it again and finally with inheritance tax. So, I think the people are unduly concerned, and they do not understand the nature of the profits.

I might point out in connection with Exxon. In February, 1970, Exxon was so short of money that they had to go to the public and raise $400 million by selling stock under the book value. That particular point in time, the company owed over $2 billion, and they did not want to borrow any more, or maybe they could not borrow it if they wanted to. But, that goes unnoticed, and unsung. For a half a dozen months things have been going well for this group, and there is a great deal of abuse, I think, which has been put upon them. And this is not to cover up any unreasonable tax elements in their structure that should be rectified.

The perception of profits in our society must be changed by our lawmakers and our opinionmakers, or they are going to destroy the goose that laid the golden egg.

Senator JAVITS. Thank you, Mr. Ross. Thank you, Mr. Chairman.

Chairman BENTSEN. Thank you very much, Senator Javits.

Congressman Moorhead.

Representative MOORHEAD. Thank you, Mr. Chairman.

I want to compliment all of you gentlemen for excellent statements, very thought provoking. One of the things that rather intrigued me is that the four of you, very, very, diverse backgrounds, seem to come out with a common theme.

Well, Mr. Brown said the consumer joy-ride was over. And Mr. Jones and Mr. Ross talked about the need for more savings for capital formation. And Mayor Mineta talks about urban conservation, which is all somewhat related. I think there is an interesting thread going throughout this testimony.

Mr. Jones, you talked about how deeply inflationary forces are imbedded in our total system at the present time. Are you thinking there of our national, U. S. inflationary problem, or are you thinking of it as a worldwide problem, or both?

Mr. JONES. Well, it is definitely worldwide. Mr. Brown said it is global. And it is certainly imbedded in our system as well. We escaped it longer than most industrialized nations but it is with us now. And we cannot look for any panacea for any immediate cures. This is going to be something that is going to take some considerable period of time to work out.

I believe that we all know the cures. We know what causes inflation and we all know the cures. But, they are terribly painful, and politically so; they are terribly painful.

Representative MOORHEAD. I wonder if the United States, no matter what policies we adopt can cure inflation if there is worldwide inflation? Will we not be infected by this disease?

Mr. JONES. Well, economists argue long and loud about the degree to which inflation is exported or imported from one economy to another. There has been a great deal of talk about how the United States exported inflation over many years because of the use of the dollar not just as a transaction currency, but also as a reserve currency. We were very concerned with the enormous overhang of Eurodollars and all of the nations in Europe were complaining about the fact that we were, by constantly running this dollar abroad, causing them problems in their own economies.

I am not sure that there is any hope that we can totally insulate ourselves from the inflation rampant in other sections of the world, even if we take the necessary medicine at home. But, we can certainly differentiate our own rate of inflation sharply from that elsewhere in the world.

I think Mr. Brown made an awfully good point about the shortages that we are going to face and the impact that those will have on our economy. I cannot be quite as Malthusian in my approach to the problem as he. The ingenuity of man has come up with many answers in the past, and it will again in the future. The hydrogen economy, for example, is something that can be a reality. We have got work to do.

Your point, Senator Bentsen, about the need for R.&D. funds is so well put. They are needed in agriculture and in industry. But we will find solutions that will at least to some degree give us a handle on the larger, longer range problems that have been mentioned here. It is our hope that if we are sufficiently farsighted, and through the work of subcommittees such as this, we can begin to realize the enormous complexity of these problems and begin to recognize the need to move from a consumption-oriented economy to one that is going to be concerned largely with the economics of production and development and capital.

I think we can wind up with a sharply differentiated rate of inflation compared with other countries. That is why in our forecast, we have used the rate that I have mentioned, which is certainly far above historic standards, when you talk about 5 percent, but well below the double-digit rates that we are encountering now, as is most of the world.

Representative MOORHEAD. I would now like to ask a question of the Malthusian representative. I realize, Mr. Brown, that in the best of all possible worlds the solution to scarcities and inflation is international agreement. But, I think we, on this committee, have to at least consider the alternative if we do not get an international agreement. What should we be thinking about to take care of our own people, if we do not happen to have an international agreement? First, I think we should decide whether we can feed our own people with our own domestic production.

And second, I think we should look to those materials, raw materials and minerals particularly, which we do not produce domestically and which are produced by few countries, and arrange them in order of their absolute necessity and the availability of substitutes. This grouping could lead to an R.&D. program that might preclude our overdependence on any single material at some future date.

Mr. BROWN. Well, as to the first point, I do not consider myself a Malthusian, and, indeed, the case I am making is that I think we are rational enough to get off the path we are now on before the Malthusian forces begin to operate. I could be wrong. But I am hopeful, at least, that we can do that. And what I am suggesting is that we recognize the need to do it.

I think in terms of looking at the United States and resources we need with the passage of time, it is becoming more and more difficult for us to think independently of the rest of the world. There is in the pamphlet I submitted for the record a table that looks at 13 of the principal minerals used in this country and the trend in dependence during the last half of this century. It shows very clearly that whereas we have historically been an essentially self-sufficient continental storehouse in energy, fuel and raw materials, we are moving rapidly to the situation where that is no longer the case.

In the food area, I do not think there is any question but that we can feed ourselves, as far as we can see into the future—particularly if the population growth continues to slow as it now is doing.

The more important question, it seems to me, is that in a world of scarcity, with the rising prices for many important raw materials, how are we going to pay the import bill? That is where sharing our food with others has to loom very large, because, as you know, agriculture has been carrying much of the load for paying the energy import bill for the last year or two.

Representative MOORHEAD. Thank you, Mr. Chairman. My time has expired.

Chairman BENTSEN. Thank you very much.

These hearings will reconvene at 10 o'clock tomorrow morning in room 4200.

Gentlemen, you have made a real contribution. I think we are off to a good start and we are very appreciative. Thank you. The subcommittee stands recessed.

[Whereupon, at 12:20 p.m., the subcommittee recessed, to reconvene at 10 a.m., Thursday, May 9, 1974.]

[The following written questions and answers were subsequently supplied for the record:]

RESPONSE OF REGINALD H. JONES TO ADDITIONAL WRITTEN QUESTIONS POSED BY CHAIRMAN BENTSEN

Question 1. Senator Mansfield has expressed his belief that there is an urgent need for the Government to establish new machinery to foresee and cope with longer-term economic problems. Do you agree that this need exists, and, if so, just what type of new machinery would work best?

Answer. Senator Mansfield's testimony before the Subcommittee on Economic Growth on May 8 focused largely on development of a mechanism for anticipating commodity shortages and converting its projections into recommended policy alternatives for consideration by the Congress, Executive Branch and, by implication, the private sector.

About a month later, on June 12, the Senate adopted S. 3523 to create a 13-member National Commission on Supplies and Shortages designed, in part, at least, to carry out the recommendations of the Majority Leader's testimony. Surely the objectives set forth for this Commission are worthy, and I trust the House and the Administration will give this legislation positive consideration.

In the energy field alone, the Commission and its studies should supply a much more sophisticated public and legislative understanding not only of the nation's energy needs but of what to do about them, when and how. The present fragmented approach on nuclear policy, oil import quotas, natural gas regulation, petroleum exploration and coal mining, to name just a few, invites repetition of the miscalculations, stalemates, and delays which brought us where we are in energy availability.

Many hard choices need to be made in the light of the necessary trade-off decisions required.

I would strongly urge, however, that such a Commission should focus its efforts on forecasting and anticipating commodity shortages and other economic problems such as capital shortages that may face our country in the years ahead. It should resist all temptations to assume the role of economic planning for the nation; no state planning has ever achieved the flexibility, response, and success of the market-directed economy.

In my view, the prime function of such a Commission would be to alert the nation to emerging economic problems so that the Government would be in a position to use all resources of the private sector, no less than the public sector, in the development of effective solutions.

Question 2. You have stressed the capital investment needs of both the private and the public sectors. These needs over the next decade may strain the capacity of traditional channels of finance. Should we allocate credit by letting interest rates go higher and higher, thereby cutting housing and public investment out of the competition for funds? Or should we have direct policies of credit allocation? Or are there other options available?

Answer. May we suggest that the preferable course would be the adoption of national policies which will increase the supply of capital, and thus make governmental allocation unnecessary.

Governmental allocation systems should be avoided as much as possible because they end to disrupt and distort the most effective allocation system we have—that is, the market system. Government does have an important role, and that is the formulation of policies (especially tax policies) that encourage and permit individuals and corporations to boost savings, and thus to fund future capital outlays in a non-inflationary manner.

Several suggestions along these lines were included in our testimony.

Question 3. You have recommended that we encourage foreign investment capital in our economy. What incentives or restrictions would be needed to increase capital while keeping management decisions in the hands of domestic producers?

Answer. At a time when the U.S. balance of trade is moving into the red due to the rising costs of imported oil, it is important that the U.S. attract its fair share of foreign long-term capital, notably so-called petro-dollars, in order that we enhance our balance of payments position.

The House Ways and Means Committee has recently proposed that the U.S. discontinue the Withholding Tax on dividends of foreign portfolio investors. This seems to be a step in the right direction, especially since oil producers are not subject to income taxes against which they could get credits for U.S. taxes. Equally important is the need to stimulate *direct* investments which involve foreign investors who would own more than 10 percent in a given company. They, too, should be exempted from U.S. Withholding Taxes.

If the Congress is concerned about foreign control of U.S. corporations, the Withholding Tax might be waived only for those investors who would own less than a specified percent of a U.S. company. However, I would add that for a strong and well developed economy like the United States, the fear of foreign domination is rather far-fetched. Action by the United States to place undue restrictions on foreign investment would probably be used by other nations to justify further restrictions on U.S. investment overseas—to the detriment of the U.S. balance of payments.

Question 4. You note that the regulated industries—electric and gas utilities, railroads, airlines, and communications companies—face extraordinarily high needs for capital. At General Electric you have naturally taken a careful look at the investment needs of the electric utility industry. Could you comment briefly on what you foresee those needs to be and how you expect them to be financed? In making these estimates, what kind of assumptions do you make regarding possible shifts in the demand for electricity due both to rising prices and to possible government efforts to promote energy conservation?

Answer. In my testimony, I outlined the order of magnitude of plant and equipment spending which we expect for the U.S. during the next twelve years. This included capital outlays by private electric utilities of $450 billion, and the figure goes to more than $500 billion if we include the government-owned utilities.

Our economists based their forecast on the future demand for electric energy as well as the relative importance ofthe highly capital-intensive nuclear generation. Specifically, they were guided by the following considerations:

(1) The Government will encourage increasing use of coal and uranium—and thus electricity—in order to limit U.S. dependence on imported fuels.

(2) Compared to the pre-embargo situation, the cost of electric energy will rise less than oil and gas prices. Moreover, natural gas and oil will be in short supply. These factors will encourage substitution of electricity for other types of energy.

(3) As a result, rising electricity prices and conservation measures will probably reduce the rate of growth in electric demand only slightly below its historic rate.

My comments about the inadequacy of corporate profits—especially when adjusted for the hypo-effect of inflation—are particularly applicable for the electric utility sector. The cumbersome rate adjustment process penalizes this industry at a time of rapid cost inflation so that declining profitability compounds the inadequacy of depreciation reserves. This may well explain the precipitous decline in utility stock prices and the downgrading of their bonds which jeopardize the ability of many regulated companies to fund badly needed expansion.

I, therefore, strongly urge that the Subcommittee tackle the perplexing question of how to regulate utilities during inflationary periods which, I'm afraid, will be upon us during the foreseeable future. You might perhaps study the pro's and con's of Federal tax relief; whether more liberal depreciation rules could provide the necessary cash flow; or whether there is a way in which national guidelines might help the states to liberalize and accelerate the process of rate adjustments.

While utility rates are primarily a matter of state regulation, federal agency actions have had a significant adverse effect on the utilities' financial problem. As just one example, AEC licensing delays have contributed to lengthening the time cycle from the initiation of a new power plant project until commercial production from 5–6 years in the sixties to 8–10 years at present. This has significantly retarded the introduction of more efficient power plants, forcing the continued use of higher cost alternatives, and resulting in extended tie-ups of utility capital before new plants can begin to generate revenue. More broadly, the whole decision-making system for the proper balancing of environmental constraints and energy needs should be reviewed with the objective of reducing uncertainties and delays which seriously affect the outlook of the utility industry.

Question 5. One tax expert has stated: "By adopting ADR (Asset Depreciation Range) as a part of the Revenue Act of 1971, we abandoned a concept which has been an integral part of the tax law for forty years—namely, that deductions for depreciation of capital assets must be based on the actual useful life of the asset." Would you care to comment on this?"

Answer. The implication here is that our depreciation practices of the previous forty years were correct and the adoption of ADR was not justified. To the contrary, we believe that the adoption of ADR helped to correct a serious policy error made forty years ago. It is part of an evolutionary process aimed at improving this part of our tax structure, to assure adequate recovery of capital and replacement of obsolete equipment and facilities.

The statement of your tax expert is incorrect in several respects, namely: (1) in asserting that the matter of depreciation lives has been an integral part of our tax laws, whereas in fact it has been an essentially administrative matter; (2) in describing past practice as requiring depreciation to be based on "actual" useful lives, whereas depreciation allowances of necessity have to be based on estimates of future usefulness, and (3) in alleging that the concept of useful life has been abandoned, whereas the Internal Revenue Service has stablished an Office of Industrial Economics to monitor industrial experience, forecast useful economic lives, and based thereon to recommend changes in the ADR system.

A brief history of changes in tax depreciation policy will be helpful in understanding the place of ADR in this evolutionary process.

During the first twenty years of the Federal income tax, taxpayers had considerable latitude in determining their depreciation allowances. As long as they were determined in accordance with sound accounting principles consistently applied, such allowances were not challenged unless there was clear and convincing evidence that they were unreasonable. In 1933, purely as a revenue-raising measure, the Ways and Means Committee proposed to reduce depreciation allowances by 25% for the years 1934, 1935, and 1936. The Treasury Department assured the Committee that an equivalent result could be achieved administratively and the legislative proposal was dropped. The Treasury's method was to shift to the taxpayer the burden of proving that its depreciation allowances were reasonable. This meant that thereafter taxpayers had to use the Treasury's Bulletin F in determining depreciable lives unless they could somehow prove their right to use something shorter. Since it is obviously impossible to "prove" how long an asset purchased today will be useful in the business, disputes were numerous, negotiations arduous and time-consuming, and their resolution unsatisfactory. The Treasury's program was economically harmful in that it caused the retention of assets beyond the time when they would otherwise have been discarded and replaced with more modern equipment. The situation was somewhat alleviated for a time by the program of five-year amortization for defense facilities during World War II.

Thereafter complaints proliferated and it became increasingly apparent that a more enlightened depreciation policy was needed. In 1953, the Internal Revenue Service issued a ruling to the effect that depreciation deductions would not be disturbed unless there was a clear and convincing basis for a change. It was generally agreed that this pronouncement was not effective in reducing controversies.

As a part of the Internal Revenue Code of 1954, the double declining balance and sum of the years-digits depreciation methods were authorized by the Congress. There were helpful to taxpayers from a cash flow standpoint as they permitted a greater portion of the cost of depreciable assets to be recovered in the early yars of their depreciable lives. This making available of additional flexibility in the pattern of recovery over the recovery periods had no effect on the recovery periods themselves, which remained an administrativ matter within the jurisdiction of the Treasury and the Internal Revenue Service.

It was clear that the matter of lives still required attention. In 1957 and 1958 the Internal Revenue Service undertook a study to revise and update Bulletin F, but the results were never adopted because it was felt that they gave insufficient weight to increasingly rapid obsolescence.

In 1962 the so-called "Guideline" procedure was promulgated by Treasury under which assets were grouped in guideline classes with a guideline life established for each. The guideline lives were somewhat shorter than those theretofore in actual use. A "reserve ratio test" was a part of the Guideline system. The application of the reserve ratio test was intended, over a considerable period of time, to result in adjustment of a taxpayer's depreciable lives in accordance with its actual past history of additions and retirements.

President Kennedy in announcing this change said:

"Although the executive branch has long been authorized by statute to allow reasonable deductions for depreciation based on obsolescence as well as wear and tear, the Internal Revenue's Bulletin F has never been changed since its publication in 1942, despite the vast and apparent changes in the rate at which modern machinery in a new age of technology can become obsolescent and require replacement."

The reserve ratio test was a complex mechanism. One of its features was that it allowed a 20 percent variation from the result obtained by formulizing the taxpayer's actual addition and replacement experience. A three-year moratorium accompanied the adoption of the reserve ratio test as a part of the Guideline system in 1962. In 1965 a new variation of the reserve ratio test was authorized as an alternative and new transitional and minimal adjustment rules were introduced. The 20 percent tolerance from the computed result was retained.

These efforts to make the reserve ratio test an effective instrument of depreciation policy failed. The principle was basically defective. It affected newer businesses and older businesses unevenly; it provided no means for taking into account machinery and equipment that was retained only on a standby basis, but had not yet been physically retired: and, most important, was retrospective in its focus—i.e., its relied heavily on past history.

Moreover, the reserve ratio test was extremely complex. A survey by the Internal Revenue Service showed that nearly 90 percent of experienced revenue agents even after spcial training regarded the reserve ratio test as unworkable and favored abandoning it.

The ADR system was promulgated by Treasury in 1971. One of its features was to allow a variation of 20 percent above or below the lives prescribed under the Guideline system. Another was to eliminate the reserve ratio test. It also dealt with the so-called first-year convention, the problem of salvage value, and the treatment of repair and maintenance expenditures, and expanded the use of closed-end accounts for each year to facilitate the gathering of data on additions and retirements for the purpose of monitoring the reasonableness of the depreciable lives in use.

It is apparent from this history that the matter of depreciable useful lives has always been under the jurisdiction of the Treasury Department and has not been embedded in the law, which merely provides for the deduction of "a reasonable allowance for—exhaustion, wear and tear (including a reasonable allowance for obsolescence)—." The Staff of the Joint Committee on Internal Revenue Taxation reached a similar conclusion in a report issued in 1960 in which it said:

"Consistently, the statute concerning depreciation has been general, not requiring either any certain method of accounting or uniformity in annual deductions, so long as the taxpayer followed a reasonably consistent plan in recovering the original cost or other basis of his property, less salvage value, free of tax. Thus, depreciation has an administrative rather than a legislative history in U.S. tax law."

It is true that the Congress approved the ADR system by legislative amendment in 1971, but this was only in response to self-appointed "public interest" critics who contended that Treasury had exceeded its authority.

To summarize:

The determination of useful lives for tax depreciation purposes has since 1913 been done by administration rather than by legislation;

There has been no concept of basing depreciation deductions on "actual" lives. The objective has always been to attempt to forecast future usefulness. For a period of time, this was done, mistakenly, as is now generally recognized, solely by reference to past history;

Far from being a revolutionary move, ADR was simply one in a series of steps aimed at adapting our tax depreciation policy to modern needs;

To assure the continued reasonableness of depreciation deductions (and avoid "abandoning" all ties to past experience), a mechanism has been established to monitor patterns of plant additions, retirements, and replacements and recommend changes in the ADR system where indicated.

Response of Hon. Norman Y. Mineta to Additional Written Questions Posed by Chairman Bentsen

Question 1. Economists for many years have been fond of defining policy in macro-economic terms. Yet much of the real impact of economic policy occurs on a disaggregated basis at the local level. How can we devise National economic policy that takes better account of the long-term impacts of that policy on local communities and life styles?

Answer. The principles are clear. Economic policymaking should be more purposeful and more self-conscious. What is needed is better goal-setting, improved processes for assessing the consequences of public policies, a stronger effort to eliminate the conflicts among public policies, and the willingness to take action to meet the desired goals and soften the undesired consequences of otherwise reasonable policies.

Unemployment is one general example used in the testimony. A certain rate of unemployment may be desirable in terms of the growth and stability of the national economy. But, if these goals come into conflict with the goal of full employment, which one takes precedence? And, how is the decision made? Furthermore, when a national unemployment rate of 5 percent translates into rates two or three times that for certain cities can the representatives of those cities be expected to think this "acceptable?" Unemployment is, in part, a consequence of economic policies and in a sense is an economic tool. Those who use this tool are ready to accept credit for good results. They should be as ready to accept blame for the bad on the responsibility of minimizing the bad.

Another example used in the testimony was the use of Federal expenditures to stimulate the economy. The tendency in these cases is to spend the most readily available money at the least political risk and often this means defense money. When the money is spent, rarely are the side-effects for local situations taken into account. More thought must be given to where money spent for macro-economic purposes will go—where, both in the sense of purpose and in a geographic sense.

In the testimony it is stated that, "Federal procurement activities alone directly or indirectly account for approximately 17 percent of the GNP. The patterns of procurement can create an economic boom situation in one part of the country and undermine community viability in another." Why cannot the side-effects of this Federal activity be redirected in ways consistent with intentional policy?

According to William Alonso, "Defense, as the largest budget item, is clearly one of the principal determinants of the location of growth. Although a 1967 Independent Study Board recommended that regional development considerations be taken into account in procurement policies, Congress has insisted that contracts be awarded on the basis of least cost, requesting only that the purchases be dispersed only if costs are equally low." As a consequence the Federal government pursues a hidden regional growth strategy that is probably stronger than its avowed one, unclear as it is.

Unemployment and government procurements are rather obvious examples of how macro-economic policy decisions are disaggregated at the local level. A long quotation from the same article by William Alonso makes the same case for the broadest economic policy decisions.

One of the central preoccupations of national domestic policy is the cyclical control of the economy. In recent years there have been shifts in emphases between the use of monetary policy and fiscal policy, and within fiscal policy between an emphasis on tax inducements to investment and direct employment in public works. Whatever the merits of these policies as counter-cyclical measures, their regional consequences may be quite different. Tax credits for business investment favor localities whose economy is based on capital-intensive activities with a capacity for rapid adoption of new capital. Since it appears that smaller cities specialize in well-established traditional industries, whose technology has developed capital-intensive forms along well-established lines, it might be expected that such localities would benefit especially. Similarly, fast growing areas, which need capital for new enterprises would be expected to benefit. On th other hand, an increase in the supply of money and a lowering of the discount rate (or the reverse) under monetary policy would affect most sharply fast growing regions, both for public and private investment, including consumer investment in the form of housing and durables. Swings in the interest rates of municipal bonds might affect local tax rates and borrowing capacity in such regions for several decades, thus affecting their attractiveness in terms of levels of public service, their ability to invest in physical and social infrastructure, and so forth. Comparably, fiscal measures based on lowering taxes will have different effects from public works ones, since the ability to mount rapidly substantial programs will vary greatly from region to region, as will the usefulness (other than counter-cyclical) of the projects. General tax reduction, including income tax reduction, would presumably favor large, high income urban aseas with stable rates of growth. (William Alonso, *Problems, Purposes, and Implicit Policies for a National Strategy of Urbanization*, University of California: Institute of Urban and Regional Development, Working Paper No. 158 prepared for the National Commission on Population Growth and the American Future, August, 1971, pp. 22-23.)

As suggested above the first need is a clearer understanding of the goals of national economic policy and with that a blending of the goals of economic policy with the full set of domestic goals. Wilfred Lewis has put it this way:

In short, there has been a lot of attention to national goals and measuring social progress; in fact, we might almost speak of a national goals industry! But, for all this activity, we are sadly lacking a consensus on what our national goals are at this time. Nor do we seem to have the means of determining such goals, the machinery for pursuing them efficiently, or the means of measuring whether or not we are achieving them. Indeed, we seem to be no further ahead—perhaps not as far ahead—as we were 10 years ago. (Wilfred Lewis, Jr., "Public Police and National Priorities in the Next Decade," *Looking Ahead*, vol. 19, No. 5, p. 5.)

Having goals, without the means can only be frustrating. The ability to judge the real, not the intended, consequences of government actions must be improved, and especially the ability to discern where government action cancel each other out.

How?

It is interesting that four years ago, Lewis pointed at the budget process:

We simply do not have a Federal budget process adequate to our needs. I am well aware that the budget represents "inputs" rather than "outputs," and that budget expenditures are an improper, sometimes even a perverse, measure of progress towards national goals. However, it is also true that most new goals initiatives are going to require budgetary resources, and it is further true that, in our system of government, it is, of necessity, primarily through the budget process that priority choices get made. (Lewis, *op. cit.*, p. 7)

Today, the greater part of that budget process exists—on paper. It would be easy to make a ringing call for more, but no better first step is available than the full implementation of the Congressional Budget and Impoundment Control Act of 1974.

I abided by in spirit as well as law, it requires an explicit general statement of at least near-future goals and imposes the discipline of naming priorities. It requires that significant changes in the proposed levels of federal assistance to state and local governments must be explicitly identified, that appropriations bills must detail impact on state and local governments and that fiscal impact statements must be prepared for local governments. It begins to sort out the conflicting features of Federal actions by requiring estimates of levels of tax expenditures under current laws, thus bringing out into the open the "hidden budget."

The Budget Act does not of course meet all the needs described above, nor does it go far enough. But, seriously adhered to, it would be a significant advance in the effort to make economic policy-making more purposeful and more self-conscious.

Question 2. One of the findings of a study prepared for the National Science Foundation by the Rand Corporation on "Growth in San Jose", May, 1973, is that under the jurisdictional structure of many development patterns and continued competition for power and tax base, it is unlikely that the overall growth pattern of Santa Clara County will be subject to effective control. Today what you find in Santa Clara County, with a population of slightly more than a million, is 16 general purpose Governments, 18 special districts, and 38 school districts. You have strongly recommended that we need an explicit overall National framework for urban growth. Do you believe a similar framework should be attempted at the county level, at the State level, and with what distribution of authority?

Answer. An overall framework for urban growth is needed at the city, county, regional, and State levels as well as at the Federal level. It is essential that cities play a beginning and major role in the creation of a family of plans from the local level through the state level. Once city frameworks are developed they need to be integrated at the county and regional level. Finally, the regional plans need to be integrated at the state level. This bottom to top sequence of developing urban growth framework will insure the needed amount of local input, responsiveness and responsibility and will provide for the desired integration of policies, plans and programs.

A framework is needed at each level because each level has significant resource allocation and/or land development regulation authority and responsibilities. States play a major role in channeling urban growth through annexation laws, highway location, taxation policies, school facility location criteria and funding, etc. Single or multi purpose regional entities are evolving with power to effect resource allocation through grant review processes and with power to regulate urban development. An example of the later is the power that the Bay Conservation and Development Commission (BCDC) has to issue permits for development around the San Francisco Bay. Counties have powers to regulate and approve urban development, much of which eventually ends up in an incorporated city. Counties also allocate resources for hightways, parks and other urban directing and urban serving activities.

At all levels the framework for urban growth should seek to define general objectives and priorities and a strategy for meeting critical needs. Processes for handling the day to day regulatory and service delivery aspects of growth issues should also be included. A main thrust of the framework at each level should be to weave together in a supportive way the programs of the many separate agencies that exist at the level being considered (e.g. the City) and also those programs and agencies below (e.g. school district) and above (e.g. county, regional, state, federal) the level being considered. Also, the elements and approach need to be broad and flexible enough to provide for unforseen events and for the maneuverability needed in meeting future issues. The general elements and intergrative approach outlined above should exist for the urban growth framework of each level of government. However, the specific content and authority at each level of government should differ commensurate with the general role of each level of government. Some key differences are outlined below:

CITIES

Establish future growth pattern including the mix of land uses designed, the extent or limit of growth to be encouraged, and the staged location of new growth.

Plan, budget and provide capital improvements and other services on a staged basis so that resources can be applied in an orderly manner.

Approve new development via zoning and subdivision regulations.
Coordinate with county and regional agencies in developing and implementing the above.

COUNTIES

Plan and budget for facilities and services provided by the county in such a way that they are responsive to needs expressed by cities in City policies.

REGIONS

Work with cities and counties to negotiate and evolve a regional growth framework that defines urban and rural areas and that includes a staged approach to new growth with matched regional facilities and services such as rail transit, preservation of regional major open spaces, etc.

STATES

Work with regions to negotiate and evolve a state growth framework that provides a staged program for delivering state facilities and services.
Federal and State levels should require that planning for urban growth be done by lower level governments and should provide incentives for the planning, but should not dictate directly or indirectly the content of the plans.
Several steps have been taken in recent years, or are in progress now, that indicate the degree of positive activity at the local through the state levels in developing urban growth frameworks and the policies, plans and programs needed to create better communities. Several examples of this activity are listed below.

CITY

Urban Development Policy (See enclosure "A"). This policy defines the area within which the City encourages urban growth and the area where urban growth is not encouraged.
Construction and Transfer Taxes (See enclosures "B" & "C"). These two taxes are applied to new development or to the transfer of real property. The income from each of these taxes is used to help provide adequate facilities for residents of the City. A majority of the funds from each tax must be spent in the planning area in which the tax is generated.
Economic Action Plan (See enclosure "D"). This plan sets forth the objectives, policy and action components of the City's Economic Development Program and relates this program to other key aspects of the City's growth framework such as the Urban Development Policy and the General Plan.
Action Plan for the Future of California Cities (See enclosure "E"). Recently the League of California Cities adopted an "Action Plan for the Future of California Cities". Three elements of this Action Plan provide significant details on the role and responsibilities of city, county, regional and state government in dealing with problems of urban growth. These elements are listed below and are attached to provide detailed items related to the general framework for city, county, regional and state responsibilities outlined above.

1. Environmental Control and Land Use Authority.
2. Social Responsibilities of Cities.
3. Adequate and Equitable Revenue Base.

COUNTY

Local Agency Formation Commission (LAFCO) (See enclosure "F"). In California each county has a LAFCO agency that oversees the coordination of city and district formation and annexation. In Santa Clare County LAFCO has been working to develop a county-wide urban development policy pattern after San Jose's policy.
Inter City Council (See enclosure "G"). This body was voluntarily formed by Santa Clara County and the cities within the county to provide intergovernmental communication and to: serve as an agency fostering intergovernmental cooperation in the development of San Clara County, aid cities in their governmental and proprietary functions, stimulate awareness and study of community

problems, formulate plans and recommendations for areawide development. The body is composed of City Council members and members of the Board of Supervisors.

Intergovernmental Planning Commission. Recently a County Charter Review Committee proposed that an Intergovernmental Planning Commission be created to do broad planning for physical and social concerns in the County. Such a new body could provide an official joint governmental vehicle for cities to coordinate their policies, plans and programs with those of Santa Clara County.

City Services Zoning. This zoning district recently created by Santa Clara County, when applied, would assure that any urban land use would develop within a city because it would be required to annex to a city to receive urban services.

County Supervisors Association of California (CSAC). Study of Local Government. CSAC has initiated a study of the functional and service responsibilities of cities and counties in California.

REGION

AB 2040. This State bill has passed the State Assembly and is awaiting action in the Senate. The bill would create a single regional planning agency for the San Francisco Bay Area. This new agency would take over the powers presently exercised by the Association of Bay Area Government, The Metropolitan Transportation Commission, The Bay Area Pollution Control District, The Bay Conservation and Development Commission and The Bay Area Sewage Service Agency.

Local Government Reform. California's Council on Intergovernmental Relations is in the process of reviewing work by the Governor's Task Force on Local Government Reform. For the past two years, this has been a topic of great interest.

Not all of the examples listed above represent completed activity, but they do represent a strong movement toward the development of workabl local to State growth fremeworks that are matched by policies, plans, programs and organizations to make the frameworks positive impact on the quality of life in our communities.

Question 3. If states and cities adopt policies curtailing further growth and development, what are the implications you foresee for future Americans in terms of their freedom of choice to live and work where they wish and to the development and implementation of a National growth policy?

Answer. This is a question best approached by asking several other questions.

A. How much freedom of choice to live and work where they wish do Americans currently have? For many, the answer is little. On the average it has always been the higher status people who have been more mobile. In central cities today a significant part of the population finds itself separated from jobs and prevented for a variety of reasons living elsewhere. Even the relatively well-to-do find their choices limited by the availability of housing and the condition and character of neighborhoods, schools and public services. To say that Americans now have the right to live where they wish, is by no means to say that anybody can live anywhere.

B. How much freedom to live and work where they wish will Americans have in the future if governments do not formulate growth policies? Less than they have now. When Boca Raton declared a population limit, its rate of population growth jumped. The people of Boca Raton wanted to live in Boca Raton, in a setting and style that they judged would be impossible if the population reached a certain size. Those who moved there felt the same way. If a population limit were maintained in Boca Raton some who might want to live there could not which would be a further limit to live and work where they wish. But, if a population limit were not maintained in Boca Raton it would cease to be the Boca Raton that people wish to live and work in and therefore their rights would be seriously compromised.

Stated in an exaggerated fashion these are the alternatives for the future of the right to mobility—an abstract right to live and work in any undesirable place you wish, or the substantive right to live in a desirable place—the right being limited by public policy rather than destroyed by government in action.

It should be pointed out that growth policies entail a good deal more than population limits. Population in itself is significant only when related to land and resources. Increased population at higher densities need not be undesirable depending on how the population is housed and transported. A growth policy must blend all of these elements.

C. Is it likely that state and local growth policies will, by themselves, have a great impact on the right of Americans to live and work where they wish? No. Strictly state and local actions cannot stand against the pressure of national trends; and the force of contrary national policies. Individual cases will be publicized but the real impact on mobility possibilities or Americans will be slight. Local governments will and should continue to grapple with growth. They are at the contact point and they are the laboratories that will yield conclusions necessary to deal with growth generally. But, if the national problems connected with growth are to be solved, the context of a national policy will be necessary. It is unrealistic to expect that local policies will add up to a national policy. This matter is taken up at some length in the testimony.

Good growth policies should preserve the reality rather than the appearance of the right to live and work where one wishes. If there are no policies on growth, the right will be abolished along with the disappearance of places where people want to live and work. The effort should be to limit the right as little as possible intentionally, rather than eliminate it unintentionally. To accomplish this the framework of a national growth policy is necessary.

Question 4. In your statement you make a quite sweeping indictment of the FHA and similar Federal housing programs. What would you like to see done about the FHA? How do you feel about more recent Federal housing programs intended to promote urban renewal and expand the availability of low income housing?

Answer. The major changes in the indictment against FHA is success. It was intended as an incentive for home-owning for people of middling means. It has succeeded. If public programs in general succeeded in achieving their aims as well as this particular housing program, what a wonderful world this would be. But unfortunately a housing program of this sort is only part of a complete urban policy, most of which does not exist or, as the statement asserts, exists by default. As a consequence home-owning by the middle class in the suburbs has been subsidized, and owning or renting by anyone, but especially the less affluent, in the central city has been penalized. It would be silly to attribute central city deterioration and suburban sprawl exclusively to FHA, but it would be just as silly to deny its influence.

They are too partial in several senses. They are partial in that they offer a subsidy to only part of the population. They are partial in that they support only part of urban development. The results are social and physical distortions of urban areas.

The success of traditional housing programs such as FHA should not be damned but their limitations should be remedied. Public policy and public subsidies should encourage actions that have results that are good in themselves and which do not have destructive side-effects. As times change the criteria for making these judgments change. At present programs which encourage new, sprawl development and discourage renovation and fill-in development should be avoided. Programs which encourage the best and fullest use of existing resources and which distribute the costs equitably should be encouraged.

Certainly programs like urban renewal, when they are not simply pretexts for clearing the land, should be instituted and maintained. But what is the sense of expecting a drop like urban renewal to turn the tide of the long-standing, strong incentives built up by other programs. The statement makes this point at much greater length.

The success of programs to expand the availability of low income housing depends upon the success of a complete urban policy the pieces of which are congruent. Housing programs, such as 235 and 236, effectively developed into subsidy programs for the developer rather than the low-income family for which the programs were initially designed to reach. FHA, which of course is currently experiencing many problems, should not be indicted for success, rather programs in other areas should be indicted for relative failure. And policymakers should be indicted for not clearly declaring the goals to be used in making judgments concerning the success or failure of these programs.

Enclosures: A–G follow.

ENCLOSURE A

URBAN DEVELOPMENT POLICIES

City of San Jose, California

As Revised — April, 1972

URBAN DEVELOPMENT POLICIES

City of San Jose, California

CITY COUNCIL
Norman Y. Mineta, Mayor
David J. Goglio, Vice-Mayor
Joseph A. Colla
Alfredo Garza
Janet Gray Hayes
Walter V. Hays
Roy B. Naylor

CITY MANAGER
T. W. Fletcher

San Jose's first Urban Development Policy was adopted by the City Council on October 19, 1970 and revised April 10, 1972.

BACKGROUND

The goal of the Urban Development Policy is to insure that San Jose's future growth will proceed in an orderly, planned manner to achieve a balanced composition of industrial, commercial, residential, and public uses which preserve and advance the quality of the existing environment. As an important step in achieving this goal, the policies seek to assure that future development will occur in such a manner as to provide efficient and economical public services and to maximize the utilization of existing and proposed public facilities.

San Jose's rapid growth over a wide geographic area during the last twenty years poses physical limitations to the efficient provision of public services. It is generally agreed, however, that a more cohesive and consistent pattern of development could result in lower costs to construct and maintain community facilities and to provide needed public services. More efficient public services will obviously be of economic benefit to the taxpayer.

While a number of conditions were previously factors in San Jose's scattered growth, present boundary agreements between cities and the Urban Development Policy recommendations adopted by the Local Agency Formation Commission (LAFCO), the Santa Clara County Association of Planning Officials (SCCAPO) and the Planning Policy Committee (PPC) will increase San Jose's ability to control growth in a more cohesive manner. The LAFCO Urban Development Policy recommendations include the statement that urban development should occur within cities. A vital part of an urban development policy is agreement with the County of Santa Clara that urban-type developments requiring municipal services should not be allowed to develop in the unincorporated area of the County. Cooperation between the City and County to carry out the urban development recommendations made by the City-County Planning Committee in October of 1969 will also support San Jose's Urban Development Policy. The City-County Planning Committee recommendations are contained in the 1970 Urban Development Policy report available from the San Jose City Planning Department.

An integral part of an effective urban development policy is the City's annexation policy. This policy must be consistent with, and related to the goals of the Urban Development Policy.

In order to assure that the Urban Development Policy effectively direct urban growth and reflect continuing changes in growth trends and capital facilities, the Policy is reviewed annually by the City Council. The Urban Development Policy and the related Annexation Policy were amended on April 10, 1972. The policies were revised after consideration of updated information regarding development, existing and planned capital facilities and vacant land. The Council also considered the recommended Urban Development Policy definitions and policies submitted by the Local Agency Formation Commission (LAFCO), the Santa Clara County Association of Planning Officials (SCCAPO) and the Planning Policy Committee (PPC). The revised policies are presented here.

ANALYSIS

a DESIGNATION OF URBAN DEVELOPMENT AREAS

The objective of the Urban Development Policy is to stage growth in a manner which provides for orderly and planned growth. In order to accomplish this objective, it was necessary to consider (1) the amount of land which will be needed annually to accommodate new growth (2) the areas of the City which currently have adequate utilities and facilities and (3) the amount of land which must be available to avoid artificial inflation of land values. The area designated for immediate urban growth should be that area which is now serviced or proposed to be serviced within five years, provided the area is large enough to accommodate projected growth and avoid inflation of land values.

b LAND REQUIREMENT AND RATE OF GROWTH

Based on Federal decennial census figures, the annual increment of growth between 1960 and 1970 was 24,200 persons. Between 1962 and 1967, 8,000 acres of land were developed for roadways, community facilities and private land uses of all kinds. Based on the growth, approximately 64 acres of land are needed for each 1,000 people added to the population. With the increased number of multiple dwellings and townhouses added between 1967 and 1972, it is likely that the 64 acres of land per 1,000 population ratio is high.

Assuming the population of San Jose will continue to grow at the same annual rate which has occurred for the past ten years, approximately 25,000 persons per year, 1,600 acres will be required annually to accommodate growth. This acreage requirement represents the maximum amount of land needed annually because it is based on a high growth rate and low density pattern of development. In the year following the adoption of the Urban Development Policy, October 1970 to October 1971, approximately 1,500 acres were developed.

ANALYSIS

c DESIGNATION OF SERVICED AREAS

In order to identify the area which should be initially considered for urban development, the location and service areas of existing and proposed urban services and facilities were mapped. These maps are included in the 1970 Urban Development Policy publication available from the San Jose Planning Department. Essential city services and basic utilities were considered in designating serviced areas. Essential city services are police and fire protection, streets, and library and park services. Basic utilities are sanitary services, storm drainage facilities and water service.

An urban area was determined by utilizing the service area maps to determine a boundary consisting of areas having or proposed to have urban services and facilities. The urban or serviced area contains approximately 48,100 acres. Of these 21,500 acres (45%) are developed, 5,600 acres (11%) are approved for development and 21,000 acres (44%) are vacant. The total of the land approved for development and the vacant land is 26,600 acres; this is enough land for 16 years of future growth.

d EFFECT OF LAND AVAILABILITY ON LAND PRICE

In general, as long as sufficient choice is provided, it is assumed that the value of the developable land would not be significantly affected. Land within a given area generally appreciates as the land develops. Based on the previous assumption that 1600 acres is the maximum probable number of acres which could be developed annually, it is felt that the 26,600 acres in the urban area would be a sufficient supply to avoid artificial inflation of land values. Annual review of the policy will assure that enough land remains in the urban area to avoid artificial inflation of land values.

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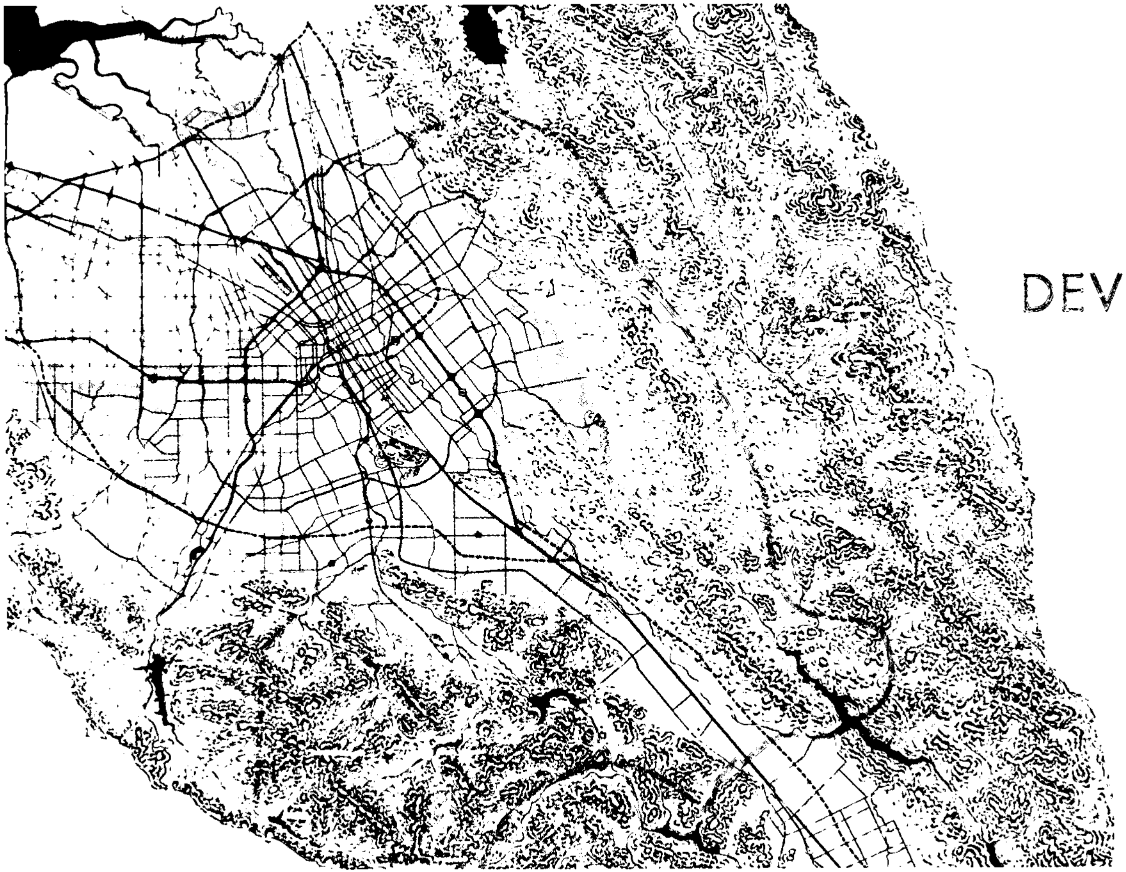
e REVISION IN THE URBAN DEVELOPMENT POLICY

The Urban Development and Annexation Policies were revised on April 10, 1972. The new policies are presented on the following pages. The major changes are briefly mentioned here. The Urban Development Policy, as adopted in 1970, contained three development areas: urban, urban transition and urban reserve. Urban areas were considered for immediate development; urban reserve areas were assumed to be not required for urbanization in the next 15 years. Transition areas were an interim category between the two. After consideration of the size of the urban area at the annual review, the transition area was eliminated by placing developed areas in the urban area and the undeveloped areas in the urban reserve. The transition policy was replaced by a transition process providing for planned expansion of the urban area. The transition process describes a procedure and set of criteria to be used to determine whether properties mapped as urban reserve should be considered for development.

The Urban Development Policy definitions and policies were modified to reflect the new transition process and analysis of the LAFCO Urban Development Policy recommendations.



URBAN
DEVELOPMENT
MAP

POLICY

a URBAN DEVELOPMENT AREAS

The Urban Development Map designates two kinds of areas: **URBAN** and **URBAN RESERVE.**

URBAN – URBAN AREAS consist of existing urban developed areas and vacant and agriculture land either incorporated or unincorporated, within a city's sphere of influence, which are now served by existing urban facilities, utilities and services or are proposed to be served by urban facilities, utilities and services provided in the first 5 years of the city's adopted Capital Improvement Program. The boundary around these urban areas will be called "Urban Areas Boundary." Urban Areas may be divided into two categories:

Urbanized Areas – This includes all urbanized areas that are now part of the city. It also includes urbanized areas that are presently unincorporated that are within the City's 'Urban Area Boundary."

Urban Expansion Areas – Urban expansion areas consist of vacant and agricultural land proposed for urbanization, served by utilities or public facilities now existing or provided for in the first 5 years of the City's adopted Capital Improvement Program, and placed within the city's "Urban Area Boundary." (Other vacant and agricultural land not ready or not desired for urbanization will be placed in URBAN RESERVE AREAS). These lands may be incorporated or unincorporated and in some cases the land may be in a sewer district.

A portion of the Urban Area consist of Urban Open Space Areas. Urban Open Space Areas are composed of lands within the Urban Area including publicly owned lands such as parks, utility corridors, water areas and flood control channels and areas which will be designated in the future as required for park and recreation purposes. This category could also include certain privately-owned lands upon which development should be permanently prohibited for reasons of public health, safety and welfare; such as landslide areas, earthquake hazard areas, and airport flight path zones. Such areas would be designated in the General Plan.

URBAN RESERVE – These are generally areas not readily accessible to utility extensions or where development of community facilities are not programmed. Extensive highway systems may also be required and are also not programmed to serve these areas properly. These are areas which include lands which may be in the City or may be in the County and in San Jose's area of influence. These areas are generally open in nature and contain no urban development. These areas shown in the urban reserve are generally not required for urbanization in the next 15 year period.

An undesignated portion of the urban reserve may be in close proximity to existing urban development and may meet stated criteria for development, as defined in the urban transition process. These areas may be required for development within the next 15 years.

A portion of the urban reserve contains permanent open space. This category, includes publicly owned lands including parks, utility corridors, water areas and flood channels. It could also include lands upon which development is to be permanently prohibited for reasons of public health, welfare and safety; more specifically to meet such needs as: the aesthetic and psychological needs of an urban population for open space; the requirements for an adequate air basin, water shed, and ground water recharge areas for the maintenance of adequate air and water quality; the maintenance of acceptable noise levels; the consideration of public safety with regard to landslide, earthquake, fire hazard, flooding, and air flight areas, and the maintenance of an ecological balance. These areas would be designated in the General Plan.

b

URBAN DEVELOPMENT POLICY

1. Existing and future urban land uses should be in cities. Urban expansion should be planned and programmed by the cities on a staged basis, in cooperation with the county and LAFCO.

2. Urban areas should be designated by cities, in cooperation with the County and LAFCO.

   Areas identified as urban on the Urban Development Map either in the City or in the County, and within the existing utility systems, shall be encouraged for immediate development. Individual areas shall be reviewed as to their ability to be served by the existing or proposed facility systems. (Five-Year Capital Improvement Program.) Both urbanized and urban expansion areas in the County should be pre-zoned as provided for under existing procedures of the City Council. The County should not allow urban uses in the urban area. The City should seek ways of establishing planning and development control within sewer districts in the City's urban area.

   In parts of the urban area where full facilities and services do not exist and are not funded, the City should plan for the expansion of facilities and services and include them in the 5-year Capital Improvement Program.

   The City Manager shall report to the Council on any special funding required to provide public facilities in urban area at such time as specific development is proposed.

   In order to assure that all new urban development be adequately served, each developer will be required to pay the incremental cost for new capital facilities created by his development. This payment will be toward the cost of park land acquisition and first phase park development, libraries, fire stations; parks and public works maintenance facilities, and communication equipment.

3. Areas indicated as Urban Reserve on the Development Map are to be considered non-urban areas. No development should be permitted in most cases. In a few cases, areas mapped as urban reserve will meet the criteria described in the urban transition process and may be considered for urban development. Exceptions may be considered in other cases by report of the City Manager to the Council only if development is considered to be of outstanding value to the existing or future urban community. The report shall include an assessment of the economic and other community benefits of the proposal. Proposed funding of special costs to the developer, and special costs to the City, if any, shall be included.

   Where such a report shows that the costs of developing are higher than ordinary in the urban area, then the extra costs of sanitary sewers, and other utilities shall be borne by the developer. Where feasible, reimbursable contracts may be employed for the construction of municiple water facilities. However, this policy may vary, depending upon the economic and other benefits derived by the City in the approval of the development.

   Where the City has no facilities planned in the near future for parks and recreation, fire protection, libraries or public works maintenance facilities the developer may be required to participate in the additional costs of said facilities and to provide for these as well as other services. The amount he is required to contribute will vary with the type and size of the development he is proposing.

   Urban reserve areas should not be considered for pre-zoning by the City.

   The City will consider the recommendations of the County's urban development/open space program in designating San Jose's urban reserve area in the future.

4. Properties in an undesignated portion of the urban reserve area may meet criteria necessary for urban development. Properties in the urban reserve will be evaluated on an individual application basis using the urban transition process, to determine whether they meet necessary criteria.

   The following urban transition process would be used to consider development. When a specific development proposal is made for an area mapped as part of the urban reserve, the City Manager's report to the Council on the proposal should include an evaluation to determine whether the property met the stated transition criteria as well as an assessment of the economic and other community benefits of the proposal. The transition criteria would require the property to be: (1) located on or near the urban edge, (2) adjacent to existing development, and (3) generally served by existing or proposed facilities or services. Areas meeting these criteria would be considered for development.

5. The City shall designate open space areas (in conformance with State Law). All possible devices should be used to maintain this land in open space.

6. Urban Development shall be reviewed by the City Manager prior to the adoption of the Capital Program or operating budget for each fiscal year. Findings and recommendations will be forwarded to the City Council for annual review and adoption.
7. Activities of the Industrial Development Commission and Housing Task Force should generally be structured within the framework of this policy. Conversely, proposals and recommendations of these committees shall be evaluated for their significance to development in future reviews of this Development Policy. Similarly, all development will be evaluated on a continuing basis in order to assess its ecological implications. These findings also will be considered in future reviews of this Development Policy.

POLICY

C ANNEXATION POLICY

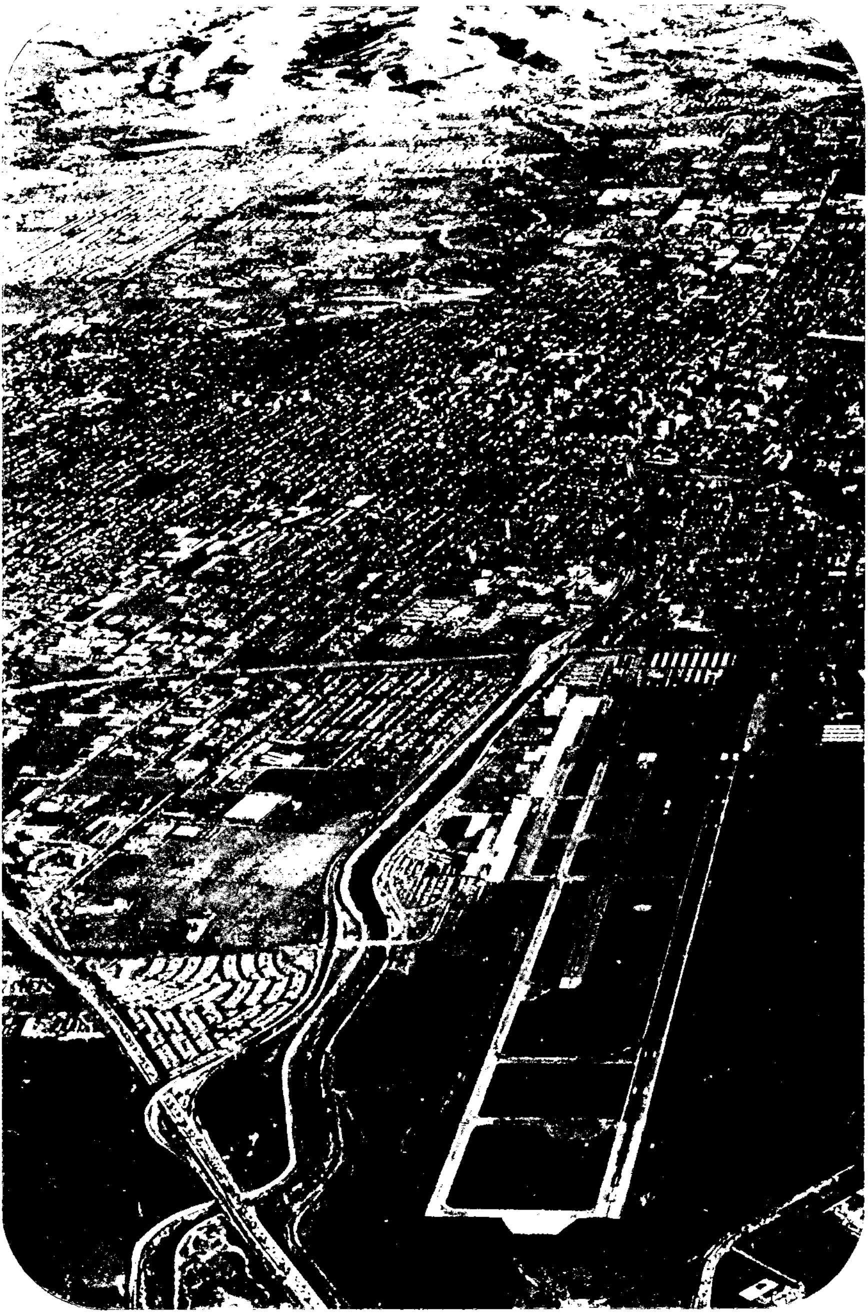
The Annexation Policy of the City should conform closely to the Development Policy. The act of annexation itself is frequently an integral step in the development process.

In the light of the factors and considerations previously set forth, the following Annexation Policy is established:

1. Those unincorporated areas within the City's sphere of influence which are generally within reach of essential city services and which have or are within reach of all basic utilities are encouraged for immediate annexation.
2. These areas lacking one or more of the basic utilities and the essential city services (i.e. the Urban Reserve) shall be considered for annexation only on an exception basis, when in the interest of the City of San Jose. The City Manager will prepare a report for the Council related to any proposed annexation in the Urban Reserve. If the developer has a specific development plan for the property, this report shall include (1) an evaluation of whether or not the development is of outstanding value, and (2) a cost revenue analysis considering both capital facility expenditures and City operating costs which will be created by the proposed development. The report shall also include an analysis of the effect of extending urban services on adjacent areas that can also be served. This report will provide the Council with a basis for deciding if the proposed annexation will lead to a development of outstanding value to the existing or future urban community. Only proposals which meet this criteria should be permitted to annex. If no specific development is proposed, the report shall include (1) a cost revenue analysis for providing services to the property in its current land use, (2) a cost revenue analysis for providing services to the property for the highest use allowed under the General Plan, and (3) an analysis of the effect that extending facilities to serve the projected General Plan land use will have on adjacent areas.

CONCLUSION

The direction of future growth and development is among the most pressing issues facing San Jose today. While the policies presented in this report do not answer all questions and resolve all doubts, they do set a point of departure and a framework for future review and revision.



Enclosure B

Ordinance No. 16250

AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING ARTICLE XVI OF THE SAN JOSE MUNICIPAL CODE BY REPEALING ALL OF SAID ARTICLE XVI AND BY ENACTING, ADOPTING AND ADDING TO SAID CODE A NEW ARTICLE XVI IMPOSING AN EXCISE TAX ON THE CONSTRUCTION OF BUILDINGS AND MOBILEHOME LOTS IN THE CITY OF SAN JOSE

Be it ordained by the Council of the City of San Jose:

Section 1. Article XVI of the San Jose Municipal Code is hereby amended by repealing all of said Article XVI and by enacting, adopting and adding to said Code a new Article XVI to be numebered and to read as follows:

ARTICLE XVI—CONSTRUCTION TAX

16000. Title and Purpose. This Article may be cited as the "San Jose Construction Tax Ordinance".

The tax imposed under this Articles is solely for the purpose of raising revenue. This Article is not enacted for regulatory purposes.

16001. Definitions. Except where the context otherwise requires, the definitions given in the following Sections 16001.1 through 16001.13 shall govern the construction of this Article.

16001.1. Building. A building is any structure having a roof constructed for the support, shelter or enclosure of persons, animals, chattels or property of any kind. A mobilehome shall not be deemed a building.

16001.2. Construct. Construct means the putting together, assembling, erecting or altering of construction materials, components or modules into a structure, or portion of a structure, and includes reconstructing, enlarging or altering any structure. Construct also includes the moving and locating of a building, or portion thereof, onto a lot or parcel of land, and also includes the improvement of land as a mobilehome lot.

16001.3. Dwelling Unit. Dwelling unit means a building, or portion of a building, planned or designed for use as a residence for one family only, living independently of other families or persons, and having its own bathroom and housekeeping facilities included in said unit (e.g., a one-family dwelling, each dwelling unit in a two-family dwelling and each dwelling unit in a multiple dwelling).

16001.4. Family. Family means: (a) one (1) person living alone; (b) two (2) or more persons living together all of whom are related to one another by blood, marriage or adoption, provided that any person related by blood or adoption to one (1) spouse shall be deemed related to all other persons related to such spouse by blood or adoption and shall also be deemed related to the other spouse and to all other persons related to such other spouse by blood or adoption; or (c) if they do not come under the provisions of (b) above, a group of not more than five (5) persons living together.

16001.5. Floor Area. Floor area is the area of the several floors of a building included within the surrounding exterior walls of a building or portion thereof, exclusive of vent shafts and courts. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.

16001.6. Mobilehome. Mobilehome means a vehicle designed and equipped for human habitation, including but not limited to travel trailers, camp cars, recreational vehicles, tent trailers, motor homes, etc.

16001.7. Mobilehome Lot. Mobilehome Lot means any area or portion of a mobilehome park designated, designed, or used for the occupancy of one mobilehome on a temporary, semi-permanent, or permanent basis.

16001.8. Mobilehome Park. Mobilehome Park means any area or tract of land where one or more mobilehome lots are rented or leased or held out for rent or lease to accommodate mobilehomes used for human habitation.

16001.9. Multiple Dwelling. Multiple Dwelling means a building, or any part thereof, which is planned or designed for use for three (3) or more dwelling units.

16001.10. One-Family Dwelling. One-Family dwelling means a detached building which is planned or designed exclusively for use as one dwelling unit.

16001.11. Person. Person means any domestic or foreign corporation, firm, association, syndicate, joint stock company, partnership of any kind, joint venture, Massachusetts business or common law trust, society or individual.

1601.12. Structure. A structure is anything constructed which is supported directly, or indirectly, on the ground (at, above, or below the surface of the ground).

16001.13. Two-Family Dwelling. Two-Family dwelling means a building, or any thereof, which is planned or designed for use for two dwelling units.

16002. Imposition of Tax. An excise tax, at the rates hereinafter set forth in the Article, is hereby imposed upon every person who constructs, or causes to be constructed, any building, or portion thereof, or any mobilehome lot, in the City of San Jose, in which said person has an equity or title or other interest either as owner, lessee or otherwise.

16003. Tax Rates. The rates of the tax imposed under this Article are as follows:

a. Each 1-family dwelling	$150.00
b. A dwelling unit in any building (other than a 1-family dwelling) containing only 1 dwelling unit	114.00
c. Each dwelling unit in a 2-family dwelling	114.00
d. Each dwelling unit in a multiple dwelling containing at least 3, but not more than 4, dwelling units	101.75
e. Each dwelling unit in a multiple dwelling containing at least 5, but not more than 19, dwelling units	82.50

* * * * * * *

16007. Use of Tax Revenue; Construction Tax Fund. All of the taxes collected under this Article shall, subject to the provisions hereinafter set forth, be expended for the acquisition, construction, reconstruction, replacement, remodeling, modification, alteration, enlargement, renovation, furnishing, and refurnishing of the following improvements (hereinafter referred to as "Construction Tax Improvement"), to wit:

(a) City public library facilities, including land and interests in land, library buildings, furniture, books, furnishings, equipment, parking areas and other works, properties, structures and facilities necessary or convenient for the public library system of the City.

(b) City fire protection facilities, including land and interest in land, fire stations, fire engines and trucks, other motorized and unmotorized fire fighting equipment, and other works, properties, structures and facilities necessary or convenient for the fire protection of the City.

(c) City public park, playground and recreation facilities, including land and interests in land, swimming pools, tennis and volleyball and basketball courts, baseball grounds, children's play areas, turf, sprinkler systems, community center buildings, recreation buildings, and other works, properties, structures and facilities necessary or convenient for public park, playground and recreation purposes; and also including any of above-described facilities constructed or installed within or upon any public school grounds where City is given a right to use the same for public playground or recreation purposes.

(d) City maintenance yards for park, playground and recreation facilities, including land and interests in land, buildings, and other structures or works necessary or convenient for the maintenance of City's parks, playgrounds, and recreation facilities.

(e) City public public works maintenance facilities, including land and interests in land, buildings, and other structures and works necessary or convenient for the maintenance of the City's public works.

(f) Communication facilities, including land and interests in land, buildings, structures, radio and other equipment, and other works, properties, or structures necessary or convenient for the communication facilities of the City.

At least seventy-five percent (75%) of the taxes collected in any fiscal year on account of construction in a planning area (hereinafter referred to as "planning area of origin"), shall not be expended except for construction tax improvements situate in the planning area of origin. As used herein "planning area" means a planning area designated as such in the latest adopted General Plan of the City of San Jose.

Up to, and including, but not more than twenty-five percent (25%) of the taxes collected in any fiscal year on account of construction in a planning area may be expended for construction tax improvements which have no fixed site or which may be located in any part of the City without regard to planning areas.

For the purposes set forth above in this section, all taxes collected under this Article shall be placed in a special fund which is hereby created and which shall be placed in a special fund which is hereby created and which shall be known as the "Construction Tax Fund". The Director of Finance shall establish and keep such accounts as may be necessary to account for and control the expenditure of tax revenues pursuant to the above provisions of this section.

16008. Severability. If any provision of this Article, or application thereof to any person or circumstances, is held invalid, such invalidity shall not effect other provisions or applications of this Article which can be given effect without the invalid provision or application, and to this end the provisions of this Article are declared to be severable.

Section 2. Transfer of Moneys From Residential Construction Tax Fund. All moneys and all encumbrances credited or charged to the Residential Construction Tax Fund created by Article XVI as it existed prior to the operative date of this ordinances shall be transferred credited and charged to the Construction Tax Fund established by this ordinance, and credited and charged to the appropriate planning areas.

Section 3. Operative Date. The foregoing provisions of this ordinance shall be operative as of July 1, 1972. Any construction for which a building permit is issued prior to July 1, 1972, and any mobilehome lots for which an electrical or plumbing permit was issued prior to July 1, 1972, shall be governed by the provisions of Article XVI of the San Jose Municipal Code as it existed immediately prior to the operative date of this ordinance, and not by the new provisions of said Article XVI as enacted by this ordinance.

Passed for publication this 22nd day of May 1972 by the following vote:

Ayes: Councilmen—Garza, Goglio, Hayes, Hays, Mineta.

Noes: Councilmen—Colla, Naylor.

Absent: Councilmen—None.

NORMAN Y. MINETA,
Mayor.

Attest:
FRANCIS L. GREINER,
City Clerk.

Enclosure C

Ordinance No. 16251

ORDINANCE OF THE CITY OF SAN JOSE AMENDING THE SAN JOSE MUNICIPAL CODE BY ENACTING, ADOPTING AND ADDING THERETO A NEW ARTICLE, WHICH SHALL BE NUMBERED ARTICLE XVIII, PROVIDING FOR THE IMPOSITION OF A TAX UPON TRANSFERS OF REAL PROPERTY

Be it ordained by the Council of the City of San Jose:

Section 1. The San Jose Municipal Code is hereby amended by enacting, adopting, and adding thereto a new article, said new article to be numbered and to read as follows:

ARTICLE XVIII—REAL PROPERTY CONVEYANCE TAX

18000. Title and Purpose. This article may be cited as the "San Jose Real Property Conveyance Tax Ordinance."

The tax imposed under this Article is solely for the purpose of raising revenue. This Article is not enacted for regulatory purposes.

18001. Imposition of Tax. A tax is hereby imposed on each transfer, by deed, instrument or writing, by which any lands, tenements, or other real property sold, located in the City of San Jose, are or is granted, assigned, transferred or otherwise conveyed to, or vested in, a purchaser or purchasers thereof, or any other person or persons at or by the direction of said purchaser or purchasers, when the value of the consideration exceeds One Hundred Dollars ($100.00), said tax to be at the rate of One Dollar and Sixty-Five Cents ($1.65) for each Five Hundred Dollars ($500.00), or fractional part of Five Hundred Dollars, of the value of the consideration.

* * * * * * *

18005. Instruments in Lieu of Foreclosure. And tax imposed pursuant to this Article shall not apply with respect to any transfer to a beneficiary or mortgagee which is taken in lieu of a foreclosure.

18006. Instrument to United States, Etc. Any transfer to which the United States or any agency or instrumentality therefor, any state or territory, or political subdivision thereof, is a party shall be exempt from any tax imposed pursuant to this Article when the exempt agency is acquiring title.

18007. Plans or Reorganization or Adjustment. Any tax imposed pursuant to this Article shall not apply to the making, delivering or filing of conveyances to make effective an plan of reorganization or adjustment:

(a) Confirmed under the Federal Bankruptcy Act, as amended;

(b) Approved in an equity receivership proceeding in a court involving a railroad corporation, as defined in subdivision (m) of Section 205 of Title II of the United States Code, as amended;

(c) Approved in an equity receivership proceeding in a court involving a corporation, as defined in subdivision (3) of Section 506 of Title II of the United States Code, as amended; or

(d) Whereby a mere change in identity, form or place of organization is effected.

Subdivisions (a) to (d), inclusive, of this section shall only apply if the making, delivery or filing of instruments of transfer or conveyances occurs within five years from the date of such confirmation, approval or change.

18008. Securities and Exchange Commission Orders. Any tax imposed pursuant to this Article shall not apply to the making or delivery of conveyances to make effective any order of the Securities and Exchange Commission, as defined in subdivision (a) of Section 1083 of the Internal Revenue Code of 1954; but only if:

(a) The order of the Securities and Exchange Commission in obedience to which such conveyance is made recites that such conveyance is necessary or appropriate to effectuate the provisions of Section 79k of Title 15 of the United States Code, relating to the Public Utility Holding Company Act of 1935;

(b) Such order specifies the property which is ordered to be conveyed;

(c) Such conveyance is made in obedience to such order.

18009. Partnerships. (a) In the case of any realty held by a partnership, no levy shall be imposed pursuant to this Article by reason of any transfer of an interest in a partnership or otherwise, if:

(1) Such partnership (or another partnership) is considered a continuing partnership within the meaning of Section 708 of the Internal Revenue Code of 1954, and

(2) Such continuing partnership continues to hold the realty concerned.

(b) If there is a termination of any partnership within the meaning of Section 708 of the Internal Revenue Code of 1954, for purposes of this Article, such partnership shall be treated as having executed an instrument whereby there was transferred, for fair market value, all realty held by such partnership at the time of such termination.

(c) Not more than one tax shall be imposed pursuant to this Article by reason of a termination described in subdivision (b), and any transfer pursuant thereto, with respect to the realty held by such partnership at the time of such termination.

18010. Administration of Tax. The Director of Finance of the City of San Jose (hereinafter in this Article referred to as "Director") shall collect the tax imposed under this Article and shall otherwise administer this Article.

He may make such rules and regulations, not inconsistent with the Article, as he may deem reasonably necessary or desirable to administer this Article. In the administration of this Article, the Director shall interpret its provisions consistently with those Documentary Stamp Tax Regulations adopted by the Inernal Revenue Service of the United States Treasury Department which relate to the Tax on Conveyances and identified as Sections 47.4361-1, 47.4361-2 and 47.4362-1 of Part 47 of Titl 26 of the Code of Federal Regulations, as the same existed on November 8, 1967, except that for the purposes of this Article:

(a) The term "realty" as used in said regulations, shall be deemed to mean "real property" as such term is defined by and under the laws of the State of California;

(b) Those provisions of said regulations providing for deduction of the value of any alien on encumbrance existing before the sale and not removed thereby shall not apply.

(c) Those provisions of said regulations relating to the rate of the tax shall not apply;

(d) Those provisions of said regulations which conflict with the provisions of this Article shall not apply.

18011. Due Dates, Delinquency, Penalties, Interest. The tax imposed under this Article is due and payable at the time the deed, instrument or writing effecting a transfer subject to the tax is delivered, and is delinquent if unpaid at the time of recordation thereof. In the event that the tax is not paid prior to becoming delinquent, a delinquency penalty of ten percent (10%) of the amount of tax due shall accrue. In the event a portion of the tax is unpaid prior to becoming delinquent, the penalty shall only accrue as to the portion remaining unpaid. An additional penalty of ten percent (10%) shall accrue if the tax remains unpaid on the 90th day following the date of the original delinquency. Interest shall accrue at the rate of one half of one percent a month, or fraction thereof, on the amount of tax, exclusive of penalties, from the date the tax becomes delinquent to the date of payment. Interest and penalty accrued shall become part of the tax.

18012. Declaration Required. The tax imposed by this Article shall be paid to the Director by the persons referred to in Section 18002. Payment shall be accompanied by a Declaration of the amount of tax due signed by the person paying the tax or by his agent. The Declaration shall include a statement that the value of the consideration on which the tax due was computed includes all indebtedness secured by liens, deeds of trust, or other encumbrances remaining or placed on the property transferred at the time of transfer, and also includes all special assessments on the property which the purchaser or transferee agrees to pay or which remains a lien on the property at the time of transfer. The Declaration shall identify the deed, instrument or writing effecting the transfer for which the tax is being paid. The Director may require delivery to him of a copy of such deed, instrument or writing whenever he deems such to be reasonably necessary to adequately identify such writing or to administer the provisions of this Article. The Director may realy on the Declaration as to the amount of the tax due provided he has no reason to believe that the full amount of the tax due is not shown on the Declaration.

Whenever the Director has reason to believe that the full amount of tax due is not shown on the Declaration or has not been paid, he may, by notice served upon any person liable for the tax, require him to furnish a true copy of his records relevant to the value of the consideration or fair market value of the property transferred. Such notice may be served at any time within three (3) years after recordation of the deed, instrument or writing which transfers such property.

18013. Determination of Deficiency. If on the basis of such information as he receives pursuant to the last paragraph of Section 18012 and/or on the basis of such other relevant information that comes into his possession, he determines that the amount of tax due as set forth in the Declaration, or as paid, is insufficient, he may recompute the tax due on the basis of such information.

If the Declaration required by Section 18012 is not submitted, the Director may make an estimate of the value of the consideration for the property conveyed and determine the amount of tax to be paid on the basis of any information in his possession or that may come into his possession.

One or more deficiency determinations may be made of the amount due with respect to any transfer.

18014. Notice of Determination. The Director shall give notice to a person liable for payment of the tax imposed under this Article of his determination made under Section 18013. Such notice shall be given within three (3) years after the recordation of the deed, instrument or writing effecting the transfer on which the tax deficiency determination was made.

18015. Manner of Giving Notice. Any notice required to be given by the Director under this Article may be served personally or by mail; if by mail, service shall be made by depositing the notice in the United States mail, in a sealed envelope with postage paid, addressed to the person on whom it is to be served at his address as it appears in the records of the City or as ascertained by the Director. The service is complete at the time of the deposit of the notice in the United States mail, without extension of time for any reason.

18016. Petition for Redetermination. Any person against whom a determination is made under this Article or any person directly interested may petition for a redetermination within sixty (60) days after service upon the person of notice thereof. If a petition for redetermination is not filed within the sixty (60) day period, the determination becomes final at the expiration of the period.

* * * * * * *

18022. Use of Tax Revenue; Property Conveyance Tax Fund. All of the taxes collected under this Article shall, subject to the provisions hereinafter set forth, be expended for the acquisition, construction, reconstruction, replacement, remodeling, modification, alteration, enlargement, renovation, furnishing, and refurnishing of the following improvements (hereinafter referred to as "Property Conveyance Tax Improvements"), to wit:

(a) City public library facilities, including land and interests in land, library buildings, furniture, books, furnishings, equipment, parking areas and other works, properties, structures and facilities necessary or convenient for the public library system of the City.

(b) City fire protection facilities, including land and interests in land, fire stations, fire engines and trucks, other motorized and unmotorized fire fighting equipment, and other works, properties, structures and facilities necessary or convenient for the fire protection of the City.

(c) City public park, playground and recreation facilities, including land and interests in land, swimming pools, tennis and volleyball and basketball courts, baseball grounds, childrens' play areas, turf, sprinkler systems, community center buildings, recreation buildings, and other works, properties, structures and facilities necessary or convenient for public park, playground and recreation purposes; and also including any of above-described facilities constructed or installed within or upon any public playground or recreation purposes.

(d) City maintenance yards for park, playground and recreation facilities, including land and interests in land, buildings, and other structures or works necessary or convenient for the maintenance of City's parks, playgrounds, and recreation facilities.

(e) City public works maintenance facilities, including land and interests in land, buildings, and other structures and works necessary or convenient for the maintenance of the City's public works.

(f) Communication facilities, including land and interests in land, buildings, structures, radio and other equipment, and other works, properties, or structures necessary or convenient for the communication facilities of the City.

At least seventy-five percent (75%) of the taxes collected in any fiscal year on account of transfers of real property situate in a planning area (hereinfater referred to as "planning area of origin"), shall not be expended except for property conveyance tax improvements situate in the planning area of origin. As used herein "planning area" means a planning area designated as such in the latest adopted General Plan of the City of San Jose.

Up to, and including, but not more than twenty-five percent (25%) of the taxes collected in any fiscal year on account of transfers of real property situate in a planning area may be expended for property conveyance tax improvements which have no fixed site or which may be located in any part of the City without regard to planning areas.

For the purpose set forth above in this section, all taxes collected under this Article shall be placed in a special fund which is hereby created and which shall be known as the "Property Conveyance Tax Fund." The Director of Finance shall establish and keep such accounts as may be necessary to account for and control the expediture of tax revenues pursuant to the above provisions of this section.

18023. Severability. If any provision of this Article, or application thereof to any person or circumstances, is held invalid, such invalidity shall not effect other provisions or applications of this Article which can be given effect without the invalid provision or application, and to this end the provisions of this Article are declared to be severable.

Section 2. Operative Date. The foregoing provisions of this ordinance shall be operative as of July 1, 1972.

Section 3. County Services. The City Manager and the Director of Finance are hereby authorized to negotiate with the County of Santa Clara for its aid in the collection of the tax imposed by this ordinance. Any agreement so negotiated shall be submitted to the Council for its approval.

Passed for publication this 22nd day of May, 1972 by the following vote:
Ayes: Councilmen—Garza, Goglio, Hayes, Mineta.
Noes: Councilmen—Colla, Naylor.
Absent: Councilmen—None.

NORMAN Y. MINETA,
Mayor.

Attest:
FRANCIS L. GREINER,
City Clerk.

Ordinance No. 16827

AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING SECTION 18022 OF ARTICLE XVIII OF THE SAN JOSE MUNICIPAL CODE (THE SAN JOSE REAL PROPERTY CONVEYANCE TAX ORDINANCE) BY CHANGING THE FORMULA UNDER WHICH TAXES COLLECTED UNDER SAID ARTICLE XVIII MAY BE EXPENDED FOR REAL PROPERTY CONVEYANCE TAX IMPROVEMENTS

Be it ordained by the Council of the City of San Jose:

That Section 18022 of Article XVIII of the San Jose Municipal Code is hereby amended to read as follows:

Section 18022. Use of Tax Revenue; Property Conveyance Tax Fund. All of the taxes collected under this Article shall, subject to the provisions hereinafter set forth, be expended for the acquisition, construction, reconstruction, replacement, remodeling, modification, alteration, enlargement, renovation, furnishing, and refurnishing of the following improvements (hereinafter referred to as "Property Conveyance Tax Improvements"), to wit:

(a) City public library facilities, including land and interests in land, library buildings, furniture, furnishings, equipment, parking areas, streets and sidewalks adjacent to City public library facilities, and other works, properties, structures and facilities necessary or convenient for the public library system of the City.

(b) City fire protection facilities, including land and interests in land, fire stations, fire engines and trucks, other motorized and unmotorized fire fighting equipment, streets and sidewalks adjacent to City fire protection facilities, and other works, properties, structures and facilities necessary or convenient for the fire protection of the City.

(c) City public park, playground and recreation facilities, including land and interests in land, swimming pools, tennis and volleyball and basketball courts, baseball grounds, children's play areas, turf, sprinkler systems, community center buildings, recreation buildings, streets and sidewalks adjacent to City park, playground and recreation facilities, and other works, properties, structures and facilities necessary or convenient for public park, playground and recreation purposes; and also including any of above-described facilities constructed or installed within or upon any public school grounds where City is given a right to use the same for public playground or recreation purposes.

(d) City maintenance yards for park, playground and recreation facilities, including land and interests in land, buildings, streets and sidewalks adjacent to City maintenance yards for park, playground and recreation facilities, and other structures or works necessary or convenient for the maintenance of the City's parks, playgrounds, and recreation facilities.

(e) City public works maintenance facilities, including land and interests in land, buildings, streets and sidewalks adjacent to City public works maintenance facilities, and other structures and works necessary or convenient for the maintenance of the City's public works.

(f) Communication facilities, including land and interests in land, buildings, structures, radio and other equipment, streets and sidewalks adjacent to City communication facilities, and other works, properties, or structures necessary or convenient for the communication facilities of the City.

(g) Books for the public library system of the City.

At least sixty percent (60%) of the taxes collected in any fiscal year on account of transfers of real property situate in a planning area (hereinafter referred to as "planning area of origin"), shall not be expended except for property conveyance tax improvements in categories (a), (b), and (c) above situate in the planning area of origin. Up to, and including, but not more than twenty percent (20%) of the taxes collected in any fiscal year on account of transfers of real property situate in a planning area may be expended for property conveyance tax improvements in categories (a), (b), and (c) above in any part of the City without regard to planning areas of origin. Up to, taxes collected in any fiscal year on account of transfers of real property situate in a planning area may be expended for property conveyance tax improvements in categories (a), (e), (f), and (g) above in any part of the City without regard to planning areas of origin. As used herein "planning area" means a planning area designated as such in the latest adopted General Plan of the City of San Jose.

For the purpose set forth in this section, all taxes collected under this Article shall be placed in a special fund which is hereby created and which shall be known as the "Property Conveyance Tax Fund." The Director of Finance shall establish and keep such accounts as may be necessary to account for and control the expenditure of tax revenues pursuant to the above provisions of this section.

Passed for publication of title this 25th day of June, 1973 by the following vote:

Ayes: Councilmen—Garza, Hayes, Hays, Mineta.
Noes: Councilmen—Colla, Goglio, Naylor.
Absent: Councilmen—None.

NORMAN Y. MINETA,
Mayor.

Attest:
FRANCIS L. GREINER,
City Clerk.
By: RICHARD C. MCCOY,
Deputy.

ENCLOSURE D

ECONOMIC ACTION PLAN

BACKGROUND

It has been apparent for some time that the City of San Jose, in order to solve potential economic problems, must actively pursue an aggressive economic development program. There is a genuine concern that the City is not getting its proportionate share of new economic development. As a consequence, the City is not providing the new job opportunities required by the residents of the community nor the increase in tax base required to support the level of municipal services desired by the citizens of the community. Major problems have been the lack of a ready inventory of land and excessively long processing procedures, which have tended to discourage industry from locating in San Jose. To reverse this trend, the City has developed a program that revitalizes the City's land development process, and has initiated a marketing program designed to encourage existing industry to stay and expand, and to attract new economic development to the community.

The following Action Plan is designed to meet the needs of the development community within sound and acceptable development standards and set the framework necessary for an aggressive marketing program. While the program encourages further economic development of the community, it does not intend to do so at the expense of the environment. The standards required for new development will be consistent with maintaining and enhancing the quality of life. The type of company that will be actively recruited will be the one that provides the type of new jobs needed by the community, the diversification necessary for economic stability, and the increase in tax revenue necessary to properly fund municipal services. This type of company should, in turn, find an economic advantage in locating in the community.

This Action Plan sets forth the objectives of the program, City policy, the development procedures needed to meet the needs of the development community, and pinpoints the changes in City ordinances, policies, and procedures required to improve our development process.

OBJECTIVES

1. To create a stronger tax base by obtaining a greater share of the total industrial and commercial development of the County.

2. To produce more job opportunities for local residents including our integrated manpower training and placement programs for those who suffer from chronic unemployment.

3. To attract a broad range of industries so as to reduce the economic impact of the business cycle and government spending.

4. To create and maintain the community facilities that enhance the quality of life to insure that the community retains and attracts the labor force necessary to meet industry's needs.

5. To develop an Economic Development Program that protects and enhances the environment of the community.

6. To develop a dynamic city that reflects the pride of its residents, success of its commerce, and soundness of its government.

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POLICY

The City has taken the first step in the development of an Action Plan by committing itself to the continued development and expansion of its industrial tax base. To honor this commitment, the City by resolution has stated that it intends to:

1. Provide where appropriate all necessary public capital improvements to support the expansion and development of the community's tax base.

2. Provide assistance and encouragement in the formation of assessment districts to help lessen the burden of development.

3. Provide under the direct control of the City Manager a development service designed to eliminate all unnecessary delay in the development process.

The above provides direction for the operation of the Economic Development Program. This policy is consistent with the General Plan and Urban Development Policy of the City. Its intent is to help direct the economic growth of the community so that it provides the strong tax base and expanded employment opportunities necessary to solve the economic and social problems confronting the City while also enhancing the quality of life.

The success of the Economic Development Program depends on how well the City's development process is designed to eliminate costly delays in its approval of development proposals. The key to an effective development process is coordination of each procedure within the development process as well as the designation of key staff of the departments responsible for various phases of development. This coordination is essential to maximize the impact of the improvements that will be implemented in the near future as well as to insure that the development process remains responsive to the needs of the development community.

DEVELOPMENT PROCESS

The following is the development process as it will be coordinated within the City.

1. The Economic Development Director as a first point of contact will meet with all prospective industrial and commercial developers to provide them with the information required to develop their project within the City. In addition, the Director will, in conjunction with the various service departments, provide whatever service necessary to confirm the location of the project within the City.

2. At the time that the potential developer has prepared his preliminary plans, the Director of Economic Development will hold a joint meeting with the Directors of Public Works, Planning, Project Management, and the applicant to clarify City policy and resolve all major questions regarding the project.

3. Within one week of the initial meeting, the applicant will receive in writing from the Director of Economic Development the City's *position* on his project, the requirements he will have to fulfill, and a PERT diagram prepared in conjunction with key department staff that sets the critical dates for processing of the project. The accompanying schematic diagram of the development procedure lays out the interrelationship between the various procedures required for developing a project in the City and the maximum time usually required. In most cases, a proposed project will have one or more of the required procedures completed prior to the initiation of the project. The General Time Line is developed around the approval by the City Council of the key parts of the development process. For each individual project, the staff of the Office of Economic Development in conjunction with key staff members assigned from the various departments involved in the project will set a critical path. This path will lay out the shortest processing time possible for the project and set the key date necessary to honor this commitment.

4. The Director of Economic Development will then take the responsibility of coordinating the project with the various departments to insure that the City honors its commitment to the project. This will be accomplished by initiating a tracking and information system designed to:

(a) Give the City the ability to make firm commitments on processing time for development proposals.

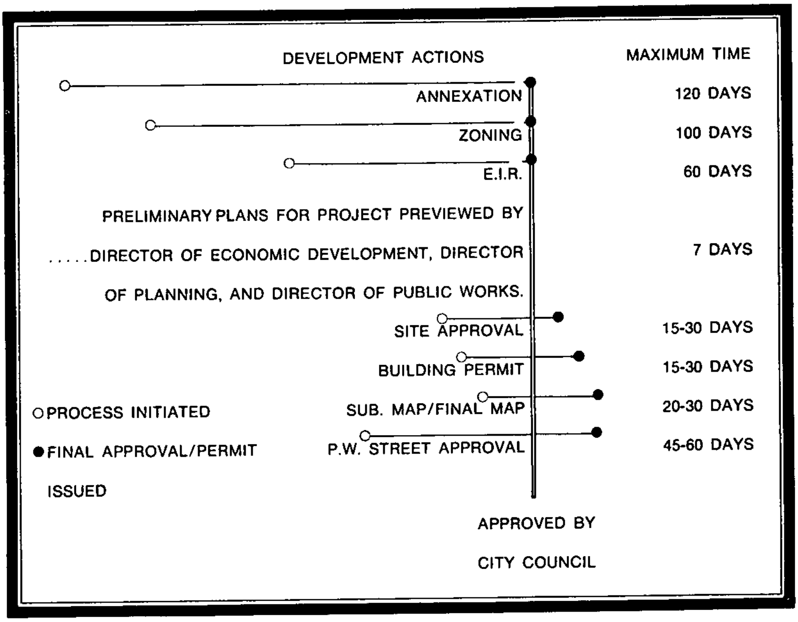
(b) Provide key staff with the information necessary to insure that development proposals are processed in a minimum amount of time.

(c) Monitor development proposals in the City system to insure that they are on track.

(d) Coordinate the work of the various departments on particular development proposals.

The City has already actively initiated a number of actions that should help to carry forth the Action Plan. The following outlines these actions:

SCHEMATIC DEVELOPMENT PROCESS



ACTIONS TAKEN

Adoption of New Industrial Zoning Ordinance. A new Industrial Zoning Ordinance has been needed for some time by the City in order to be competitive in the industrial development market. In order to be more responsive to the needs of the development community, the City has drafted a new industrial district that clearly lays out the general uses that the City allows in the industrial reserves and sets forth performance standards that a company must meet to develop in San Jose. This ordinance will be set for public hearing early in 1974.

Create Revolving Fund for Economic Development. The City Council has created a $200,000 revolving fund to support the economic development efforts of the City. These monies will be used to support the development of area-wide EIR's for the City's industrial reserves that will cover both public and private projects. In addition, these funds will be used to cover the preliminary engineering required to support formation of assessment districts for the improvements necessary in our industrial reserves to provide finished industrial sites.

Adopt City Policy on Site Development. At the present time there is not a precise statement of City policy on site approval for industrial and commercial development. The preparation of a written statement clearly defining the City's policy in this area will greatly help the City's economic development efforts. A clear statement of City policy in this area will help a prospective firm quickly decide whether or not it wishes to develop in San Jose. If the firm found the City's policy acceptable, it could assume that there would be no problem in developing within the City. Such a policy is now being developed.

Amend Site Development Permit. The Site Development Ordinance now requires a hearing by the Director of Planning. This process will be more effective if changed to waive the Director's hearing for a project that is clearly in conformance with City policy. In this case, the project will be approved by the Director of Planning but without a hearing. The decision on whether or not the Director's hearing should be waived will be made by the Director of Planning. This change is now being made in the Site Development Ordinance.

Amend Council Policy on Initiating Rezoning. In order to speed up the development process in cases where a project needs industrial zoning, the Council Policy on initiating rezoning has been amended. Under the previous procedures, it took an average of 164 days to process a rezoning. This could be cut down considerably under present policy if the City Council will, on its own motion, initiate the rezoning procedures for key industrial projects. If the public hearing by the City Council is held 63 days after initiation of the rezoning, it will allow sufficient time to hear the required Environmental Impact Report (EIR) and still allow the 60 days required by ordinance for the Planning Commission to act. This procedure cuts the processing time for key industrial rezonings from the current coverage of 164 days to under 100 days. Equally important, this gives the applicant the exact date on which the zoning would be final if approved by the Council.

Coordinate Development Process. The Office of Economic Development will be responsible for coordinating key development projects. In order to accomplish this, the staff of the Office of Economic Development will meet with key staff members assigned by the various departments involved in a project and set a time schedule for processing the project through the City.

Preparation of Area-Wide EIR's. The City has initiated the preparation of area-wide Environmental Impact Reports which consider both public and private projects in its prime industrial area. The EIR's for the Berryessa Industrial Reserve and the North San Jose Industrial Reserve are now in process. These EIR's are designed to eliminate the need for each project within the reserve to have to have an Environmental Impact Report. In this way the City hopes to provide adequate environmental evaluation of projects within its industrial area and at the same time, eliminate costly delays in the development of individual projects.

Prezone Industrial Reserves. Those areas of the North San Jose and Berryessa Industrial Reserves that are not in the City and are expected to develop in the next five years will be prezoned to the new industrial zoning ordinance when it is adopted by the City Council. Those parcels that are being considered for development in the near future will not be prezoned. Those parcels will be recommended for emergency industrial zoning at the time of annexation.

Rezone Industrial Reserves. Those areas in the North San Jose and Berryessa Industrial Reserve that are in the City but do not have the proper industrial zoning will be encouraged to rezone. In those cases where the property is under consideration for development in the near future, the City Council will be asked to initiate the rezoning on its own motion.

Encourage the Formation of Assessment Districts. As part of the City's Economic Development Program, it is necessary to rapidly increase its available inventory of improved industrial sites. In the present situation, the lack of an adequate inventory puts the City at a competitive disadvantage with other areas and makes it difficult to develop and implement an effective sales program. The key is to encourage the use of special assessment district financing. At the present time there are two assessment districts in various stages of completion in the North San Jose and Berryessa Industrial Reserves. These will add approximately 650 acres to the City's industrial inventory. An additional assessment district is being considered north of Trimble Road in the North San Jose area which will add another 300 acres of inventory.

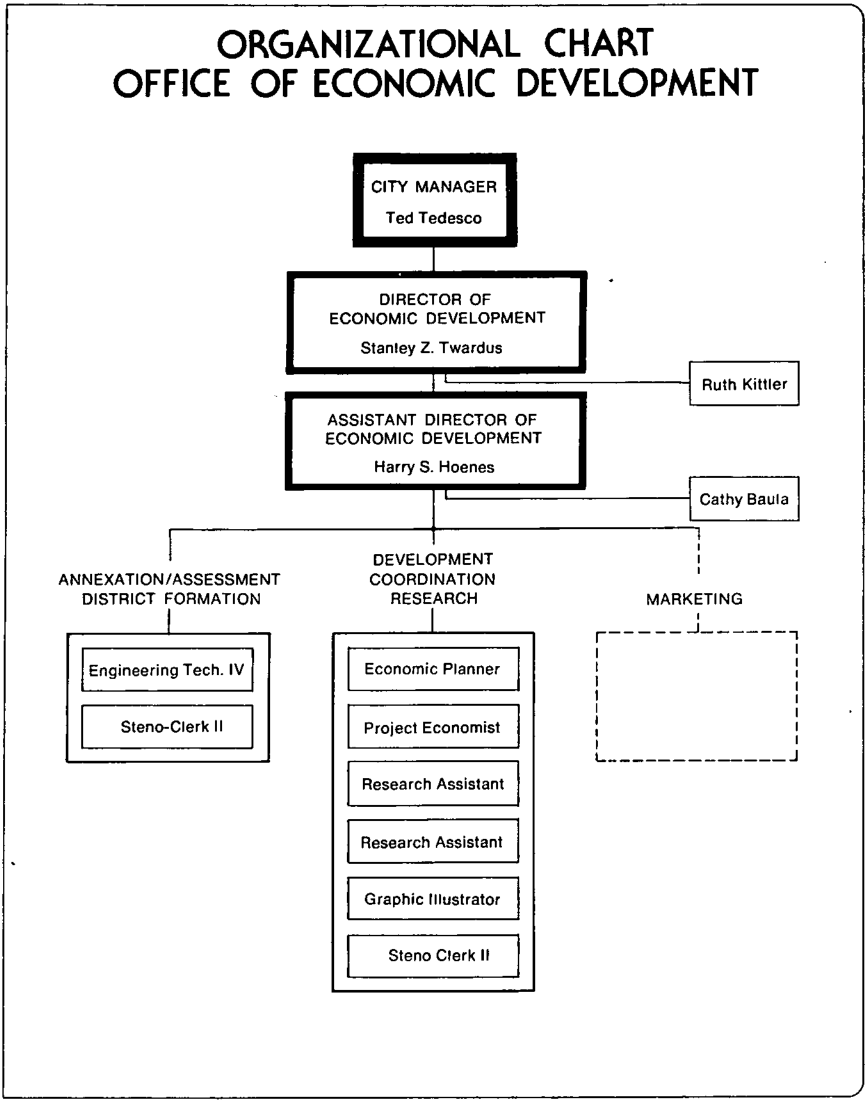
Provide Preliminary Engineering. To encourage the formation of special assessment districts, the Public Works Department has been asked to provide the necessary preliminary engineering work to initiate the project.

Encourage the Use of Tax Allocation Bonds. There are improvements in the North San Jose and Berryessa Industrial Reserves that are beyond the scope of either special assessment district financing or the City's Capital Improvement Program. In these cases, the use of tax allocation bonds will help to provide these facilities in the near future and will help to support the City's Economic Development Program and the accelerated development of the Berryessa and North San Jose Industrial Reserve.

Encourage Annexation. Those areas in the North San Jose and Berryessa Industrial Reserve that are not now in the City and most likely will be developed in the next five years will be encouraged to annex.

Initiate Marketing Program. As a first priority, the Office of Economic Development has directed its energy toward improving the development process. This phase of the program is now generally complete.

The Office of Economic Development is now concentrating on coordinating development and initiating the marketing program. To date this has been directed toward following up the initial contacts made by the Mayor on his trip to Japan. With the completion of this brochure, the marketing effort will be broadened to include encouraging expansion of local industry and attracting those new industries needed to improve the tax base and provide jobs for local residents.


ORGANIZATIONAL CHART
OFFICE OF ECONOMIC DEVELOPMENT
CITY MANAGER
Ted Tedesco
DIRECTOR OF ECONOMIC DEVELOPMENT
Stanley Z. Twardus
Ruth Kittler
ASSISTANT DIRECTOR OF ECONOMIC DEVELOPMENT
Harry S. Hoenes
Cathy Baula
ANNEXATION/ASSESSMENT DISTRICT FORMATION
Engineering Tech. IV
Steno-Clerk II
DEVELOPMENT COORDINATION RESEARCH
Economic Planner
Project Economist
Research Assistant
Research Assistant
Graphic Illustrator
Steno Clerk II
MARKETING

Enclosure E

General Assembly, 75th Annual Conference, League of California Cities

ACTION PLAN RESOLUTION NO. 1

ACTION PLAN FOR THE FUTURE OF CALIFORNIA CITIES

WHEREAS, the Action Plan for the future of California cities has been developed by full participation of city officials through regional divisions, departments, and policy committees of the League as a basis for enhancing the environmental, social, and economic well being of all citizens in California cities; and

WHEREAS, the Action Plan recommendations envision the strengthening of general purpose local government through increased comprehensive planning authority and responsibility commensurate with sound revenue and taxation policies; and

WHEREAS, the Action Plan should serve as an initial response to efforts at local government reform such as the Governor's Task Force on Local Government; and

WHEREAS, the Action Plan should ultimately go beyond planning coordination to integration of balanced environmental, social and economic planning and service delivery; now, therefore, be it

RESOLVED, by the General Assembly of the League of California Cities, assembled in Annual Conference in San Francisco, October 24, 1973, that the Leabue Board of Directors continue the development of an Action Plan program by undertaking a joint effort with the County Supervisors Association of California to develop a plan for local government reform including discussions with educational institutions, special districts, and other public interest groups; and be it further

RESOLVED, that the long-range goal of the Action Plan result in the integration of environmental, social and economic planning and management responsibilities within the comprehensive planning authority of general purpose local government. This responsibility would be exercised by city government within the city's general plan including planning decisions in the sphere of influence. The county government would exercise similar authority in unincorporated areas while insuring that residents of unincorporated territories pay full cost of municipal-type services they receive. Where regional councils exist, they would assume the role of Area Coordinating Councils with comprehensive area planning responsibility. In all other areas of the state, similar councils could be created only by action of cities and counties in that area. A State Coordinating Council would be established with responsibility for state planning of environmental, social and economic resources. The State Coordinating Council would be responsible for enhancing and protecting the quality of life for all Californians. The State Council and the Area Councils would assume those responsibilities outlined in the Action Plan for environment and social planning functions to be integrated for balanced environmental, economic and social comprehensive planning.

Source: Board of Directors.

ACTION PLAN RESOLUTION NO. 2

ENVIRONMENTAL CONTROL AND LAND USE AUTHORITY

WHEREAS, California cities should be concerned with environmental planning and management policies which enhance the quality of life through balanced environmental, social, and economic development; and

WHEREAS, comprehensive land use planning authority at the local level as an essential element of environmental quality control is inhibited by lack of adequate authority and responsibility within the city and its sphere of influence; and

WHEREAS, the proliferation of single purpose regional agencies prevents adequate comprehensive land use planning and environmental management at the local, regional and state level with adequate and necessary representation by local elected officials; now, threfore, be it

RESOLVED, by the General Assembly of the League of California Cities, assembled in Annual Conference in San Francisco, October 24, 1973, that the League Board of Directors develop an action program to implement the Environmental Control and Land Use Authority policies of the Action Plan and summarized as follows:

Cities would assume expanded authority and responsibility for managing environmental quality efforts through comprehensive land use planning and control within the city and in the city sphere of influence. This would include planning and regulation of urban development, greater annexation and zoning authority. Taxation authority and tax policy, particularly assessment practices, would be revised to assist, rather than obstruct, long-range planning goals.

With comprehensive planning strengthened locally, cities and counties would assume a coordinated area planning function through an Area Coordinating Council composed and created by locally elected officials. Inconsistencies among local plans would be coordinated and resolved by the Area Coordinating Councils as they affect the area. All special district and state agency programs affecting the area would have to conform to the city-county area plan. A State Coordinating Council would be created chaired by the Governor and composed of city and county officials from Area Coordinating Councils and appropriate state agencies, legislative appointees, and heads of single-purpose pollution control agencies to develop a State Resources Conservation and Development Plan to be submitted to the Legislature for adoption. Guidelines to protect the environment of California would be established to coordinate state agency plans and resources based on balanced environmental, economic, and social concerns. With expanded local land use authority and adequate area and state representation, the integrity of city plans will be protected and coordinated within an intergovernmental framework.

(On page 3, Section A(1) of the body of the Action Plan, following "development" add "including county and state-owned land".)

Source: Board of Directors.

ACTION PLAN RESOLUTION NO. 3

SOCIAL RESPONSIBILITIES OF CITIES

WHEREAS, cities should have the opportunity for greater involvement in planning, coordinating and evaluating social services with both public and private agencies; and

WHEREAS, existing social services are highly fragmented and suffer from a lack of comprehensive planning and coordination at all levels of government; and

WHEREAS, appropriate comprehensive planning at the local level would appropriately reflect the different social needs and priorities of city residents; and

WHEREAS, cities can provide the necessary local balance to environmental and economic decisions through social planning and coordination activities to achieve integrated community development goals: now, therefore, be it

RESOLVED, by the General Assembly of the League of California Cities, assembled in Annual Conference in San Francisco, October 24, 1973, that the League Board of Directors develop an action program to implement the social responsibilities of cities element of the Action Plan and summarized as follows:

Cities should assume the responsibility of assessing social needs within the city and insuring that delivery of social services is adequate commensurate with those needs. Cities should coordinate and evaluate social services by other governmental agencies and encourage and cooperate with the private sector in a similar capacity recognizing that many social services are provided by community and private organizations. Cities should be authorized to develop a social services general plan element indicating the goals and objectives, standards and priorities, for meeting community social needs. In addition, cities could also prepare a social services operational plan to implement the goals and objectives of their general plan element. The strengthening of the social planning process at the local level would seek to eliminate the overlapping and duplication of srvices and identify service gaps. Social services planning could then be related and coordinated with physical, economic and environmental planning. In addition to planning and evaluation resposibilities, cities should have the option to deliver certain social services when they wish to increase the basic level provided by the county when called for in the city planning process.

Cities should be encouraged to develop a local advisory council to develop the social services plan and counties should be encouraged to develop a similar advisory city and county planning council with majority city membership from those cities which have adopted a social services general plan element. Area responsibility for social services planning would be exercised where COGs presently exist, also through an advisory council. Where no COG exists, area planning would be done by the state based on city and county plans for the area. A state coordinating body would be established for integrated state social service planning and delivery and would coordinate its planning with that of the State Resources and Development Plan which might be established. Uniform planning boundaries for social planning purposes would be established at the local, area and state levels. Social services mandated by state and federal government would require complete financing. Funding from federal and state government for social services should be provided on a flexible block grant basis recognizing social needs to general purpose government or consortia of such governmental units which have adopted a social services element to their general plan.

Source: Board of Directors.

ACTION PLAN RESOLUTION NO. 4

PUBLIC SERVICE EMPLOYEE RELATIONS

WHEREAS, basic distinctions exist between public and private employment which create a need for different employee relations structures and practices; and

WHEREAS, any modification to existing public employer-employee relations law should only proceed on a selective basis to provide more understandable procedures, greater comprehensiveness, and continuing flexibility where necessary to create a positive employer-employee relationship by establishing a method of resolving disputes; now, therefore, be it

RESOLVED, by the General Assembly of the League of California Cities, assembled in Annual Conference in San Francisco, October 24, 1973, that the League Board of Directors develop an action program to implement the public service employee relations element of the Action Plan and summarized as follows:

Any further evaluation in public employee relations policy should continue to distinguish between public and private sector labor relations. Extreme caution should be taken with respect to establishment of any statewide board to administer employer-employee relations throughout California. The creation of area and local employer-employee relations boards should be encouraged under existing law with limited jurisdiction for the following: hearing appeals and final determinations on representations units and recognition matters, maintenance of third party neutral lists of individuals qualified in employer-employee relations and public administration, and hearings and determinations on unfair practice matters. Existing law should include a "scope of representation" definition prescribing exclusive management rights for the public agency. The right of public employees to strike should not be legalizd. State-mandated benefits should be negotiated within the local meet and confer process or, if adopted, require full cost state funding. Impasse procedures should be established with recommendations only to the city council responsible for final decision on salaries and working conditions. Cities are encouraged to consider total compensation for purposes of meeting and conferring.

Source: Board of Directors.

ACTION PLAN RESOLUTION NO. 5

AN ADEQUATE AND EQUITABLE REVENUE BASE

WHEREAS, current revenue sources available to California cities are not responsive to economic changes and lag far behind the increase of prices and salaries due to inflation and increasing demands for public services; and

WHEREAS, major tax reform should provide a municipal revenue base that is broad and flexible with increased equity for the taxpayer; and

WHEREAS, appropriate authority, responsibility and flexibility for financing municipal services should rest with local city officials, thereby reversing the present trend toward narrowing and limiting the authority of cities to raise revenues needed to perform the increasing scope of city responsibilities; now, therefore, be it

RESOLVED, by the General Assembly of the League of California Cities, assembled in Annual Conference in San Francisco, October 24, 1973, that the League Board of Directors develop an action program to implement the revenue and taxation policies of the Action Plan and summarized as follows:

Cities require a strong local tax base upon which to meet the current and future needs of cities for public services. Tax reform should move forward correcting existing inequities yet providing an elastic and progressive tax base for city government. The reality of city finance is that cities are tied to an inelastic tax base and rely on an accumulation of single-purpose tax sources or upon revenues which do not increase commensurate with the demand for public services. Cities should have authority for a city levied income tax or access to the income tax through an intergovernmental tax sharing agreement. Additional sources which should be extended would include a sales tax on personal services, extension of the utility use tax, and equitable increase in the motor vehicle in lieu fee, and equitable increase in liquor license in lieu fees, full value levy of the property transfer tax, authority to levy a tax on on-sale consumption of alcoholic beverages (tippler's tax) and an adequate increase in the gas tax. All costs of welfare should be transferred to the federal government with benefits equalized and a statewide property tax should be established for added necessary revenues to finance a basic level of education in accordance with the limitations prescribed in the Serrano-Priest decision.

Source: Board of Directors.

Action Plan for Environmental Control and Land Use Authority

League of California Cities Annual Conference, October 1973, San Francisco, Calif.

INTRODUCTION

Environmental quality is a critical problem. In some areas of California, it is the most critical problem facing cities and their citizens. In all urban areas, environmental quality problems and activities affect many other city activities, such as housing, employment, economic development, social planning, and transportation. A balance must be reached between these activities and environmental management.

Because of this, the cities's role in environmental quality is taking on new dimensions, and these new dimensions necessarily are involving complex relationships. The League of California Cities' Committee on the Future put it this way:

"We now realize that whatever we do, we cause change in our environment. So, our objective should not be to plan to avoid change, but rather to plan to manage change in a manner which enhances the environment. Most of the statutes concerning the environment were written in an earlier time, when abatement and regulation were assumed to be adequate. Environmental management, on the other hand, is something new. It assumes policies and practices which will require us to break through our customary ways of thinking and through traditional boundaries."

Historically, cities have attacked environmental problems separately, with little consideration for interrelationships. Today, however, problems must be addressed in the most comprehensive manner possible. In effect, coordinated policies, at all levels of government, should be established covering environment, land use, social services, and physical development.

These problems require cities to be involved in a new field, environmental quality management. The essential element, in th solution of environmental problems, is management. Such management, at the city level, requires the integration of environmental, land use, social service, and development policies. For the cities of California, these elements are inextricably combined and require from cities the assumption of broad-scale integrated planning and implementation.

The Los Angeles County Division, in response to the Action Plan papers, similarly stated the needed environmental and land use goals for cities to be:

"The primary goal of California cities should be concerned with how to manage change in the field of environment and how to balance environmental decisions with employment, adequate housing, and economic stability. There should be a distinction made between the responsibility of the state and that of the cities in this field, and incentives should be created to encourage a better environment. Standards, including land use as well as the rest of the environmental problems noted, should not only be set but means of enforcement should be enacted."

The recommendations which follow are made to promote an improved environmental quality management for cities and an enhanced quality of life for the citizens of California.

RESPONSIBILITIES OF CITIES

Each city should assume expanded responsibility and be granted the added authority for managing environmental quality efforts. Cities should insure that adequate standards in all environmental fields—land use, air, water, solid waste, open space, etc.—are established and that these standards are achieved. The cities should do this both by establishing appropriate environmental quality programs themselves and by serving as an advocate and catalyst to insure that effective environmental quality programs are pursued by all relevant public and private agencies.

ENVIRONMENTAL QUALITY PLANNING PROCESS

It is proposed that a state-wide comprehensive planning process be established. This planning process would be intergovernmental in nature. It would start with the cities, continue at the area and at the state level, and as appropriate, at the federal level. It requires a new set of relationships between cities, areas, and the state.

The role of the cities would be basic to the entire planning process. The plans of the cities would be the building blocks. The city plans would be coordinated at the area level by planning councils, as a part of the comprehensive planning process and in conjunction with area-wide planning. Environmental impact reports should indicate the effect on the environment of the city, area and state plans when implemented. Specific development would then be judged on the basis of its consistency to the general EIR, with only additional specificity included as necessary for the individual project EIR.

The state would compile a comprehensive resources conservation and development plan for California based upon a composite of the city and area plans. It would reconcile and coordinate differences between area plans, and city and county plans in areas where area planning organizations do not exist.

The comprehensive planning process described above, and detailed in this report, would result in the establishment of environmental quality guidelines and pollution control standards, designate areas of critical environmental concern, and would, in the broadest terms, define urban and rural areas for California. These three components—guidelines and standards, designated areas of concern, and a delineation of urban and rural areas—would be components of the cities' general plans, area council's plans, and the State plan. These plans would be basic foundations against which cities, areas and the state could evaluate day to day decisions.

LAND USE CONTROL IN URBAN AREAS

Cities' current authority for land use planning would be retained and significantly increased. This would be accomplished by the fortification of land use planning tools and by increasing cities' authority and responsibility for comprehensive planning within their spheres of influence. All urban areas of the State would be placed under cities' spheres of influence. This would significantly increase cities' role in shaping the future of the urban position of the State of California.

Within the city and its *sphere of influence*, each city should have the following responsibility and authority:

A. Planning and development

1. Authority and responsibility to plan and regulate land use and urban development, including county and state-owned land.
2. Authority and responsibility to prohibit the delivery of public services (sewerage, water, etc.) to a proposed development within the sphere of influence when such a development is not approved in the city's plan.
3. Authority to withdraw territory, which is in its sphere of influence, from special districts upon annexation.
4. Authority to acquire by condemnation open space. Such authority would be enabling and would be exercised at the discretion of the City Council.
5. Authority to require dedication or in lieu fees in connection with development approval for public facility sites necessary to serve the development.
6. Expanded authority to impose taxes and fees on developments, including a real estate transfer and/or construction tax to fund needd public improvements and services.
7. Authority to impose an "availability" or "stand by" tax for urban services available to land outside the city but inside the city's sphere of influence (as a corollary to this, cities and/or counties should have the authority to exempt planned rural areas from urban type taxes).

B. Annexation

A uniform annexation law should be adopted which would conform annexation statutes to presently enunciated judicial holdings and provide the following:

1. Authority to annex land within its sphere of influence as follows:
   a. Any land which is developed.
   b. Any land which is developing.
   c. Any unincorporated island up to 250 acres regardless of whether developed or not.
   d. Any land the annexation of which is determined by the city council to be desirable or necessary by reason of detrimental land use or environmental situations.

Such annexations should be subject to procedural requirements but should not require an election in the area to be annexed.

2. The requirement that a city annex developed (urbanized) areas in its sphere of influence upon such a determination by LAFCO.
3. Authority to annex across county boundaries in appropriate situations with the approval of both LAFCOs.

C. Zoning powers

1. Support continued unrestricted ability of cities to utilize zoning and rezoning as tools for implementation of community planning and environmental goals.
2. Authority to zone outside its boundaries, but within its sphere of influence.

AREA RESPONSIBILITIES

To be effective, the expanded municipal authority must be set in the context of an on-going area planning process. Thus, the proposals herein provide for area coordinating councils. Such area coordinating councils would be comprehensive in scope and would consist of (1) Council of Government, with the authority to act as umbrella agencies over area issues, and (2) sub-units of Councils of Government where appropriate.

Area responsibilities shall be exercised by each of the councils of government which presently are in existence. In areas where there are no councils of government there is the option to form one. Where no councils of government exist and where none are formed, any necessary area planning will be the responsibility of the State, based upon the city and county plans for such area. Either existing or new councils of government should meet the following criteria: (1) the governing body should consist primarily of city and county elected officials, (2) it should have a comprehensive planning capability, (3) it should represent at least 50% of the cities representing at least 50% of the municipal population in the region and 50% of the counties. (It should be noted that HUD certification requires 75% of the cities representing 75% city population and 75% of the counties.) The area organization would have the authority to:

1. Establish and maintain area plans and policies which conform to state guidelines, and which are based upon the city and county plans.
2. Coordinate and resolve inconsistencies concerning standards in the quality of air, water, disposal of solid waste, and other broad areas of environmental concerns.
3. Coordinate and resolve inconsistencies affecting the area among city and county plans.
4. Coordinate and resolve inconsistencies between plans and programs by state departments and agencies, special districts and other public planning agencies affecting the area.

STATE RESPONSIBILITIES

A State Coordinating Council should be established. The State Coordinating Council should have a broad-based membership. It would be chaired by the Governor and composed of elected city and county officials representing their respective area councils, relevant state agency directors, legislative appointees representing the public, and heads of single purpose pollution control agencies. In order to support this policy-making body, a cabinet level director of state planning would be created. He would be responsible directly to the Council. The Council should have adequate staff and funding to accomplish its responsibilities.

THE STATE COORDINATING COUNCIL

The State Coordinating Council should be responsible for the development of a State Resources Conservation and Development Plan for submission to the legislature for adoption.

A major focus of the State plan would be the improvement of the quality of life in California. The protection of the environment and broad determinations of land use are inextricably intertwined. It is difficult and unwise to consider them separately. Accordingly, the State Coordinating Council would have at least the following functions and responsibilities:
1. Protect the State's natural environment by establishing comprehensive pollution standards which would guide land-use decisions.
2. Insure the coordination of all relevant existing state programs and agencies, i.e., transportation, health, human resources development.
3. Develop appropriate comprehensive area holding capacity standards for water quality, air pollution, solid waste, and energy.
4. Coordinate the state government development activities (e.g., highways, energy, educational institutions, etc.).
5. Identify and preserve non-urban areas of critical statewide significance (e.g., prime agricultural land, state parks, open spaces, etc.).
6. Develop a statewide policy indicating which portions of the State are urban and which are non-urban.
7. Coordinate the state capital improvement programs and control the site location of all major state facilities.
8. Coordinate the programs of the State's pollution control agencies so that their efforts are directed at meeting state sandards.
9. Provide data and technical assistance to area and local governments.
10. Revise and update periodically for legislative consideration the California Resources Conservation and Development Plan to meet changing conditions.

TAXATION

Recognizing that taxation has a major influence on the conservation and development of the State's resources, the State should revise its tax and assessment structure so that assessment and taxation can become instruments of policy at all levels. Revenue and taxation laws should be established which assist, rather than obstruct, long range planning goals. This should include:
1. Assessment and tax legislation which encourages the preservation and/or acquisition of planned open space and planned agriculture land, and would discourage land speculation and leapfrog development in fast-growth areas.
2. Assessment and tax legislation which encourages rather than penalizes, maintenance and improvement of existing structures, whether located in a fast-growth or slow-growth area. Conversely, tax legislation which penalizes, rather than encourages, the maintenance of substandard structures.

3. State legislation to provide authority for cities to levy construction and propery transfer taxes for funding of local implemenation of the planning process.

4. State legislation which would remove rural lands (agricultural, open space, etc.) from urban service districts.

In short, assessment and property tax policies at state and local levels would be developed to complement land use and development policies and to reduce pressures for devlopment.

SUMMARY

New state legislation should be enacted which would strengthen the ability of cities to exercise authority over land use decisions. The legislation should provide an area planning role to resolve inconsistencies among local agencies as they affect the area and a state role to develop land use guidelines, identify lands of statewide significance, and provide technical assistance, including land use data, to cities and the area planning agencies. The state role under such law should also include authority to coordinate all state activities related to environmental goals. Implicit in this proposed process is that environmental quality policies and standards are established at the State level and that the planning tools and authority necessary to implement these standards are retained at the local level and expanded. The policy devised at the State level would have substantial input from local government inasmuch as city plans would flow upward to the State Planning Council, and because all of the area planning councils and the State Planning Council would have significant local government membership.

Action Plan for Social Responsibilities of Cities

INTRODUCTION

We all recognize, whether it was our desire or not, that the social needs of our citizens are increasingly being laid on our doorstep for solution and resolution. As stated by the East Bay Division in response to the League's Social Issues paper:

"As the pressures of our urban society increase and 'participatory democracy grows, the City Council, as the most accessible governmental body, is continuously confronted with demands for solutions to *all* problems—not just public works and public safety matters.

"The Administration's 'new federalism' is committed to place the responsibility for the resolution of conflict on the shoulders of the local governmental body.

"In short, pressures are growin: 'the monkey is on our back' and elaborate explanations to constituents of why we are not responsible and can't do anything about various problems simply are not acceptable to the citizens whom we represent."

Some cities are accepting this challenge as an opportunity to improve human values. These cities are instituting new city social programs in addition to the traditional city social programs. Cities for years have been in the social field with leisure time activities), youth services, special programs for the senior citizens, etc. Social service is not a new activity for cities.

This area of service, however, is becoming more complex and fragmented. Social services are planned, controlled, funded or delivered by a variety of public and private agencies: the federal government, the state government, counties, school districts, cities, and a host of private agencies. ("Centralized social planning for the private agencies is accomplished by local United Ways in most communities. In major communities such as Los Angeles, San Francisco, San Diego, Sacramento and San Jose, United Way-sponsored planning councils provide a coordinating and planning mechanism used by public and private agencies in varying degrees.") Notwithstanding these efforts, the fact is that existing social services are highly fragmented and suffer from a lack of comprehensive planning and coordination. This being the case, each city should be aware of plans relating to human services and the services that are being delivered by other agencies, public and private, to its citizens. The city should establish a means of procedure for making an input into the plans of these other agencies and for monitoring the services which are provided.

In addition, many social problems, because of their interrelationship with the total environment, require area as well as local solutions. What is emerging in California is a series of single-purpose, area social planning mechanisms dealing with such subjects as manpower, aging, comprehensive health planning, etc.

Social problems exist in all cities. However, each city because of its size, its location, its economic base and its people is distinct from any other city. Certainly cities can fall into groupings or patterns because of key similarities, but in the end, cities, like people, are each different and their needs for, and response to, social programs will vary. Consequently, uniformity in programs will do a disservice to the social service system and to the people of the cities. Program flexibility, locally determined, appears to be the key to any social service proposal.

Under today's pressures, the city's social services must be elevated to equal status with other city functions, such as public safety, land use control, and public works. The solutions to social problems, social planning, and social services must be part of the ongoing municipal planning, budgeting and evaluation procedures.

In developing its social services, plans, procedures, and programs, the city must have the meaningful participation and involvement of its citizens. This is necessary in all stages of planning, coordinating and evaluating social services. Such participation is an essential element of successful programming and acceptance by the community.

RESPONSIBILITY OF CITIES

Each city should assume responsibility for identifying all community social needs, and for planning, coordinating, and evaluating programs to alleviate social problems within its boundaries. Cities should insure the delivery of all essential social services either by serving as an advocate or catalyst to insure the most effective delivery of service by the appropriate public and/or private agencies or by delivering such services themselves.

CITY SOCIAL SERVICES PLANNING

Each city should prepare and adopt a social services element to its general plan, treating it like the other general plan elements, and as part of the overall planning process. The social services element should be a plan for determining city goals and objectives and for establishing standards and priorities to meet community social needs. The social services element should address the needs of all city residents from the youngest to the oldest. It should include but not be limited to the following:

Dependency Avoidance Services—for example—employment development services, income maintenance, counseling,.

Health Services—for example—alcohol treatment, drug abuse, mental health, physical health, emergency care, disease prevention, etc.

Individual and Family Services—for example—education, housing, crisis intervention.

Justice, Rehabilitation and Protective Services—for example—affirmative action, minority and community relations, crime prevention, legal assistance, consumer protection, rehabilitation, civil rights.

Transportation Services—for example—transportation for the poor and elderly, rapid transit, etc.

Leisure Services—for example—educational programs, recreation, cultural activities, etc.

In addition to the social services element of the general plan, each city should prepare and adopt an operational and implementation plan for social services in the city. This plan should include allocation of resources and be revised yearly to reflect changing needs, priorities and funding.

The social services element and the social services plan should seek to provide services to meet the total needs of the individual and/or family in a unifid rather than a fragmented manner. The social services element and the social services plan should seek to eliminate the overlapping and duplication of services, and to identify service gaps. Social services planning should be related to and coordinated with physical, economic and environmental planning.

The state should provide funding for the intitial development of the social services element to the general plan. The League should pursue with the proper state agencies the obtaining of such funding and if necessary sponsor legislation for this purpose. State and federal funds for social services should be made available only to units of local general purpose government which have adopted social service element plans.

DELIVERY OF SOCIAL SERVICES BY CITIES

Each city shall have the option to deliver within city boundaries any social service provided by the county when the city desires to increase the level or amount of service above the basic level provided by th county. When a city exercises this option, the county shall provide to the city funds equal to the cost to the county of providing the basic level of service in the city. This option may also be exercised by a city-county contract or service agreement. Extending beyond each city's responsibility for integrating and coordinating its social services through its own planning program is the responsibility to join with other groups in the support of community and/or area social planning bodies. In some communities, cities may be required to take the lead in sponsoring such planning bodies; in others they may wish to participate in and strengthen existing citizen based community planning bodies.

TECHNICAL ASSISTANCE

With certain exceptions, cities are not now involved in identifying, coordinating and evaluating the total social service program within the city. Hence, there is a need for assistance to cities in developing a capability in these areas. The League should develop a program of technical assistance to cities designed to increase their capacity to meet the cities' responsibility in the social service area. Such action by the League is similar to programs that have been developed to assist cities in other new fields. Some of the areas which might be included in such a technical assistance program are:

A. How are social service needs assessed and identified?

B. What is a valid basis for evaluating the effectiveness of social programs?

C. A review of existing successful and effective social programs.

D. Organizational requirements for effective coordination of social service programs in a city.

The League should analyze all federal and state funds currently available for social services to determine if these funds are distributed and utilized in the most effective manner. This analysis should trace the flow of funds through the inter-governmental system to the individual(s) receiving the service. This should not be interpreted to mean that programs be evaluated for results, but that funds be traced to determine purpose of expenditure.

RESPONSIBILITY OF COUNTIES

Each county should assume responsibility for identifying all social needs and for planning, coordinating and evaluating programs to alleviate social problems in the unincorporated areas within its boundaries.

Each county should prepare and adopt a social services element to its general plan, treating it like other general plan elements, and as part of the overall planning process.

Each county should develop and adopt a plan of social services within the county which would include the social service plans it has developed for the unincorporated areas and for cities that have not developed a city plan for social services, and the social service plans developed by the cities within the county. Such county plan should also include a basic level of social services throughout the entire county.

State and federal funds for social services should be made available only to those counties which have adopted the social service element and plans.

COUNTY ADVISORY PLANNING AND COORDINATING COUNCIL

There should be established in each county a planning and coordinating council to assist the Board of Supervisors as an advisory and recommending body in the development of the county's general plan element on social services,

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the county plan establishing basic levels of service, and for the coordination of city plans. Such council should be composed of:

A. Representatives of the cities in the county.
B. Representatives of the school districts in the county.
C. Representatives of the county.
D. Representatives of the voluntary sector.

A majority of the membership of the council should be city representatives. One of the city representatives in each such council should be a representative of the largest city in the county.

Where they exist, "mini-Cogs" may be used as such a planning and coordinating council if the membership meets, or is revised to meet, the above requirements.

RESPONSIBILITY OF VOLUNTARY SECTOR

The voluntary sector should assume responsibility for identifying those community social needs that have traditionally fallen within its purview. It should coordinate vigorously with city and county to ensure that assessment of needs, setting of priorities and effective coordination of services occurs. To complement the social services element of the city and county general plan, the voluntary sector should adopt a plan for determining goals and objectives and for establishing standards and priorities to fulfill its share of community social needs. The plan should incorporate an annual review of resource allocation, and should contain provisions for the voluntary sector to continue to deliver human care services directly and by service agreements with local governments. The plan should prevent duplication and respond to gaps in services.

AREA RESPONSIBILITY

Area responsibility for social service planning shall be exercised by each of the COGs which presently are in existence. Where areawide agencies are involved in the social planning process, they shall seek local input in the form of the city and county social service elements and plans. The integrity of these plans shall be preserved in the preparation of the area plan. In areas where there are no COGs there is the option to form a COG. Where no COGs exist and where none in formed any necessary area planning will be done by the state based upon the city and county plans for such area.

As in the case of counties, there shall be established in each area an advisory planning and coordinating council to the COG. Such council will be composed of representatives of the cities in the area, the school districts in the area and the counties in the area. The majority of the members of the council shall be representatives of cities.

State and federal funds for social services should be made available only to those COGs, or other area agencies, which have adopted a social service plan for the area.

STATE ROLE IN SOCIAL PLANNING

The state government should create a social planning body, which includes adequate city representation, and which should be coordinated with the physical planning body of the state. Such planning body will prepare and recommend a social services plan for the State of California which plan shall include consideration of the city, county and area plans which have been adopted and approved by those bodies. Through such plan there shall be coordination and evaluation of the various state functional agencies involved in social planning or the delivery of social services.

Social service funds from the federal government should be granted to the state only after the state has adopted a state plan for social services. Where applicable the state should utilize the Integrated Grant Application (IGA) technique in developing the state plan.

UNIFORM PLANNING BOUNDARIES

There should be uniform planning boundaries for social planning purposes at the local, area and state levels.

FUNDING

The federal and state government should provide flexible block grants for social services to units of local general purpose government, or consortia of such governmental units, provided that such local governmental units have adopted a social services element to their general plan. Programs mandated to local government by federal or state government shall be fully funded by the level of government delegating the responsibility. Whenever the responsibility for the delivery of social service functions is transferred from on unit of government to another, the necessary revenue raising authority or funding should also be transferred. When the federal, state or county government modifies the delivery system for any social service so as to impose requirements for city services to the client group expressly or by implication (as, e.g., the current shift from institutional to community-based treatment for the mentally ill), the federal, state or county government should be required to pre-plan such change with the cities involved and to provide the funds for the ensuing services.

All state and federal grants should include the funds necessary to build and maintain capacity to enable local government to plan, administer, and evaluate social programs.

State and federal social service funds should be allocated by a distribution formula based on indices of social needs.

The State should provide sufficient funds to cities to develop the social services element of the general plan.

LEGISLATION

Many of the proposals contained in these recommendations will require state legislation. When required, the League of California Cities should introduce and sponsor any legislation necessary to accomplish the recommendations contained herein.

The League should sponsor and have introduced legislation to provide the funding for cities to prepare and adopt a social services element to their general plans.

In addition the League should ask the Legislature to establish a joint committee to devise and adopt means and methods by which the cities may implement their social service element, including funding and necessary vehicles for all types of social service programs.

Action Plan for an Adequate and Equitable Revenue Base

INTRODUCTION

Financing local government in California is and will continue to be a difficult, frustrating and thankless task. For a decade local officials have been caught in an uncomfortable vice formed on the one hand by demands for local governmental services and costs which rise more rapidly than do local revenues at given tax rates, and on the other by increasingly strong public resistance to higher taxes. The result has been an urgent search for new revenue sources that would be accepted by the voters, be consistnt with existing legal restrictions, and be practical without excessive administrative and economic costs. As the continued presence of the fiscal crisis eloquently testifies, this search has not been successful. It is difficult in part because success depends on the extent to which the different levels of government cooperate in rationalizing both the allocation of service responsibilities and allocating corresponding revenue sources.

The revenue crisis has been extensively documented by the League and presented to the State Legislature on numerous occasions. Many cities have also documented their individual revenue and expenditure problems and presented the facts to th Legislature.

In addition, to many city officials there appears to be a trend to further restrict city revenue raising options—both as to sources and rates. Senate Bill 90 (1972) limits property tax rates. The city sales tax rate is fixed at 1¢ through state collection policy. Cities have few revenue choices or options and the flexibility of the tax effort has been diminished.

Finally, revenue sources available to cities are not responsive to general economic growth. Increases in these revenue sources do not keep up with local and inflationary cost increases. Many cities have not been able to maintain the same services at an identical level from one year to the next without rate increases, using new revenue sources, or cutting back vital services by laying off employees.

MAJOR TAX REFORM

Taxation goes to the very heart of a city's ability to govern. Cities in California have substantial responsibility and authority. However, their ability to act effectively is related directly to their ability to finance necessary services and programs. Thus, a strong local tax base is essential if cities are to continue to meet the needs of their citizens. A reform of California's current revenue and tax system will achieve this. The question is: What are the necessary components of comprehensive reform? Any tax reform effort should include the following principles:

A. Tax reform should provide a municipal revenue base that is broad and flexible. No single, new or expanded revenue source should be expected to meet the complete needs of all cities. Accordingly, a variety of revenue sources must be made available to local government to provide a sufficiently broad tax base for all cities.

B. Tax reform proposals should anticipate the future revenue requirements of cities. The demand for more and better services will mean increased revenue needs for cities. Accordingly, care should be taken to assure that cities' revenue sources have the capacity for growth.

C. Tax reform should be directed toward those areas which need improvement. Tax reform should assure relief to those who need it most and not merely shift the burden from one tax to another.

D. Tax exemptions should be considered carefully. Exemptions of more than a nominal amount should be tied to specific replacement revenues. Some exemptions may be necessary to make a tax more equitable or to grant relief in special situations. However, no exemption causing more than a nominal revenue loss to cities should be adopted unless there is a balancing provision for adequate replacement revenues and unless the exemption meets justifiable social needs.

E. Tax reform should provide the means to permit cities to use the tax structure as an instrument to effectuate public policy.

To accomplish major tax reform the following specific tax proposals, transfer of taxing responsibilities, elimination of tax exemptions, and related items are recommended.

REVENUE MEASURES

The revenue measures herein proposed are designed to: provide substantial additional revenue; give to each city the flexibility and options of choosing between sources of revenue and using those sources which best meet the situation of that city, economically, politically, and practically; provide growth consistent with cost increases; and reverse the present trend toward narrowing and limiting authority of cities to raise the revenues needed to perform the increasing scope of city responsibility.

The revenue and tax measures proposed are:

1. City income tax on personal income of its residents and/or commuters and a city income tax on business income.

The existing income tax collection system of either the state or federal government could be utilized to collect the city income tax.

The personal income tax could be levied statewide and returned by formula or levied by each city individually and returned to city of taxpayers' residence or work. The business income tax would be levied statewide and distributed on a need basis.

The city personal income tax could be based on either the federal or state adjusted gross income or the actual federal or state tax liability or gross receipts or wages and salaries. It could be established at a flat percentage rate or a graduated rate.

2. The state and local sales taxes should be extended to personal services and the state should subvent a portion of its increased revenue to cities on a need basis.

3. Authority to levy a utility users tax should be extended to general law cities.

4. The motor vehicle in-lieu fee should be increased to reflect the current level of statewide property taxes. This rate should remain flexible to it would adjust as the property tax average changes.

5. Liquor license in-lieu fees should be increased to the level of the statewide average for business license taxes (for which they are "in-lieu") and

should be placed on a flexible basis to keep pace with changes in business license taxes.

6. The property transfer tax should be levied against the full value of the property being transferred rather than only the equity being transferred.

7. Authority should be given to all cities to levy a tax on the on-sale consumption of alcoholic beverages (tipper's tax).

8. Section 2107 of the Streets and Highways Code should be amended to increase the gas tax to produce sufficient revenues to replace general fund support to street purposes such as street lighting, street sweeping, drainage, signal maintenance, signing, etc. This will relieve substantial amounts of general fund monies for use for other city purposes.

9. Flexible new revenue sources should be developed to allow local agencies to meet critical transportation needs in their areas. In any additional revenue sources for transportation purposes, sufficient funding should be provided for balancing transportation modes, especially mass transit and rapid transit.

10. A city payroll or occupation tax could be levied on the wages and salaries of residents and non-residents who earn their living within the city.

REALLOCATION OF RESPONSIBILITY FOR FINANCING

1. All costs of welfare should be borne by the Federal Government with benefits equalized throughout the nation. This should help alleviate the migration of the poor to California and other states that provide greater benefits.

2. In accordance with the Serrano-Priest decision, the costs of the basic level of education prescribed by the State should be paid by the State. The State should retain present sources for financing education and use a statewide property tax for any needed added revenues to finance the basic level of education.

CAPITAL FINANCING OPTIONS

1. Tax increment financing in redevelopment areas should be retained as an option and tool for rehabilitation and redevelopment of blighted areas.

2. Lease-purchase and joint exercise of powers financing should be retained as tools to provide flexibility and options for financing capital improvements.

3. Cities should have flexible authority to form assessment districts for all types of municipal capital improvements.

RELATED ITEMS

1. The two-thirds vote requirement for city general obligation bonds should be reduced to a simple majority.

2. Cities should have authority to pledge a portion of their gas tax funds (accumulated and future) to finance revenue bonds or general obligation bonds for the construction and reconstruction of any city streets.

3. Additional legislation should be enacted to assure that residents in unincorporated areas pay the full cost of municipal-type services which they receive.

4. Cities should have authority to provide incentives to encourage the rehabilitation of structures.

ITEMS FOR FURTHER STUDY

1. Mobile homes, which are permanently situated, should be assessed and taxed on the same basis as other residential property.

2. The exemption from ad valorem property tax for life-care retirement homes should be removed.

3. It appears that some county tax assessors are not complying fully with the Williamson Act assesment concept. The State legislature should require that all assessors assess all Williamson Act property on the basis of its current income producing value.

4. A study of the economic and tax implications of cities having relatively higher tax on land and a relatively lower tax on improvements. Included in the study should be the related area of the implications of city authority to establish variable assessment ratios. A study has been done in San Deigo of the effects of transferring the property tax entirely to land and eliminating and ad valorem tax on improvements. This could be the starting point for this study.

It is suggested that this study be completed in one year with the results as the basis for a report to the 1974 Annual Conference.

5. An investigation of the need for the feasibility of using a method analogous to the Williamson Act concept by which cities would be reimbursed for decreases in net taxes resulting from decreased assessments caused by building prohibitions or limitations by the coastal commissions and other state agencies or state boards.

PRIORITIES

Priority I

Income tax.

Reallocation of responsibility for financing the costs of welfare and education.

Extension of utility uses tax to general law cities.

Extension of state and local sales taxes to personal services.

Obtaining flexible block grants for social services, to be allocated by a formula based on indices of social needs.

This grouping is proposed as the first priority on the following basis. The income tax would: provide a new source of revenue, hence providing flexibility; provide a source of revenue which expands as rapidly as inflation thus helping to close the gap between city costs and city revenues; and provide a substantial source of new revenues.

The shifting of the major responsibility for funding welfare to the federal government and education to the state government, would greatly reduce the local property taxes. This would be substantial relief and permit a greater use of this source by cities, again providing an option and flexibility.

The utility users tax would provide a substantial new source of revenue for general law cities and give them a source which is now limited to charter cities.

The extension of the sales tax to personal services would provide substantial revenue and growth, as services is the rapidly growing section of our economy.

The funding for social services is given priority because of the demand by citizens for new and expanded social services. To meet the demand and to provide the services, funding is needed at the earliest possible time.

Priority II

Retention of tax increment financing for redevelopment.

Retention of lease-purchase financing and joint exercise of powers financing.

Reduction of voter requirement on general obligation bonds from 2/3rds to a simple majority.

Authority to provide incentives for property maintenance and improvement to offset increased assessed valuation.

Enclosure F

[From the Santa Clara Valley Plans, April 1972]

LOCAL AGENCY FORMATION COMMISSION OF SANTA CLARA COUNTY (LAFCO)

HISTORY AND PURPOSE

A Local Agency Formation Commission was authorized for counties in California in 1963, when the State Legislature adopted the Knox-Nesbit Act. The Commission has the responsibility for regulating the formation of cities and special districts and annexation of territory to cities and to special district (except school districts). In 1965, the Legislature passed the District Reorganization Act which increased the scope of the Commission to include detachments, dissolutions, mergers, consolidations and reorganizations of special districts. Later legislation added authority over disincorporation of a city or exclusions from a city.

The law states that: "Among the primary purposes of the Local Agency Formation Commission are the discouragement of urbal sprawl and the encouragement of the orderly formation and development of local government agencies based upon local conditions and circumstances." (Government Code Section 45774)

Recent changes in the law now require the Local Agency Formation Comission to make studies of existing governmental agencies including an inventory of such agencies to determine their maximum service area and service capacities. LAFCO is also now required to develop and determine the sphere of influence, and plan for the probable ultimate boundaries and service area of each local governmental agency within the county. This information must be used by the Commission as a basis for its decisions. The spheres of influence are to be periodically reviewed and updated. LAFCO may receive financial assistance or grants in-aid from public or private sources to do these studies. Recommendations from a LAFCO study are available to the public.

ORGANIZATION AND MEMBERSHIP

The Local Agency Formation Commission consists of five members appointed for four-year terms: two County supervisors and one alternate appointed by the Board of Supervisors, two mayors or councilmen and one alternate appointed by the mayors of the fifteen cities in the County, one representative selected from the public by the four governmental members.

Th alternate member substitutes for the regular member when that member is absent or disqualifies himself. The alternate city member also serves when the Commission is considering a proposal for annexation to the city of which the regular member is a councilman. Under certain circumstances, two representatives of Special Districts may be named to the Commission.

LAFCO meets on the first Wednesday of each month in the Board of Supervisors' Chambers.

REVIEW PROCEDURES

After a proposal is filed, the Commission has 70 days to hold a public hearing which may be continued up to 70 days, and an additional 35 days to adopt a resolution with any modifications. When certain applications have written consent of all property owners, public hearings are not required. If approved, annexation or incorporation procedings continue as provided by law. A rejected proposal cannot be resubmitted for at least one year without Commission approval. Failure to complete a proceeding within one year concludes the proceeding, unless during that year the Commission authorizes an extension of time.

California law (G.C. Sec. 54796) states that factors to be considered in the review of a proposal shall include but not be limited to:

1. Population density, population; land area and land use; per capita assessed valuation topography, natural boundaries, and drainage basins; proximity to other populated area; and likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas during the next ten years.
2. Need for organized community services; maximum possible service area; range and level of services; the present cost and adequacy of governmental services and controls in the area; probable future needs for such services and controls; probable effects of the proposed incorporation, formation, annexation, of exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas.
3. The effect of the proposed action and of alternative actions on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the County.
4. The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors or unincorporated territory, and other similar matters affecting the proposed boundaries.
5. Conformity with appropriate city or County general and specific plans.

RECENT ACTIVITIES

The Commission considered a total of 250 proposals in 1970–71, including 209 city and special district annexations and 41 special district detachments. Concerning new local agencies, during its first eight years, the Commission disapproved two city incorporations and approved a large Parks District and a County Service Area for a small neighborhood park. LAFCO has adopted Guidelines to assist the Commission in evaluating proposals coming before it. The Guidelines list general principles as well as criteria for: city annexation, annexation to special districts, incorporation of municipalities, and formation of special districts. As a followup to the LAFCO Guidelines, LAFCO adopted a set of definitions for urban areas, urban transition areas, and open space as well as policy statements for these categories of land use. The Commission will also consider for adoption criteria fo, placing land in urban development areas and open space.

The Commission is currently completing determination of spheres of influence of cities in the County. LAFCO also serves to see that territory is removed from the tax rolls of fire and sanitation districts after the area is annexed to the city. In 1970, an inventory of special districts in the County was made.

Commissioners:
- Peter Pavlina, Public Member—May 5, 1971 to May 5, 1975.
- Dominic Cortese, Supervisor, District 2—April 28, 1970 to May 6, 1974.
- Sig Sanchez, Supervisor, District—April 28, 1970 to May 6, 1974.
- Jerome A. Smith, Councilman, Saratoga—April 6, 1972 to May 3, 1976.
- William D. Weisgerber, Councilman, Milpitas—May 1, 1969 to May 7, 1973.

Alternates:
- Charles Quinn, Supervisor, District 3—January 13, 1970 to January 7, 1973.
- Lee Lynch, Councilman, Los Altos—April 6, 1972 to May 5, 1975.

Staff:
- Howard W. Campen, County Executive.
- J. Kennedy Bartholet, Asst. Exec. Officer.
- Robert T. Owens, Council.
- Helen Bohannon, Secretary.

Enclosure G

CONSTITUTION OF THE SANTA CLARA INTER-CITY COUNCIL

Article I

NAME

Section 1—The name of the association shall be the Santa Clara County Inter-City Council.

Article II

PURPOSES

Section 1—The purposes of the Inter-City Council are to:

a. Serve as a general purpose civic agency to foster cooperation among the jurisdictions represented in the proper development of the Santa Clara County area.

b. Aid the member towns and the member cities in their governmental and proprietary functions.

c. Stimulate civic leadership and an awareness of the community and its opportunities or problems.

d. Study problems confronting the community and to make plans and recommedations for the area's development.

e. Encourage the adoption by the member jurisdictions of the Council's plans and recommendations so as to assure a community capable of providing the County's citizens with conditions essential to a livable community.

f. Seek cooperative action with other governmental jurisdictions in order to assure a community capable of providing Santa Clara County's citizens with conditions essential to a livable community.

Article III

MEMBERSHIP

Section 1—The geographic area shall include the entire County of Santa Clara. Membership shall be limited to the incorporated municipalities and the County government.

Section 2—The membership shall consist of the Mayor or his alternate from each city within Santa Clara County and the Chairman of the Santa Clara County Board of Supervisors or his alternate. Alternates shall be members of the jurisdiction represented. All members except the Chairman of the Santa Clara County Board of Supervisors or his alternate shall be voting members. All of the councilmen, supervisors and city managers or chief administrative officers of member jurisdictions shall be ex-officio non-voting members of the Inter-City Council.

Article IV

OFFICERS

Section 1—The officers of the Inter-City Council shall be:
a. President.
b. Vice President.
c. Secretary.
d. Treasurer.

Section 2—The President and Vice President shall be selected from the voting membership of the Inter-City Council. The Secretary and the Treasurer shall be appointed by the Council, shall serve at the pleasure of the appointing body, and may be a non-voting employee of a member jurisdiction.

Section 3—The President and the Vice President shall be elected at the July meeting for a one-year period or unit their successors have been elected.

Section 4—A Nominating Committee of three voting members shall be named by the President one month prior to the election. A notice of the nominations shall be sent to the members one week prior to the election meeting. At the meeting at which elections are held, nominations from the floor may be considered in addition to those submitted by the Nominating Committee.

Article V

DUTIES OF THE OFFICERS

Section 1—The President shall:
a. Preside at all meetings of the Council.
b. Have powers to call special meetings.
c. Appoint the chairman and members of the committees created by the Council.
d. Have power to carry on all other executive functions customarily performed by a presiding officer.

Section 2—The Vice President shall:
a. Have responsibility for arranging for the speaker or program at the dinner meeting.
b. In the absence of the President, assume all the duties and responsibilities of the President as outlined in the Constitution.

Section 3—The Secretary shall:
a. Give written notice of the agenda for each meeting of the Council.
b. Under the direction of the President, prepare all necessary correspondence.
c. Maintain records of the meetings of the Council and keep only all reports, documents, letters, etc. belonging to the Council.

Section 4—The Treasurer shall:
a. Keep all books of account showing receipts, expenditures and balances.
b. Collect annual assessments of member jurisdictions and any special assessments approved by the Council. The secretarial assessment shall be apportioned in accordance with the weighted voting formula described in Article VII, Section 1.
c. Submit a financial report to the Council at each regular business meeting.

Article VI

POWERS

Section 1—The Council shall power to devise and recommend to its respective member legislative bodies the methods and means by which they may, by cooperative effort, increase the effectiveness of the administration of their respective jurisdictions and create an awareness of the necessity of solving their common problems on an areawide basis.

Section 2—The Council shall have power to carry on any studies or surveys which it believes in the general public interest.

Section 3—The Council shall have power to examine and recommend on federal and state isues or legislation that the jurisdictions feel need consideration on a countywide basis.

Section 4—The Council shall have power to receive any grants, legacies, endowments, monies, securities and property from any jurisdiction represented in the Council or from any other governmental agency, individual, firm or corporation. Money it receives may be expended for any of the purposes which the Council may designate.

Section 5—The Council shall have power to disseminate its studies, reports, plans, and recommendations to the appropriate officials and to the citizens of the area in any manner which it believes desirable.

Section 6—The Council shall have power to communicate with and send delegates to any legislative body to foster the adoption of the plans and recommendations of the Council.

Section 7—When appointments are to be made representing the cities of Santa Clara County, the mayors or their alternates shall have such power as is conferred upon them by applicable law to sit as the City Selection Committee, Agency Board Selection Committee, or the Committee of Mayors to make designated appointments to regional or countywide commissions, boards, agencies, committees or councils. Voting shall be as prescribed by the applicable law but in the absence of such, voting shall be governed by Article VII of this Constitution.

Article VII

VOTING

Section 1—Each city in the county shall have one voting member and shall be entitled to one vote on the Inter-City Council except upon the request of at least two (2) cities, the following weighted voting system shall apply:

a. San. Jose—3 votes.

b. Mountain View, Palo Alto, Santa Clara, and Sunnyvale—2 votes.

c. Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill and Saratoga—1 vote.

Section 2—A normal quorum shall consist of a majority of the voting delegates of the member jurisdictions. In the event of a request for a weighted vote a weighted quorum of at least eleven (11) of the twenty-one (21) possible weighted votes must be present, but in no event shall there be less than a majority of the voting delegates present.

Article VIII

MEETINGS

Section 1—Regular meetings shall normally be held on the first Thursday of each month at the time and place designated by the President.

Section 2—Special meetings may be called by the President or any eight (8) members provided that written notice is mailed to all members at least seven days prior to the meeting.

Section 3—Roberts Rules of Order shall apply in the conduct of all meetings.

Article IX

RATIFICATION, AMENDMENT, DISSOLUTION

Section 1—This Constitution may be ratified, amended or dissolved at any regular meeting of the Inter-City Council, by an affirmative vote of two-thirds of the entire membership, provided a sixty (60) days' notice is given in writing to all members, of the proposed Constitution, its amendments, or its dissolution.

LONG-TERM ECONOMIC GROWTH

THURSDAY, MAY 9, 1974

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10 a.m., in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senator Bentsen.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, general counsel; William A. Cox, Lucy A. Falcone, Jerry J. Jasinowski, Courtenay M. Slater, and Larry Yuspeh, professional staff members; Leslie J. Bander, minority economist; George D. Krumbhaar, Jr., minority counsel; Walter B. Laessig, minority counsel; and Michael J. Runde, administrative assistant.

OPENING STATEMENT OF CHAIRMAN BENTSEN

Chairman BENTSEN. Ladies and gentlemen, it is 10 o'clock. The hearing will come to order.

This morning the Subcommittee on Economic Growth is indeed fortunate to have as witnesses three of the country's leading experts on the subject of forecasting economic growth. Two of the witnesses will present specific forecasts which they have developed with the aid of econometric models, while the third witness will serve as a critic, not only of these specific forecasts, but the potentials and limitations of economic forecasting techniques in general.

Over the months ahead, the subcommittee and its staff will be utilizing material presented this morning as well as other material we will be gathering, to develop our own conclusions about where the economy is heading as compared to where it ought to be heading.

Our purpose in undertaking this is not to predict future GNP down to the last billion. We recognize that would not be possible or especially useful. Our purpose is to build a picture of how we would like to see the economy behave over the next decade, by that I mean a realistic picture of our best hopes for approaching the difficult and sometimes conflicting goals of full employment, reasonable, price stability and an improved quality of life. If we have a realistic picture of what economic policy ought to achieve, we will then be in a position to measure actual developments against our potential achievement, to identify problems quickly, and to take corrective action hopefully before we reach the crisis stage.

The testimony that we will hear this morning will give us an excellent beginning in our efforts to assess the future potential of the U.S. economy.

Our first witness will be Mr. Otto Eckstein, professor of economics at Harvard University, president of Data Resources, Inc., and a former member of the Council of Economic Advisers.

I might also mention that he is a former member of the staff of the Joint Economic Committee. He played a prominent role in the important studies of economic growth conducted by the committee in a special 1959–60 study of Employment, Growth, and Price Levels.

It is especially appropriate to welcome him back this morning to help launch our new studies. A lot has happened since then.

Our second witness will be Mr. Ross Preston, professor of economics at the University of Pennsylvania, and executive director of the Wharton Econometric Forecasting Associates. Mr. Preston specializes in long-term forecasting. This morning he will also be presenting an important long-term forecast.

Our final witness will be Robert Solow, professor of economics, Massachusetts Institute of Technology. Mr. Solow is an author of a number of important works on economic growth, forecasting techniques, and macroeconomic policy. We are very glad that he could be here this morning to give us some guidance on assessing the long-term view.

Mr. Eckstein, would you proceed.

STATEMENT OF OTTO ECKSTEIN, PRESIDENT, DATA RESOURCES, INC., AND PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY

Mr. ECKSTEIN. Thank you, Senator Bentsen. I am delighted to see the Joint Economic Committee has renewed its interest in the long-term growth of the American economy through the creation of this subcommittee. The committee was a pioneer in this field. The studies of James Knowles were among the first government analyses of our long-term prospects, and helped to define the concept of our economic potential.

The current short-term difficulties make it abundantly clear that the United States must develop a better long-term economic strategy. Most of our troubles were a long time in coming. The food price explosion was triggered by bad crops, restrictive supply policies, and the Russian wheat deal, but the disappearance of the American surpluses had been producing a risky food situation for some time. The energy difficulties also go back to the disappearance of surplus production in our Southwest oil fields, which created the strong bargaining position of the foreign producers. The shortages of industrial capacity are due to a similar lack of advance planning in pertinent public and private policies. Even the mistakes of fiscal and monetary policy, which helped to cause the excessive business cycle upswing, can be traced back to misguided attempts to fine tune rather than to pursue policies for long-term growth and stability.

The Government clearly will need new policy machinery to avoid a repetition of these disasters. We need an early warning system for these problems, as well as some long-term analysis and planning to help develop policies as part of a long-term economic strategy. But the design of this machinery is not simple. To some extent, we can learn from other countries. Japan's Ministry of Industry and Trade and her economic planning agency clearly provide important information and policy direction for industrial activity. But the United States has no desire to convert her economy to the tightly controlled Japanese model. Similarly, French planning does not provide much guidance. The coordination of investment plans is a minor aspect of the situation here. The work of the Cost of Living Council contains some elements of long-term planning, particularly the work on capacity and on agriculture. The Federal Energy Office also has important long-range concerns, and will develop analyses in its area of responsibility.

The United States will have to feel her way toward long-term economic policies. A greater emphasis on microeconomic aspects is obbviously needed. Some form of numerical projection for specific sectors of the economy seems unavoidable. But whether a new government planning agency should be encouraged to do more than to prepare reports that serve as a background to policy is questionable. A government agency must exercise the powers that it is given. With passage of time, its decisions will become increasingly politicized. What seems to be needed at this time is a staff agency to the President and/or the Congress with the technical capacity to develop projections, monitor developments, and review policies from the long-term economic point of view. Such an agency would be comparable to the Office of Management and Budget, but would emphasize general economic goals rather than the expenditure of money.

Are we going to have them recommend to the President or the Congress or the public what is needed to devise a long-term economic policy, thereby hopefully to avoid the selection of short-term difficulties which we currently suffer?

Now, long-term projections and planning, of which I present a sample today, can accomplish things. They cannot tell us what the future is like. We will never know the exact ins and outs of the business cycle, the exact violence of the future, the exact ins and outs of what the Federal Reserve will do, the pattern of economic change, social policy at home. The uncertainties will remain, but there is a hardcore of actual contribution that long-term projection and planning can help to accomplish. They can provide us with a baseline projection of quite detailed paths of production capacity, for employment and sales. They can uncover at least some elements of the surprise of the future. In particular, they provide a tracking system which will alarm us quickly when things go wrong.

They also can provide—and I think this is very critical—a quick analytical ability to assess the impact of surprising developments such as food and energy, and also they allow us a way to assess how programs designed for other purposes will impact on long-term economic growth. I am sure in the next 5 years we will get our confidence back in social legislation, and we will develop new initiatives in the area of taxation, and the areas of negative income tax, in the areas of health and other areas, and all of these will not have economic growth as their goal.

But, we have to design them in a way that they will allow the long-run economic performance of the economy to continue at a high rate, because that is what provides the basic resources that makes the other things possible. It does make a big difference how these things are organized. We do need some agency whose job is it to look at the long-term performance of the economy.

Let me assert a few basic propositions about the outlook for the economy. These will not be so highly numerical. We have lots of tables. There are a few in my prepared statement. We will be glad to provide additional tables for the record, but these are almost qualitative propositions that grow out of this projection work.

And the first of these propositions is this: The investment-GNP ratio wlll be high for a long time in our economy; investments in energy and the expansion of basic manufacturing capacity as well is the continuing forward thrust——

Chairman BENTSEN. Are you saying they will be or should be?

Mr. ECKSTEIN. They will be.

Chairman BENTSEN. You are convinced we will achieve it?

Mr. ECKSTEIN. Yes. For many years the American economy invested about 10½ percent of its total output in business fixed capital, not counting housing. That figure was close to the average for at least 40 or 50 years. In a recession it might be a little less, a boom it might be near 11 percent. It was one of the constants that the economic system seemed to develop. We now project that ratio will get near 12 percent in the next 4 or 5 years as we develop new energy sources, as we adapt to the different energy sources, as we expand the basic capacity of the paper, the steel, the cement, the rubber and numerous other basic industries, all of which are currently short of capacity, and we believe that the shortage of their capacity is the result of a long historical process of the overinvestment of the 1960's, the depressed rates of the 1960's, environmental difficulties, their inability to plan their investments, and finally, of course, the worldwide business cycle expansion which created a general shortage of these items.

The needs are enormous. For example, the volume of business fixed investment which last year was $136 billion, by 1980 will be a number like $280 billion, more than a doubling in current dollars.

This fundamental fact, or this fundamental projected fact, I should say, of the tremendous need for capital in the American economy leads to a series of implications. The first of these, of course, is that it must be financed. We teach our students savings must equal investment. It does work out in the statistics. But the amount of financial strain that is involved in actually having the savings flow into the investment is unknown. The kind of financial difficulties you can get into, we are all familiar with from recent experiences. Out of the table in my prepared statement, let me just single out a few salient facts from it.

I have already mentioned that the investment itself that needs to be financed rises from $136 billion to $280 billion in our projection. Of that, the internal sources of corporations in retained profit and corporate capital consumption allowances, provide $114 billion in 1973, or almost four-fifths of it. By 1980, even though profits would be quite high, that figure will be $210 billion. So there is a very considerable and widening gap between the internal sources of corporate finance and the needs of corporate finance to pay for the energy and utilities and all these other items.

Where will this additional money come from? As I say, we teach our students savings equal investment, so it is pulled out somewhere. If the financial situation is reasonably stable, if we are not in the situation we have today, if it is a middle of the road policy that does not lurch from one extreme to another, then the money will come from these sources. The households at this time devote virtually their entire savings to housing. That is the volume in 1973 of personal savings which was almost identical to the volume of residential construction. But because housing is not a high growth element of the economy, and indeed, by 1980, the volume of construction——

Chairman BENTSEN. Mr. Eckstein, you are talking pretty fast here. I do not know if you are following your prepared statement, are you?

Mr. ECKSTEIN. No, sir.

Chairman BENTSEN. All right. I am trying to keep up with you because I am very interested in what you have to say.

Mr. ECKSTEIN. I would like to enter the prepared statement in the record.

Chairman BENTSEN. All right. Go ahead.

Mr. ECKSTEIN. I am trying to draw a few points of economic substance a little further than I did in the prepared statement.

Some of the funds will come out of the personal sector because, not all of it will be absorbed by housing. Some of it will be available for this more industrial type of investment. Then we may get a little bit of investment from abroad, especially if some of the oil money comes back. It may just work out, but it is certainly an iffy proposition, and the Government has a very serious responsibility and the Federal Reserve has a very serious responsibility to run our financial system in a way that this enormous transfer of funds can be smoothly effected.

A second major implication of this high investment rate is for fiscal policy. Budget policy tends to be made in the short run, and given the considerable lags from actual policy, even that is not a totally successful procedure. But in the current situation, the fiscal policy does not have as its basic problem to discourage savings, but has as its basic problem, to let the saving occur. That may not be true in the first quarter of 1974. If you look ahead a few years, the fiscal policy is a long-term policy, whether it is designed that way or not—we have a need to keep the taxes in the shape that it will let the economy produce a very considerable volume of personal saving.

Finally, the investment rate has the result that profits will be relatively high. If capital is relatively scarce, as it is today, if you look at investment capacity, and if the labor is abundant, if you look at the labor force and unemployment, then the rate of returns tends to be high and thus in turn tends to reduce the capital for the future. And then it raises questions about income distribution and in a way will open up a way for tax reform.

But we wish to do these tax reforms in a way that does not derail the investment needs.

I think those are the major basic points that I want to make in terms of the basic outlook. Table 1 in my prepared statement shows the rate of growth of real GNP. You can see the rate of investment is extremely high; the rate of consumption certainly for some years is really below trend, and so consequently, the projection is a result of this fundamental fact. We project Government spending to rise, but not rise very strongly in real terms. This is because we do not expect defense spending to rise very much in real terms, which leaves more for the civilian sector.

There is one other problem that I would like to deal with which is fundamental to the long-term outlook. That is the basic question of inflation.

We are sitting here in an inflation, which is literally the worst since World War I. That is, the increase in the price level in the last few years is greater than what we experienced after World War II. That of course raises the very big question of whether it will always be like that, or whether it is a temporary situation which will gradually wear off.

We do lean toward the view that we have had a string of bad luck, that we have had the food and energy problems which perhaps could have been foreseen, in any event, they will not repeat in their full magnitude, we believe that the world business cycle was just partly an element of chance in a very strong upswing in every major country. We believe that the short-term capacity is a part of a long-term historical process which is now complete now that the dollar is down in value, and these industries have the rate of return to allow them to invest.

There is also an element of error of fiscal and monetary policies of recent years, and we would hope that as these policies turn to a more long-range perspective and better long-range planning, these mistakes would not be repeated.

Finally, of course, there are the other structural aspects of inflation which concern people, whether it is unionism, which we think could not have had much to do with the recent inflation since union wages lagged and in real terms declined in the economy. Similarly, we do not attribute much of the inflation to changes in business organization.

There is the territory discussed yesterday in your hearings whether there is a more chronic shortage of food. We have no firm answers on that. Our initial analysis suggests that all of the resource problems put together, that is the fact that we no longer have the benefit of real declining cost in resources, can worsen inflation somewhat, but in terms of order of magnitude, it could not be more than a percent or two. You cannot get double-digit inflation out of long-run trends in resource availability. It is only the short-run disturbances that create that situation.

We think these are the fundamental problems that the economy will have to deal with in the long run. How do we manage this large shift towards capital accumulation? How do we do that while still preserving social equity and a reasonable distribution of income? And finally, how do we make sure that we are going to get our way out of a double-digit inflation and make the economy less accident prone?

We have had four or five accidents in the last 2 or 3 years. It was not always thus. We believe with better planning and a little more farsighted policies we can get out of it.

Thank you.

Chairman BENTSEN. Thank you very much. You provoked a number of questions with what you stated, and I am interested in your comments. But we will proceed to the next witness, and then we will discuss some of these issues each of you have raised at the end of this time.

[The prepared statement of Mr. Eckstein follows:]

PREPARED STATEMENT OF OTTO ECKSTEIN

PROJECTING AND PLANNING FOR U.S. LONG-TERM GROWTH

I am delighted to see the Joint Economic Committee has renewed its interest in the long-term growth of the American economy through the creation of this sub-committee. The committee was a pioneer in this field. The studies of James Knowles were among the first government analyses of our long-term prospects, and helped to define the concept of our economic potential.[1]

The current short-term difficulties make it abundantly clear that the United States must develop a better long-term economic strategy. Most of our troubles were a long time in coming. The food price explosion was triggered by bad crops, restrictive supply policies, and the Russian wheat deal, but the disappearance of the American surpluses had been producing a risky food situation for some time. The energy difficulties also go back to the disappearance of surplus production in our Southwest oil fields, which created the strong bargaining position of the foreign producers. The shortages of industrial capacity are due to a similar lack of advance planning in pertinent public and private policies. Even the mistakes of fiscal and monetary policy, which helped to cause the excessive business cycle upswing, can be traced back to misguided attempts to fine tune rather than to pursue policies for long-term growth and stability.

The government clearly will need new policy machinery to avoid a repition of these disasters. We need an early-warning system for these problems, as wells as some long-term analysis and planning to help develop policies as part of a long-term economic strategy. But the design of this machinery is not simple. To some extent, we can learn from other countries. Japan's Ministry of Industry and Trade and her economic planning agency clearly provide important information and policy direction for industrial activity. But the United States has no desire to convert her economy to the tightly controlled Japanese model. Similarly, French planning does not provide much guidance. The coordination of investment plans is a minor aspect of the situation here. The work of the Cost of Living Council contains some elements of long-term planning, particularly the work on capacity and on agriculture. The Federal Energy Office also has important long-range concerns, and will develop analyses in its area of responsibility.

[1] James W. Knowles, *The Potential Economic Growth in the United States*, 86th Congress, 2nd Session, Joint Economic Committee Study Paper No. 20, Study of Employment, Growth, and Price Levels, 1960.

The United States will have to feel her way toward long-term economic policies. A greater emphasis on micro-economic aspects is obviously needed. Some form of numerical projection for specific sectors of the economy seems unavoidable. But whether a new government "planning" agency should be encouraged to do more than to prepare reports that serve as a background to policy is questionable. A government agency must exercise the powers that it is given. With passage of time, its decisions will become increasingly politicized. What seems to be needed at this time is a staff agency to the President and/or the Congress with the technical capacity to develop projections, monitor developments, and review policies from the long-term economic point of view. Such an agency would be comparable to the Office of Management and Budget, but would emphasize general economic goals rather than the expenditure of money.

Let me emphasize that long-range projection and planning cannot provide a secure basis for long-range actions. The future really is unknowable. Some uncertainties of short-term forecasting are attenuated in the long-run because the business cycle does tend to average out. But the long-range behavior of prices, the degree of violence of future business cycles, the pattern of international economic and political change, as well as changes in domestic social policies combine to produce major changes in the path of economic development.

What long-term economic projection and planning can hope to do is this: first, it can identify a baseline forecast of economic growth, including projections of quite detailed paths of production, employment, sales, requisite investment needs, interest rates, profits, wages, etc. While a baseline forecast is unlikely to uncover the massive surprises of the future, it provides a tracking system against which current developments can continually be judged. It also can be used to plan the long-term growth of physical capacities and resource availabilities. Second, long-term projection and planning machinery can provide a quick analytical ability to assess the impact of surprising developments such as the food and energy problems. and the implications of specific government policies. For example, if we had had this kind of analytical ability, we would have understood much earlier that some of the enviromental policies would lead to economic difficulties for specific industries, and that these difficulties would create bottlenecks for the entire economy. Similarly, it would have been possible to assess the risks of the agricultural policies such as the Russian wheat deal and the poor acreage decisions of 1972.

In the years ahead, the United States will embark on another major round of social reform. The tax system will be changed. Recent initiatives in the regulatory fields will be strengthened. Our programs to alleviate poverty will be moved forward after the current period of consolidation. Our pattern of intenational economic relationships will be altered. These are all policy changes of such magnitude that they will affect the behavior of the economy as a whole. With careful analytical work, they can be related to general national economic development, and can be designed so they will not seriously affect the economy's ability to grow and operate efficiently. Indeed. in some cases they can be devised, so as to strengthen these important qualities of the economy's performance. In the American context, the process of program review from the point of view of long-term economic goals is probably the most important single task for such an agency to perform. Finally, a long-term planning agency can help devise policies for the private sector which will help assure the accomplishment of our goals. For example, at the moment, there is a major question whether the enormous investment needed to raise capacity, control pollution, switch energy sources, and to continue to bring in new technology, will be financed readily through the private capital markets. In the projections below I will deal with this problem explicitly. A long-term planning agency would be the logical group to assess for the government and perhaps for the public as well as whether particular fiscal or monetary measures will be needed to help raise our ability to finance these investments.

SOME PERSPECTIVES ON THE LONG-TERM OUTLOOK

In order to help launch the public discussion of longer run economic strategies and planning, let me summarize a set of basic forecasts for the U.S. economy which were prepared by Data Resources, Inc. as part of its regular forecasting works. (See table 1.) These projections are developed by econometric techniques. and are used by various private companies as a basis for internal long-term planning. In summarizing the projections I will illustrate the kinds of information that are needed, and some of the problems to which the long-range planning process should address itself.

Some basic conclusions that emerge from our work are the following:

1. The Investment/GNP ratio will be high for a long time

Investments in energy and in the expansion of basic manufacturing capacity are pushing the investment share in the nation's output beyond the normal historical range. Business fixed investment has become less and less sensitive to the business cycle because of the size and technological complexity of the projects and the strength of the underlying demand for capacity. The next five years will see a major catch-up element in investment to compensate for the inadequate outlays of the 1960's, when the dollar was overvalued and manufacturing suffered from depressed rates of return.

TABLE 1.—GROSS NATIONAL PRODUCT

[Average annual rates of change, constant dollars]

	60–65	65–70	70–75	75–80	80–85
Gross national product	4.9	3.2	4.0	4.4	3.7
Personal consumption expenditures	4.7	3.7	3.7	4.5	3.7
Durable goods	8.3	4.8	6.6	6.9	4.8
Nondurable goods	3.6	2.9	2.4	3.4	2.8
Services	4.6	4.2	3.9	4.3	4.0
Gross private domestic investment	6.7	1.1	6.2	5.1	3.9
Fixed investment	5.6	2.1	5.8	5.4	4.1
Nonresidential	7.3	3.2	5.8	6.1	4.9
Structures	5.2	1.3	3.6	1.6	2.4
Producers durable equipment	8.5	4.2	6.8	7.6	5.6
Residential structures	1.9	−1.1	7.2	3.0	.7
Exports	6.6	6.9	7.9	4.9	5.5
Imports	6.5	10.0	5.7	5.7	6.0
Government purchases of goods and services	3.9	4.1	2.0	3.7	3.5
Federal Government	2.5	2.7	−2.4	1.6	2.6
National defense	.2	3.6	−5.0	1.1	2.0
Other	12.0	.1	4.9	2.6	3.9
State and local government	5.5	5.7	5.2	4.8	3.9
Prices:					
Implicit GNP deflator	1.4	4.1	5.6	4.6	4.3
Consumer price index	1.3	4.3	6.2	4.9	4.5
Wholesale price index	.4	2.7	9.1	4.1	3.6
Index of unit labor costs	.4	4.9	4.5	3.6	3.9
Unemployment rate	−3.2	3.7	4.1	−3.7	−0.7

An investment ratio near 12%, compared to an historical average of 10½%, provides an underlying strength to the entire economy. There is little need to fear that the economy has any tendency to stagnation in the current historical setting. If the economy can be kept free from crises created by policies, financial conditions or events abroad, its progress will be strong and its ability to create jobs sufficient to absorb the growing labor force.

2. The financing needs for this large volume of investment will require large personal and business savings

The American economy has shown a long historical tendency toward a constant saving rate. This saving share was sufficient to finance investment. But in the coming years, the saving rate has to move up a modest percentage if the investment needs are to be met. (See table 2.)

Fortunately, personal saving is likely to be on the high side. The age structure of the population, smaller family size and changing attitudes toward large homes and cars will keep personal saving above normal. These personal savings will flow into the thrift institutions, into rapidly rising pension fund reserves, and into other saving media.

Business saving is also likely to be quite high, although its share in Gross National Product may do no better than to remain constant. With the utilization rate of industrial capacity high and labor supply relatively ample, and, with the tax structure providing various investment incentives, total cash flow will grow near the GNP rate

TABLE 2.—SAVINGS AND INVESTMENT

[Billions of dollars—SAAR]

	62	63	64	65	66	67	68	69	70	71	72	73
Savings:												
Personal savings	21.5	20.0	26.2	28.4	32.5	40.4	39.8	38.2	56.2	60.2	49.8	54.8
Retained corporate earnings	16.2	16.6	20.7	26.7	29.2	25.3	24.3	20.5	14.6	22.5	29.3	42.6
Equals: After-tax profits	31.2	33.1	38.5	46.5	50.0	46.7	47.8	44.8	39.2	47.6	55.4	70.4
Minus: Dividends	15.1	16.5	17.8	19.8	20.8	21.4	23.6	24.3	24.7	25.1	26.1	27.8
Capital consumption allowances	50.0	52.6	56.1	59.8	63.9	68.9	74.5	81.6	87.3	93.8	102.4	110.0
Corporate capital allowances	30.1	31.8	33.9	36.4	39.5	43.0	46.9	52.0	56.0	60.4	65.9	71.4
Federal Government deficit	−3.8	.7	−3.0	1.2	−.2	−12.4	−6.5	8.1	−11.9	−22.2	−15.9	.9
State and local government surplus	1.0	1.2	1.7	1.0	1.3	−1.6	−.4	.7	1.8	4.0	13.2	10.5
Investment:												
Gross private domestic investment	82.9	87.6	94.6	109.9	123.2	117.8	129.4	144.1	141.1	158.1	185.2	219.4
Business fixed investment	51.7	54.3	61.1	71.3	81.6	83.3	88.9	98.5	100.6	104.4	118.3	136.2
Equipment	32.5	34.8	39.9	45.8	53.1	55.5	58.5	64.3	64.4	66.6	76.6	87.8
Nonresidential construction	19.2	19.5	21.2	25.5	28.5	28.1	30.3	34.3	36.2	37.9	41.7	48.4
Residential construction	25.4	27.0	27.1	27.3	25.1	25.1	30.1	32.6	31.2	42.7	54.0	58.0
Inventory investment	5.9	6.4	6.4	11.4	16.6	9.4	10.4	12.9	9.3	11.0	12.9	25.2
Net foreign investment and statistical discrepancy	2.0	3.4	7.0	7.1	3.4	2.9	2.3	5.1	6.8	.2	−6.5	−.7

	74	75	76	77	78	79	80	81	82	83	84	85
Savings:												
Personal savings	63.0	65.8	71.2	82.0	86.3	91.7	99.3	105.6	114.6	124.4	135.7	145.7
Retained corporate earnings	47.9	50.4	56.0	66.1	71.3	75.0	79.2	81.4	83.5	85.9	90.1	92.6
Equals: After-tax profits	78.6	84.1	92.7	106.2	115.2	122.7	131.0	137.5	144.0	150.9	159.8	167.3
Minus: Dividends	30.7	33.7	36.7	40.1	43.9	47.7	51.8	56.1	60.5	65.0	69.8	74.8
Capital consumption allowances	119.3	129.2	139.8	151.9	166.2	182.8	200.8	220.1	240.6	262.4	285.6	310.0
Corporate capital allowances	78.1	84.5	94.2	99.0	108.6	120.0	132.5	145.8	159.8	174.7	190.5	207.2
Federal Government deficit	−3.3	5.4	12.5	8.5	7.6	7.2	7.2	4.4	1.5	−0.8	−0.0	−2.0
State and local government surplus	5.4	4.9	3.1	7.1	11.8	10.5	6.2	8.2	8.7	6.5	1.5	0.9
Investment:												
Gross private domestic investment	236.5	258.5	284.9	317.3	345.3	370.3	396.4	426.0	454.7	485.2	519.7	554.4
Business fixed investment	155.3	176.8	194.4	218.6	241.6	261.4	281.7	304.6	327.1	350.3	377.1	404.2
Equipment	98.5	112.1	123.8	140.3	155.5	169.2	182.6	197.4	211.3	224.9	240.7	255.5
Nonresidential construction	56.8	64.6	70.6	78.3	85.2	92.2	99.1	107.2	115.8	125.4	136.5	148.7
Residential construction	49.8	57.8	67.0	73.9	77.5	81.3	85.4	90.1	95.0	100.6	106.1	111.5
Inventory investment	31.5	24.0	23.5	24.9	26.2	27.7	29.3	31.3	32.6	34.4	36.5	38.7
Net foreign investment and statistical discrepancy	−4.2	−2.7	−2.3	−1.8	−2.0	−3.1	−3.8	−6.3	−5.8	−6.8	−6.9	−7.2

3. Budget deficits should be kept small

There are times when private demand is weak and the purchasing power stimulus of budget deficits is needed to achieve high employment. However, in the inherently strong economy of the mid-1970's, there is no such need beyond the automatic stabilizing properties of the budget in recession. There is no present tendency to excess saving in relation to the large investment needs. Should the government be a net dissaver through budget deficits, it will only impose strains on the use of the economy's resources and help produce inflation.

Budget policy in the United States still tends to be made in the short-run context. Given the considerable lags from fiscal action to economic impact, and given the short duration of the business cycle phases, it is a mistake to gear budget policy to the short-run economic situation. There are human needs created in recession and there are social needs that become more explicit during a period of slack. These should not be ignored by a government with a social conscience. But meeting these needs should not be allowed to produce otherwise unjustified budget deficits.

We also appear to be embarking on a massive increase in military spending, in part justified by economic conditions. This is about the poorest approach to economic policy that one can envisage. To suppose that the American economy needs the stimulus of military spending is a libel on the capitalist system.

In recent months, personal tax reduction has also been suggested to meet the short-run situation. If enacted in the second quarter of this year, it would have its major impact in the middle of 1975. Also, the tax multiplier is peculiarly low at this juncture because the consumer items with high income elasticities, such as automobiles, are not likely to show their normal response to a tax reduction.

4. The current inflation is a historical episode rather than a permanent change in the nature of the economic structure

There are at least three competing theories that have been advanced to explain the worldwide inflation. First, the inflation can be attributed to a collection of one-time misfortunes: the coincidence of the worldwide business cycle; the setback to the world food supply and the disappearance of the stabilizing U.S. agricultural stocks; the worldwide shortage of industrial raw and proceed materials because of inadequate capacity expansion of the 1960's; the new bargaining power of the oil producers after the disappearance of the American surplus capacity; and the distortions created by wage and price controls imposed without a fully developed, war-time control machinery. Given this collection of disasters, it is not surprising that the inflation was finally exacerbated by speculative hoarding and wild price movements in the poorly regulated commodity exchanges.

A second theory attributes the inflation to excessive monetary expansion and perhaps excessively easy fiscal policies around the world. If governments provided too much money and too much stimulus to purchasing power, sooner or later this would express itself in a price explosion. The retention of fixed exchange rates beyond their proper day created such vast international money flows that other advanced countries found it impossible to control their money supplies. In the United States, monetary policy has suffered from the learning process of switching from the management of interest rates, to the management of the money supply, and from an excessive recognition lag in assessing actual conditions. Federal Reserve policy remained easy much too long, and tightened only after the contractionary phase of the cycle had begun.

Finally, the inflation has been attributed to fundamental changes in economic structure: the growth of unions, the increasing concentration of industry, overzealous dedication to full employment policies producing expectations in which prices can only go up and unemployment would always be kept small.

While there are some elements of truth in each of these theories, the evidence seems to point mainly in support of the first and second, that the current inflation is an unfortunate historical episode rather than a fundamental change in economic structure. Certainly, given the wage record of the last few years, it would be hard to argue that increasing unionization is accelerating the rate of wage increase; indeed union members might well argue to the contrary. On the business side, the energy and commodity shortages are temporarily strengthening the market power of industrial companies, but this is a very recent development and one that will disappear as the shortages are relieved.

It is more difficult to divide the blame between acts of nature as opposed to lack of foresight and an inadequacy of our political system's ability to devise suitable policies. I do believe that there is an element of historical accident in the weakness of government in most of the major advanced countries. But one has to acknowledge that there are some deeper, more permanent problems in the inability of the political system to atract first-class people into political and public service careers, and in our inability to mobilize the political process toward more successful economic policies.

The computers fail us in weighing these matters. But what quantitative and historical analysis can be applied does seem to attach the preponderant weight to the episode theory of this inflation. When it is all over, the U.S. inflation rate is much more likely to settle into the 3½ to 5% range than to be much above it or to remain in the double-digit condition.

Chairman BENTSEN. Mr. Preston, would you give us your presentation, please?

STATEMENT OF ROSS S. PRESTON, EXECUTIVE DIRECTOR, WHARTON ECONOMETRIC FORECASTING ASSOCIATES, INC., AND PROFESSOR OF ECONOMICS, UNIVERSITY OF PENNSYLVANIA

Mr. PRESTON. My remarks concern themselves with the philosophy and content of our long-term forecasts which we are currently generating at the University of Pennnsylvania. It is, in a sense, a think piece with certain empirical substance added. It is entitled "Pressure Points in the U.S. Economy During the Period 1974 Through 1982."

During the period 1974 through 1982, U.S. policy planners must anticipate a wide range, but not unrelated, set of problems, both external and internal in nature. Along with a concern for the potential path of the U.S. economy other areas of concern include: Inflationary pressures, energy supply and demand balance, the trade balance, the tax base, the Government spending base, monetary management, and labor market frictions.

The use of econometric models for short-term conditional forecasting and policy analysis in the past has been frequent. Conditional forecasting using the Wharton quarterly model has been a regular activity at the Wharton School since 1963. Quarterly forecasts if done on a regular basis can provide timely and detailed information. Longer-term projections using econometric models have been less frequent in part due to the increased degree of uncertainty that must be dealt with as a projection is extended into the future. Structural, technical, and institutional change certainly will have a greater impact in the long run. Such changes could have a major bearing on the outcome of a set of policies once initiated. Failure to recognize the importance of such change could in the long run lead to substantial error.

In many cases, longer-term projections are only a partial analysis on the supply side. With a partial analysis, attention is directed at determining the availability of resources including an assessment of production techniques. This methodology, which deals with the projection of rates of increase in productivity, available manpower, and changes in average weekly hours is widely used to assess the potential level of output of the U.S. economy. However, it fails to take into account the demand side of the economy, and in particular, the important feedbacks to wages and prices that alternative demand configurations may have. Failure to take into account the demand side in long-run projections could lead to substantial error especially if one is studying the impact that specific policies may have on wages and prices and the second round impacts on input configurations. Econometric model projection for long-term analysis which joins both the demand and the supply sides of the economy in a simultaneous framework can provide a powerful vehicle for analysis of the economic environment in the long run.

The Wharton long-term model is designed for the purpose of making econometric projections with a detailed simultaneous structural analysis of both the supply and demand side of the economy for periods as long as 10 years. The model includes a 63 sector input/output table which links the national income accounts directly to the supply or production side of the economy.

The model is subdivided into eight different sectors. These include the final demand sector, which gives projections of GNP components; the input/output sector which projects production levels; the labor requirements sector which determines the labor inputs necessary to satify production levels; the wage sector, which combines information on labor market conditions and consumer price indices in determining wage rates; the industrial price sector where wholesale and industrial prices are determined; the final expenditure price sector, where the implicit deflators for the various components of GNP are determined; the income payments sector, where such categories in the national income accounts as personal income are determined; and the monetary sector, where money supply, money demand, and interest rates are determined. Figure 1, attached to this statement, represents a flow chart of the Wharton long-term model. Traced out in summary form are the various interrelationships between each of the major blocks.

The eight blocks outlined in figure 1 comprise a system of mathematical equations which have been programed for solution on a computer. In order to use the model for projection purposes, we must first specify values of variables outside the model which are necessary for solution of the model. In the econometric literature these variables are called exogenous. These variables form a core of information which outline the important policy, institutional and demographic, inputs to the model. These inputs include projections of spending levels for Federal, State and local governments on both goods and services and transfer payments. The model user must also specify the tax structure which will exist in the future prior to using the model for projection purposes. The user must also specify the inputs for monetary policy including the level of the discount rate and the level of nonborrowed reserves. The user must specify a picture of what is anticipated in the area of world trade with regard to both price levels and world trade activity. Finally, the user must specify information of a demographic nature, including rates of population growth.

This may appear to be a bewildering set of assumptions which are just as difficult if not more difficult to project than the prospects of growth for the U.S. economy over the next decade. However, many of the important inputs with respect to tax rates in the near term are precisely written in existing legislation and other important inputs are specified precisely in pending legislation. Much demographic information is available from census projections. These projections are straightforward since all those who will be in the labor force between 1974 and 1982 have been born. This, in concert with a fairly constant death rate, in a trend sense, provides adequate information in this area.

Rather than dwell on, in a tedious fashion, each of the individual inputs we must develop prior to simulating the model through 1982, I will leave this area open for your questions and discussion at the conclusion of my statement. I will treat these assumptions in only a general fashion and discuss more directly the results obtained from projecting the model through the period 1982.

A broad outline of the major assumptions underlying the scenarios which we have developed include the following. I might say some of these are very broad. The United States will not involve itself in a major conflict during the period 1974 through 1982. The defense commitment under these assumptions will be considerably less than that of previous decades. However, we do project an increment in real defense spending during the period 1974 through 1982, of approximately $10 billion representing the effect of a more capital intensive defense posture.

Chairman BENTSEN. In real dollars you are reflecting an increase?

Mr. PRESTON. An increase in prices. We anticipate faster growth in nondefense spending over this period, reflecting an increased commitment of the Federal sector to the resolution of many important domestic issues and problems, energy, ecology, the cities, mass transit, et cetera.

Projections concerning the level of State and local purchases have been divided into four categories including education, health and welfare, safety, and other. We anticipate State and local spending will be heavily influenced by the decline in school age population. This decline in school age population will cause a decrease in the rate of increase in State and local purchases during the period 1975 through 1977. However, after this period we anticipate an increase in the rate of growth in this area.

In the nongoods and services area for both Federal, State, and local governments, we anticipate a growth of transfer payments at a rate which would not only provide increased coverage and an expansion of benefits but also maintenance of the real value of the transfer dollar. During this period we anticipate a more than doubling of this item in Federal, State and local budgets.

One of the more interesting questions we seek to answer in making our long-term projections, deals with the adequacy of the current tax structure to generate funds needed to pay for programs anticipated over the course of the current decade. This is a fancy way of asking if we going to have deficits. In making these projections one must specify as a minimum the tax structure relevant during the period of the projection. The tax structure of the economy, including tax rates for both Federal and State and local governments, have been projected as if no changes were to occur in the effective tax rates over the period 1974 through 1982, except for those clearly outlined in legislation, such as increases in the statutory rates for the FICA program, or in those areas where trend drifts are apparent. That is in the State and local areas in particular. We have assumed Federal personal tax rates by bracket, for brackets one through nine, to be identical to the 1972 through 1974 experience. However, because of the progressiveness of the Federal tax system, and a movement toward higher income levels as the projection period unfolds, our solution implies an increase in the effective tax rates applied on average to personal taxable income. The increase in this effective rate is an indication of fiscal drag. In other words, in the average rate over time we see an increase.

We anticipate substantial increases in Federal grants-in-aid to State and local governments. These increased grant-in-aid to State and local governments will reduce pressure on the upward movement of State and local tax rates in the personal, corporate, and sales tax areas. Our projections of State and local tax rates anticipate this increased financing from Federal sources. In other words, we have worked into our solutions the prospect of this revenue sharing and the effect on effective tax rates at the State and local levels.

Monetary policy during the decade has a dual role. It operates both as a brake and accelerator as developments warrant. With the economy's gradual approach to potential, monetary policy is used to moderate and dampen the upward movement of the economy.

There are certain price and wage levels which we must take as exogenous before making our projections. These include the price levels associated with the farm sector and the wage rates associated with the public sector. We assume that farm prices will increase an average of 4.5 percent per year during the period 1975 through 1982 and that wage rates in the public sector will increase at approximately 5 percent per year.

The appendix, attached to this statement, contains summary results of our projections. Included are projections of major aggregates which summarize the path of the U.S. economy could take, provided the general policies outlined previously are followed over the course of the decade. Such aggregates as GNP in current and constant dollars; the GNP deflator; manufacturing output; the unemployment rate; the savings rate; and other useful summary measures are recorded. Let me add 190 exogenous variables have to be formulated before you run the model. Many of those exogenous variables are tax rates by industry, tax credit rates, depreciation, and things like this. Although it may seem overwhelming, it is really not that overwhelming. It is hard, but it is not as hard as you might anticipate.

Before we discuss in detail major areas of concern, as brought out by our projections, I would like to indicate in general terms the techniques used to generate a potential output path using our econometric model. The exogenous variable inputs that we have briefly described are in part designed to set the U.S. economy on a path toward full employment. In other words, we have taken the liberty of formulating policy in terms of spending levels that would drive the economy to that point. If we regard 4 percent in the economy as potential, the economy under our assumptions is operating at potential during the 1979 through 1982; that is, if you inspect our output, we achieve potential in those terms in that period. I want to emphasize that our estimates of potential GNP in 1980 are a supply-demand phenomena. One controversial point of our projections involves the low rates of productivity growth projected by the model during the period 1978 through 1980. Traditionally, the U.S. economy has shown large gains in productivity on the upswing of the business cycle. Our projections during the period 1975 through 1977, when the economy is approaching potential, show productivity gains to be in excess of 3 percent on average. It is only when we reach potential do productivity gains fall below the 2 percent level. Cyclical changes in productivity are important considerations even in relation to long-term projections.

Another important area of concern is the impact the emerging energy crisis may have on the U.S. trade position. U.S. domestic demand for energy and domestic supplies are already out of balance. One possible solution to the energy crisis might involve increasing imports of crude petroleum and other petroleum products to fill the gap between domestic production and domestic consumption. Satisfying domestic energy requirements by dependence on foreign supplies could, among other things, cause substantial trade deficits over the course of the decade. Policy planners must realize that the possibility does exist for a single commodity, petroleum, to swing the U.S. trade position by as much as $10 or $20 billion over the course of the decade. We anticipate the energy crisis to not only affect the U.S. trade position but also substantially increase the domestic price of energy. Given the underlying dependence of U.S. growth on cheap sources of energy, a continuation of the current supply-demand imbalance could easily lead to possible bottlenecks in the growth process. We have not dealt directly with this in our scenarios, but have assumed in our scenarios that energy needs are satisfied by either increased oil imports, or increased domestic production.

To give some substance to the alternative which has been suggested by the administration, we have also developed a scenario which assumes the U.S. increases its domestic production of energy in barrels per day equivalent by 8 million as we approach 1982. This is not enough to make the U.S. self-sufficient in energy but is adequate to return the trade balance to a slight surplus position in 1980. These calculations show the economy returning to potential 1 year earlier, compared to the dependence on foreign supplies scenario, as a result of increased investment demands placed on the economy in the energy area. However, higher rates of inflation do materialize and tighter monetary policy is necessary, causing decreased growth in nonenergy related investment areas. In particular, private housing starts suffer.

Growth of the tax base during the decade represents another problem of balance. As the U.S. economy grows, a tax base must emerge to not only support existing programs, and their uncontrollable portions, but also the tax base must be able to support new directions which Federal, State, and local governments might take over the course of the decade. With the current emphasis on setting spending targets by balancing the full employment budget, planners must realize that this approach to fiscal planning presupposes spending the fiscal dividend in advance. Our current projections incorporate this fiscal philosophy.

Distribution of this fiscal dividend among Federal programs and to State and local governments by way of grants-in-aid has already begun. Grants-in-aid to State and local governments for purposes of tax relief are anticipated to increase during the decade to levels double what they were in 1970. These new directions in fiscal planning have been preprogramed into our solutions. Our calculations with the Wharton Long-Term Model imply the necessary tax base will emerge which will permit funding of those programs which are currently expanding at rapid rates and at the same time balance budgets at full employment. In fact, the Federal budget comes into balance in 1978 and remains in slight surplus thereafter. However, as stated previously, policy planners must realize that no fiscal dividend under this approach to fiscal management will materialize. As a result the initial stages of planning of new programs should be carried out with extreme care. As full employment is reached, no surplus will materialize, leaving policymakers with a more difficult set of decisions to make. Namely, those associated with redistribution. These kinds of decisions have been the more painful type for U.S. policy planners to make.

One of the more important areas where solutions involve changing the composition of output include the emerging ecological issues. Direct projections of exogenous variables cannot adequately treat the emerging problems of pollution control and the investment needed to reduce or at least maintain a balance in this area. Proposed solutions suggest that investment as a ratio to gross national product must rise to all-time record high. The problem is complicated by the fact that the rate of return on investment in this area is of a social nature. The existing tax incentive programs and pricing system might have to be altered in order to bring about market solutions to these problems. Targeting spending on full-employment budgets, without adequately considering the ecological issues and the resources needed to solve these problems, may leave policy planners little room to maneuver as full employment is reached. Again, policy planners may face the more painful decision of redistribution. Our projections already include certain adjustments to the investment equations, which anticipate a private response to these ecological problems. The investment functions for the regulated sector have been adjusted upward to account for increased spending on pollution control. By the end of the decade the ratio of investment to GNP in our projections has increased to a record high. Our projections show that such increases do bring undue pressures, as continued high levels of interest rates will make such programs extremely costly.

Our current projections emphasize the point that targeting the economy at unemployment rates near 4 percent carries with it certain frictions. In the area of wage and price formation, the trade-off between the rate of inflation and the rate of unemployment has led to certain dilemmas on the part of policy planners. We are still struggling with the aftermath of policies which led to operation of the economy at extremely high levels of resource utilization during the latter sixties and early seventies. On top of this we have the most phenomena of high farm prices and high fuel prices. The stickiness of wages and prices during the late sixties and early seventies, exclusive of the period where controls were in force, is exhibited once again during the period 1975 through 1982. Operating the economy at low rates of unemployment, that is near 4 percent, carries with it the result of inflation rates in the 5 percent range. Precisely, no matter what we do, we cannot get the model to go below 4 or 5 percent.

No matter what we do, we cannot get the model to produce results under these set of assumptions that yield inflation rates under 4 or 5 percent.

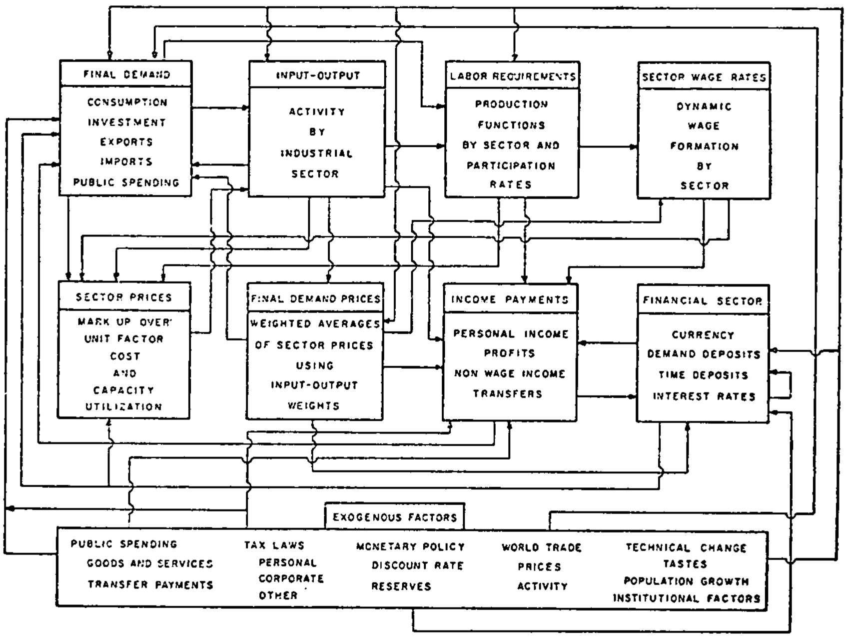
The use of monetary policy to manage the economy during periods of high level growth has systematically led to disastrous effects in mortgage markets and subsequent new home construction. Given the current administration's stated target of 25 million new housing starts by 1980, ways should be developed which would soften the effect of monetary management on particular sectors of the economy, sectors which are not primarily responsible for imbalances. Our current projections show that current tightening of monetary policy in response to inflationary pressures will lead to substantial declines in housing starts during the period 1974–75 and continued tightness in the monetary sector will depress housing starts over the course of the decade. Choosing target rates of unemployment which appear acceptable may in fact cause imbalances, whose resulting effects may lead to a reconsideration of initial targets. In particular, operation of the U.S. economy to bring unemployment rates near 4 percent by the application of general fiscal and monetary policy will probably prove to be an unacceptable and economically wasteful way to achieve full employment. This conjecture is supported by our long-term model calculations.

Chairman BENTSEN. Thank you very much, Mr. Preston.

[The figure and appendix attached to Mr. Preston's statement follow:]

FIGURE 1

FLOW CHART OF THE WHARTON LONG TERM MODEL



APPENDIX

DEPENDENCE ON FOREIGN OIL AFTER 1975—MAY 7, 1974

Selected indicators	Model: Label	Model: Variety	Forecast data: 1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Gross national product (current dollars)	GNP*	6181	1,155.2	1,290.1	1,405.9	1,538.1	1,685.6	1,862.6	2,043.8	2,236.7	2,414.9	2,612.1	2,802.1
Percent change			9.4	11.7	9.0	9.4	9.6	10.5	9.7	9.4	8.0	8.2	7.3
Gross national product (1958 dollars)	GNP	1651	790.7	837.4	835.8	853.0	896.2	951.6	997.0	1,038.6	1,069.8	1,109.6	1,148.8
Percent change			6.1	5.9	−.2	2.1	5.1	6.2	4.8	4.2	3.0	3.7	3.5
Gross national product deflators (1958=100.0).	GNPD	6471	146.1	154.1	168.2	180.3	188.1	195.7	205.0	215.4	225.7	235.4	243.9
Percent change			3.2	5.4	9.2	7.2	4.3	4.1	4.7	5.1	4.8	4.3	3.6
Labor force (millions)	CLFT	2881	86.5	88.6	90.9	92.2	93.9	95.8	97.6	99.5	101.6	103.9	106.2
percent change			2.9	2.4	2.5	1.4	1.9	2.0	2.0	1.9	2.1	2.2	2.2
Participation rate			59.5	59.8	60.2	60.9	60.0	60.1	60.2	60.3	60.5	60.8	61.1
Percent change			.9	.6	.6	−.4	.1	.2	.2	.2	.3	.4	.4
Manufacturing average weekly hours	H33	2101	40.6	41.1	40.7	40.6	40.8	41.0	41.1	41.1	41.1	41.2	41.4
Percent change			1.7	1.2	−1.0	−.3	.4	.6	.1	0	−.1	.4	.5
Productivity (manufacturing)			608.9	623.5	626.3	643.6	664.7	683.7	695.0	705.4	715.9	732.3	750.6
Percent change			4.8	2.4	.5	2.8	3.3	2.9	1.7	1.5	1.5	2.3	2.5
Money supply (demand plus time deposits)	MSPL	6921	558.1	629.1	683.4	745.7	853.5	928.3	981.6	1,039.3	1,100.7	1,187.3	1,261.3
Percent change			12.0	12.7	8.6	9.1	14.5	8.8	5.7	5.9	5.9	7.9	6.2
Bond rate (percent)	TR	323B	7.6	7.7	8.4	8.6	9.4	9.2	8.8	8.6	8.6	8.6	8.5
Prime commercial paper rate (percent)	PCP	691B	4.7	8.0	9.6	9.3	7.9	7.4	8.0	8.2	8.3	7.7	7.4
Corporate profits (current dollars)	PBT	7371	98.0	123.5	135.1	126.7	142.5	165.7	184.5	208.7	228.6	260.5	283.1
Percent change			15.3	26.0	9.4	−6.2	12.5	16.2	11.4	13.1	9.5	14.0	8.7
Manufacturing output (1958 dollars)	GPO10	0591	243.7	262.7	261.3	267.7	282.9	303.1	318.5	331.4	340.6	354.5	368.3
Percent change			8.9	7.8	−0.5	2.5	5.7	7.2	5.1	4.1	2.8	4.1	3.9
Nondurable goods (1958 dollars)	GPO11	0601	103.4	110.1	111.5	114.9	120.1	126.0	130.6	135.2	138.2	142.0	146.0
Percent change			7.6	6.5	1.3	3.1	4.5	4.9	3.7	3.5	2.2	2.8	2.8
Durable goods (1958 dollars)	GPO22	0711	140.3	152.6	149.8	152.8	162.8	177.1	187.8	196.2	202.5	212.5	222.3
Percent change			9.9	8.8	−1.8	2.0	6.5	8.8	6.0	4.5	3.2	4.9	4.6
Unemployment rate (percent)	UNR	2861	5.6	4.7	5.6	5.8	5.8	4.9	4.4	3.9	4.0	4.0	4.2
Savings rate (percent)	SR	7711	6.2	6.1	6.3	7.1	7.7	7.9	7.8	7.9	7.9	8.0	8.1
Surplus or deficit, Federal (current dollars)	SDF	7771	−15.9	1.0	−4.5	−13.2	−11.8	−3.0	5.5	8.7	8.9	10.8	9.2
Surplus or deficit, State and local (current dollars).	SDS	7801	13.1	11.3	7.7	5.3	1.8	2.9	6.9	8.0	6.7	8.3	10.0

RATIOS

Consumption to disposable income			91.2	91.2	91.0	90.2	89.7	89.7	89.9	89.8	90.0	89.9	89.9
Fixed investment to gross national product			14.9	15.0	14.5	14.6	15.1	16.0	16.7	17.2	17.3	17.8	18.2
Compensation to employees to national income.			75.1	74.9	75.6	76.4	76.7	77.1	77.9	78.2	78.5	78.2	78.3
Profits to national income			10.4	11.7	11.8	10.1	10.4	10.9	11.0	11.4	11.6	12.2	12.4
Farm income to national income			2.1	2.5	2.8	2.9	2.7	2.5	2.3	2.2	2.1	2.0	1.9
Other income to national income			13.2	12.8	12.2	11.7	11.0	10.2	9.5	9.0	8.7	8.4	8.1
Gross national product (current dollars)	GNP*	618I	1,155.2	1,290.1	1,405.9	1,538.1	1,685.6	1,862.6	2,043.8	2,236.7	2,414.9	2,612.1	2,802.1
Personal consumption expenditures	PCE*	619I	726.5	809.0	881.9	963.9	1,039.4	1,137.5	1,238.0	1,341.2	1,436.7	1,534.2	1,632.7
Durable goods	DE*	620I	117.4	131.9	132.0	140.5	151.3	170.4	187.6	200.2	209.9	219.6	229.7
Nondurable goods	NDE*	621I	299.9	338.8	375.9	409.2	439.8	479.4	521.4	567.1	609.4	652.1	695.3
Services	SE*	622I	309.2	338.3	374.0	414.2	448.3	487.6	528.9	574.0	617.5	662.5	707.7
Gross private domestic investment	PDI*	623I	178.3	200.3	211.0	232.7	267.8	319.8	363.6	405.6	438.1	487.4	531.7
Fixed investment	FI*	624I	172.3	193.3	204.2	224.9	254.4	298.9	341.3	384.1	418.7	466.2	508.6
Nonresidential	NRI*	625I	118.2	136.1	154.2	173.3	201.3	235.9	264.2	298.1	329.1	363.6	399.2
Residential structures	RS*	626I	54.0	57.2	50.0	51.6	53.1	63.0	77.2	86.0	89.6	102.6	109.4
Nonfarm	NF*	627I	53.5	56.5	49.3	50.6	52.2	62.3	76.5	85.3	88.9	101.8	108.6
Farm	F*	628I	.6	.7	.7	1.0	.8	.7	.7	.7	.8	.8	.8
Change in business inventories	CBI*	629I	6.0	7.0	6.8	7.9	13.4	20.9	22.2	21.6	19.4	21.1	23.1
Net exports of goods and services	NE*	630I	−4.6	4.7	4.3	.1	−.8	−8.3	−10.6	−10.5	−10.3	−13.8	−18.1
Exports	EX*	631I	73.5	100.9	131.3	144.7	161.3	178.8	199.8	221.2	244.0	267.2	291.0
Imports	IM*	632I	78.1	96.2	127.0	144.7	162.1	187.1	210.4	231.7	254.2	281.1	309.1
Crude foods	MCF$	665I	2.9	3.2	3.9	4.3	4.5	4.7	5.0	5.2	5.5	5.8	6.1
Manufactured foods	MMF$	666I	4.3	5.1	6.3	7.1	7.8	8.6	9.4	10.2	11.0	11.8	12.7
Nonfood crude materials	MCM$	667I	5.4	6.7	15.8	19.0	22.6	26.7	31.3	34.1	38.3	43.2	48.4
Semimanufactured goods	MSM$	668I	10.3	13.0	15.9	17.9	20.2	23.1	25.8	28.4	30.7	33.5	36.4
Manufactured goods	MFM$	669I	32.8	42.4	54.5	62.5	69.6	82.1	92.9	103.6	114.8	128.6	142.9
Services	MS$	670I	22.5	25.7	30.6	33.9	37.5	41.9	46.0	50.2	53.9	58.2	62.6
Government purchases of goods and services	GP*	633I	255.0	276.1	308.8	341.4	379.2	413.6	452.9	500.3	550.4	604.3	655.7
Federal	FP*	634I	104.4	106.3	116.5	127.4	141.4	156.3	172.9	193.1	215.5	242.6	266.3
National defense	FPND*	612I	74.4	73.7	79.4	86.8	95.9	105.4	116.4	128.9	142.2	156.1	170.5
Nondefense	FPOTH*	613I	30.1	32.6	37.1	40.6	45.6	50.8	56.6	64.2	73.2	86.5	95.8
State and local	SL*	635I	150.5	169.8	192.3	214.0	237.8	257.3	280.0	307.2	334.9	361.7	389.4
Education	SLED*	614I	64.5	75.1	85.4	95.0	106.5	116.3	127.7	142.5	156.9	169.8	183.2
Health and welfare	SLHWS*	615I	29.3	32.4	36.6	41.0	47.8	52.3	57.5	63.2	69.3	75.7	82.4
Safety	SLSF*	616I	12.0	14.6	17.0	19.7	21.8	24.0	26.5	29.2	32.1	35.2	38.5
Other	SLOTH*	617I	44.7	47.7	53.2	58.4	61.6	64.7	68.3	72.3	76.6	80.9	85.3
Gross national product (1958 dollars)	GNP	165I	790.7	837.4	835.8	853.0	836.2	951.6	997.0	1,038.6	1,069.8	1,109.6	1,148.8
Personal consumption expenditures	PCE	656I	526.8	554.2	551.6	564.9	586.4	618.7	746.0	671.8	690.6	710.5	732.9
Durable goods	DE	657I	104.0	114.2	106.6	108.6	115.1	127.9	138.2	144.3	148.5	153.6	160.1
Nondurable goods	NDE	658I	220.9	229.1	227.7	231.3	237.9	247.7	256.6	266.1	273.2	280.3	288.2
Services	SE	659I	201.8	210.8	217.2	225.0	233.3	243.2	252.2	261.4	268.9	276.6	284.6

DEPENDENCE ON FOREIGN OIL AFTER 1975—MAY 7, 1974—Continued

Selected indicators	Model: Label	Model: Variety	Forecast data: 1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Gross private domestic investment	PDI	660I	122.9	131.9	126.8	128.7	141.4	160.8	172.2	181.0	185.2	197.3	207.3
Fixed investment	FI	319I	118.3	126.5	121.6	123.4	132.7	148.0	159.5	169.4	175.3	186.9	196.5
Nonresidential	NRI	320I	83.7	92.9	95.5	98.7	109.0	121.4	128.6	136.8	143.0	151.6	160.3
Residential structures	RS	318I	34.6	33.6	26.1	24.6	23.7	26.6	30.9	32.6	32.3	35.3	36.2
Private housings starts	HST	790I	2,357.0	2,046.0	1,502.0	1,410.0	1,273.0	1,402.0	1,679.0	1,825.0	1,824.0	2,034.0	2,067.0
Single unit	HSS	7889B	1,309.0	1,132.0	821.0	671.0	459.0	399.0	526.0	668.0	774.0	1,009.0	982.0
Multiple unit	HSM	7898B	1,047.0	914.0	680.0	739.0	803.0	1,003.0	1,153.0	1,157.0	1,051.0	1,026.0	1,085.0
Nonfarm	NF	317I	34.2	33.2	25.7	24.1	23.3	26.3	30.6	32.3	32.0	35.0	35.9
Private nonfarm housing starts.	HSTA	698I	2,325.0	2,026.0	1,482.0	1,3890.	1,253.0	1,382.0	1,653.0	1,805.0	1,804.0	2,014.0	2,047.0
Additions and alterations	AAH	699B	8.2	7.8	6.6	5.8	6.5	7.5	8.0	7.7	7.5	7.7	8.1
Farm	F	316E	.4	.4	.4	.5	.4	.3	.3	.3	.3	.3	.3
Private farm housing starts	HSF	791E	31.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Change in business inventories	CBI	041I	4.6	5.7	5.1	5.5	8.9	13.0	13.0	11.9	10.1	10.6	11.1
Nonfarm	NFI	701I	4.5	5.4	4.7	5.2	8.6	12.7	12.7	11.6	9.8	10.3	10.8
Manufacturing	MI	687I	2.3	1.7	2.8	1.5	2.9	5.4	6.1	5.8	4.9	4.8	5.0
Nonmanufacturing, nonauto dealer.	NMI	688B	2.6	2.2	2.7	3.8	5.2	6.3	5.8	5.6	4.9	5.2	5.3
Auto dealer	AI	700I	−.4	1.5	−.9	−.0	.4	1.0	.7	.2	.1	.3	.5
Farm	FAI	702E	.1	.3	.4	.3	.3	.3	.3	.3	.3	.3	.3
Net exports of goods and services	NE	661I	−2.0	6.7	9.9	9.9	10.8	8.2	7.3	7.0	7.3	6.7	6.6
Exports	EX	042B	56.4	67.7	72.1	75.1	81.5	87.0	91.9	98.4	104.1	110.2	116.7
Imports	IM	043I	58.4	61.0	62.1	65.2	70.6	78.8	85.6	91.3	96.8	103.5	110.1
Crude foods	MCF	677B	2.3	2.2	2.2	22	2.2	2.2	2.3	2.3	2.3	2.3	2.4
Manufactured foods	MMF	678B	3.0	3.0	3.0	3.1	3.3	3.5	3.7	3.8	3.9	4.1	4.2
Nonfood crude materials	MCM	679B	4.9	4.7	6.2	7.0	7.9	8.9	9.9	10.3	11.0	11.8	12.6
Semimanufactured goods	MSM	680B	8.1	8.6	8.4	8.7	9.5	10.6	11.4	12.2	12.8	13.6	14.3
Manufactured goods	MFM	681B	23.6	25.6	26.5	28.0	30.3	34.7	38.2	41.3	44.5	48.4	52.2
Services	MS	682B	16.5	16.8	15.9	16.2	17.4	18.9	20.2	21.3	22.3	23.3	24.4
Government purchases of goods and services	GP	662I	143.0	144.6	147.5	149.5	157.6	163.9	170.5	178.7	186.7	195.1	202.0
Federal	FP	664I	60.8	57.1	57.2	57.1	59.6	62.1	64.8	68.3	72.1	77.1	80.6
National defense	FPND	044E	43.3	39.6	39.0	38.9	40.4	41.9	43.6	45.6	47.6	49.6	51.6
Nondefense	FPOTH	045E	17.5	17.5	18.2	18.2	19.2	20.2	21.2	22.7	24.5	27.5	29.0
State and local	SL	663I	82.2	87.5	90.3	92.4	98.0	101.8	105.7	110.4	114.6	118.0	121.4
Education	SLED	046E	35.2	38.7	40.1	41.0	43.9	46.0	48.2	51.2	53.7	55.4	57.1
Health and welfare	SLHWS	047E	16.0	16.7	17.2	17.7	19.7	20.7	21.7	22.7	23.7	24.7	25.7
Safety	SLSF	048E	6.5	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
Other	SLOTH	049E	24.4	24.6	25.0	25.2	25.4	25.6	25.8	26.0	26.2	26.4	26.6
Addendum:													
World trade	XWT	706E	299.0	339.0	353.3	371.5	401.3	429.4	459.4	487.0	516.2	547.2	580.0
U.S. grants-in-aid abroad	USGA	655E	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9

EXOGENOUS ASSUMPTIONS

Federal Government purchases (1958 dollars):													
National defense	FPND	44E	43.3	39.6	39.0	38.9	40.4	41.9	43.6	45.6	47.6	49.6	51.6
Nondefense	FPOTH	45E	17.5	17.5	18.2	18.2	19.2	20.2	21.2	22.7	24.5	27.5	29.0
State and local government purchases (1958 dollars):													
Education	SLED	46E	35.2	38.7	40.1	41.0	43.9	46.0	48.2	51.2	53.7	55.4	57.1
Health and welfare	SLHWS	47E	16.0	16.7	17.2	17.7	19.7	20.7	21.7	22.7	23.7	24.7	25.7
Safety	SLSF	48E	6.5	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
Other	SLOTH	49E	24.4	24.6	25.0	25.2	25.4	25.6	25.8	26.0	26.2	26.4	26.6
Exogenous sector deflators (1958=100):													
Farm	PGPO2	128E	139.5	210.5	259.8	273.0	285.3	298.1	311.5	325.6	340.2	355.5	371.5
Agricultural services, forestry, and fishing	PGPO3	129E	225.9	239.9	255.0	264.9	276.8	289.3	302.3	315.9	330.1	345.0	360.5
Chemicals	PGPO18	139E	91.2	91.0	91.0	91.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0
Petroleum	PGPO19	140E	157.3	165.0	175.0	185.0	195.0	205.0	215.0	225.0	235.0	245.0	255.0
Rubber	PGPO20	141E	101.2	101.0	101.0	101.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0
Electrical machinery	PGPO31	150E	90.6	90.0	90.0	90.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0
Government industry	PGPO82	161E	221.5	236.1	253.3	275.4	289.2	303.6	318.8	334.8	351.5	369.1	387.5
Federal enterprises	PGPO75	159E	181.9	187.0	195.0	205.0	215.3	226.0	237.3	249.2	261.6	274.7	288.5
State and local enterprises	PGPO78	160E	161.0	165.0	170.0	180.0	189.0	198.5	208.4	218.8	229.7	241.2	253.3
Government employment:													
Federal Government (thousands)	N37	244E	2,650.0	2,744.0	2,787.0	2,800.0	2,850.0	2,880.0	2,920.0	2,960.0	3,000.0	3,040.0	3,080.0
State and local government (thousands)	N38	245E	10,640.0	10,906.0	11,363.0	11,750.0	11,850.0	11,950.0	12,050.0	12,150.0	12,250.0	12,350.0	12,450.0
Armed forces (millions)	AF	287E	2.45	2.33	2.18	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08
Wage rates (dollars per week):													
Farm	W1	432E	30.39	36.00	40.00	44.00	46.20	48.50	50.90	53.50	56.20	59.00	61.90
Federal Government	W37	456E	225.07	246.56	260.50	282.00	296.10	310.90	326.40	342.80	359.90	377.90	396.80
State and local government	W38	457E	162.36	172.63	188.30	207.10	217.50	228.30	239.70	251.70	264.30	277.50	291.40
Farm sector:													
Farm income (current dollars)	PIF	735E	20.2	26.8	31.6	36.1	37.1	38.1	39.1	40.1	41.1	42.1	43.1
Farm residential purchases (1958 dollars)	F	316E	.4	.4	.4	.5	.4	.3	.3	.3	.3	.3	.3
Private farm housing starts	HSF	791E	31.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Farm price deflator (1958=100.0)	FD	653E	150.8	164.6	179.0	197.3	207.2	217.5	228.4	239.8	251.8	264.4	277.6
Change in farm inventories (1958 dollars)	FAI	702E	.1	.3	.4	.3	.3	.3	.3	.3	.3	.3	.3
Financial sector:													
Discount rate (percent)	FRDR	710E	4.50	6.45	7.82	7.81	6.50	6.50	6.50	6.75	6.75	6.25	6.25
Maximum rate on total depreciation under regulation Q (percent).	DRQ	711E	6.75	9.78	12.00	12.00	6.75	6.75	6.75	6.75	6.75	6.75	6.75
Effective reserve requirement ratio	RRTL	716E	.06	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05
Nonborrowed reserves (current dollars)	RNB	717E	30.3	34.0	37.0	39.0	42.5	44.8	46.7	49.0	51.0	53.0	54.0

DEPENDENCE ON FOREIGN OIL AFTER 1975—MAY 7, 1974—Continued

Selectedi ndicators	Model Label	Model Variety	Forecast data 1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Foreign trade sector:													
Crude foods deflators	PMCF58	671E	122.4	144.8	180.0	195.5	203.3	211.5	219.9	228.7	237.9	247.4	257.3
Manufactured foods deflators	PMMF58	672E	143.2	169.5	210.6	228.7	237.8	247.4	257.3	267.5	278.2	289.4	301.0
Nonfood crude materials deflators	PMCM58	673E	109.2	143.0	254.5	272.5	286.1	300.4	315.5	331.2	347.8	365.2	383.4
Semimanufactured goods deflators	PMSM58	674E	126.1	151.2	189.9	206.4	212.6	219.0	225.5	232.3	239.3	246.5	253.8
Manufactured goods deflators	PMFM58	675E	139.0	165.5	205.9	222.7	229.4	236.3	243.4	250.7	258.2	265.9	273.9
Services deflators	PMS	676E	136.6	153.2	192.2	208.8	215.0	221.5	228.2	235.0	242.1	249.3	256.8
World trade activity (1958=100)	XWT	706E	299.0	339.0	353.4	371.5	401.2	429.4	459.4	487.0	516.2	547.2	580.0
World trade deflator (1958=100)	PWT	705E	128.0	153.9	199.4	217.0	227.0	237.0	247.0	257.0	267.0	277.0	287.0
Transfer payments and grants-in-aid:													
Transfer payments to for., net	TPFF	774E	2.7	2.4	4.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Personnel transfer payments to for., net	PTPF	769E	1.0	1.2	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
State transfer payments	TPS	752E	18.2	19.5	19.2	22.4	25.7	29.2	31.5	32.5	34.6	36.7	38.0
Federal transfer payments	TPFPO	750E	74.6	88.7	106.2	122.0	133.0	144.5	155.2	172.0	186.0	200.0	213.0
Business transfer payments	BTP	729E	4.6	4.9	5.3	5.7	6.5	6.9	7.3	7.7	8.1	8.5	8.9
Grants-in-aid to State and local government.	GIAF	776E	37.7	40.9	45.8	48.5	53.0	58.5	63.0	66.5	70.0	73.5	77.0
U.S. grants-in-aid abroad	USGA	655E	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
Residual items:													
Wage accruals less disbursements	WALD	762E	-.5	0	0	0	0	0	0	0	0	0	0
Net interest paid, State	NIPS	747E	-.4	-1.3	-.9	-.9	-.9	-.9	-.9	-.9	-.9	-.9	-.9
Net interest paid, Federal	NIPF	748E	13.5	15.9	18.3	18.9	18.0	18.5	19.0	19.5	20.0	20.5	21.0
Subsidies less current surplus	SCSF	727E	6.1	5.1	1.8	2.7	5.5	5.6	5.7	5.8	5.9	6.0	6.1
Current surplus of Government enterprises.	CSS	728E	4.4	4.7	4.9	5.1	5.3	5.4	5.5	5.6	5.7	5.8	5.9
Net interest paid by consumers	IPBC	696E	19.7	22.5	25.1	27.4	29.0	30.0	31.0	32.0	33.0	34.0	35.0
Statistical discrepancy	SD	730E	-1.5	2.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Growth rate—population 15 and over	GRPT16+	781E	1.67	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Ratio—male civilian population to total	RCPMT16+	784E	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
CORPORATE TAX RATES (PERCENT)													
All industries	TAX5	740E	38.6	39.3	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
Farm	PTR1	352E	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Mining	PTR2	353E	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8
Durable goods:													
Iron and steel	PTR3	354E	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
Electrical machinery	PTR5	355E	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
Nonelectrical machinery	PTR6	356E	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
Motor vehicles	PTR7	357E	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
Aircraft	PTR8	358E	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
Other transportation equipment	PTR9	359E	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5

Stone, clay and glass	PTR10	360E	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
Fabricated metal products	PTR11	361E	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
Furniture	PTR13	362E	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
Instruments	PTR14	363E	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8
Nondurable goods:													
Food and beverages	PTR16	364E	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5
Textiles	PTR17	365E	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
Paper	PTR18	366E	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2
Chemicals	PTR19	367E	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9
Petroleum	PTR20	368E	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
Rubber	PTR21	369E	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
Tobacco	PTR22	370E	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
Apparel	PTR23	371E	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
Leather	PTR24	372E	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8
Printing and publishing	PTR25	373E	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
Transportation	PTR26	374E	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
Utilities	PTR27	375E	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
Communications	PTR28	376E	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
TAX CREDIT RATES (PERCENT)—EXOGENOUS													
Farm	IVCR1	327E	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Mining	IVCR2	328E	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Durable goods:													
Iron and steel	IVCR3	329E	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Electrical machinery	IVCR5	330E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Nonelectrical machinery	IVCR6	331E	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Motor vehicles	IVCR7	332E	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Aircraft	IVCR8	333E	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Other transportation equipment	IVCR9	334E	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Stone, clay and glass	IVCR10	335E	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Fabricated metal products	IVCR11	336E	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Furniture	IVCR13	337E	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Instruments	IVCR14	338E	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Nondurables:													
Food and beverages	IVCR16	339E	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Textiles	IVCR17	340E	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Paper	IVCR18	341E	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Chemicals	IVCR19	342E	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Petroleum	IVCR20	343E	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Rubber	IVCR21	344E	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Tobacco	IVCR22	345E	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Apparel	IVCR23	346E	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Leather	IVCR24	347E	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Printing and publishing	IVCR25	348E	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Transportation	IVCR26	349E	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Utilities	IVCR27	350E	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Communications	IVCR28	351E	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8

DEPENDENCE ON FOREIGN OIL AFTER 1975—MAY 7, 1974—Continued

Selected indicators	Model: Label	Model: Variety	Forecast data: 1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
TAX LIVES (YEARS)—EXOGENOUS													
Farm	ESL1	377E	13.4	13.4	13.4	13.4	93.4	13.4	93.4	13.4	13.4	13.4	13.4
Mining	ESL2	378E	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
Durable goods:													
Iron and steel	ESL3	379E	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
Electrical machinery	ESL5	380E	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Nonelectrical machinery	ESL6	381E	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
Motor vehicles	ESL7	382E	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
Aircraft	ESL8	383E	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
Other transportation equipment	ESL9	384E	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Stone, clay, and glass	ESL10	385E	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
Fabricated metal products	ESL11	386E	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
Furniture	ESL13	387E	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
Instruments	ESL14	388E	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
Nondurable goods:													
Food and beverages	ESL16	389E	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
Textiles	ESL17	390E	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
Paper	ESL19	391E	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
Chemicals	ESL19	392E	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Petroleum	ESL20	393E	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
Rubber	ESL21	394E	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
Tobacco	ESL22	395E	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
Apparel	ESL23	396E	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
Leather	ESL24	397E	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Printing and publishing	ESL25	398E	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
Transportation	ESL26	399E	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
Utilities	ESL27	400E	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Communications	ESL28	401E	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
DEPRECIATION RATES (PERCENT)—EXOGENOUS													
Farm	DRINR	402E	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Mining	DR2	403E	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Durable goods:													
Iron and steel	DR3	404E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Nonferrous metals	DR4	405E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Electrical machinery	DR5	406E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Nonelectrical machinery	DR6	407E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Motor vehicles	DR7	408E	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Aircraft	DR8	409E	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

Other transportation equipment	DR9	410E	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Stone, clay and glass	DR10	411E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Fabricated metal products	DR11	412E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lumber	DR12	413E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Furniture	DR13	414E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Instruments	DR14	415E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.00	5.0
Ordnance and miscellaneous	DR15	416E	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Nondurable goods:													
Food and beverages	DR16	417E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Textiles	DR17	418E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Paper	DR18	419E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Chemicals	DR19	420E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Petroleum	DR20	421E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Rubber	DR21	422E	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Tobacco	DR22	423E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Apparel	DR23	424E	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Leather	DR24	425E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Printing and publishing	DR25	426E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Transportation	DR26	427E	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Utilities	DR27	428E	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Communications	DR28	429E	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Commercial and other	DR29NR	430E	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

PERSONAL AND INDIRECT TAX RATES

State taxes (effective rates):													
Personal income	TAX1	766I	3.94	3.99	4.08	4.19	4.04	4.11	4.27	4.50	4.68	4.84	4.99
Social insurance	TAX7	753I	1.60	1.63	1.70	1.76	1.72	1.70	1.70	1.72	1.76	1.81	1.86
Corporate income	TAX2	741I	4.95	5.09	5.43	5.89	5.53	5.38	5.35	5.46	5.62	5.93	6.20
Indirect taxes	TAX3	724I	9.52	9.17	9.03	9.21	9.50	9.20	9.22	9.10	9.06	8.96	8.91
Federal taxes:													
Personal income (average rate)	TAX4	764I	12.90	12.36	12.78	12.91	13.27	13.46	13.47	13.74	14.06	14.27	14.34
Tax rate 1st bracket	ITR1	807E	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Tax rate 2d bracket	ITR2	808E	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Tax rate 3d bracket	ITR3	809E	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Tax rate 4th bracket	ITR4	810E	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00
Tax rate 5th bracket	ITR5	811E	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Tax rate 6th bracket	ITR6	812E	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Tax rate 7th bracket	ITR7	813E	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Tax rate 8th bracket	ITR8	814E	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00
Tax rate 9th bracket	ITR9	815E	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Income proportions by tax bracket:													
Proportion in 1st bracket	TPR1	816B	.11	.09	.08	.05	.06	.06	.05	.05	.05	.05	.05
Proportion in 2d bracket	TPR2	817B	.10	.09	.07	.06	.05	.05	.05	.05	.05	.05	.06
Proportion in 3d bracket	TPR3	818B	.10	.09	.08	.07	.07	.07	.08	.07	.06	.07	.08
Proportion in 4th bracket	TPR4	819B	.09	.08	.08	.07	.07	.06	.06	.05	.04	.04	.03
Proportion in 5th bracket	TPR5	820B	.28	.28	.29	.31	.31	.31	.31	.31	.32	.32	.32
Proportion in 6th bracket	TPR6	821B	.14	.16	.17	.19	.19	.20	.20	.21	.21	.22	.22
Proportion in 7th bracket	TPR7	822B	.06	.07	.08	.09	.09	.09	.09	.09	.10	.10	.09

DEPENDENCE ON FOREIGN OIL AFTER 1975—MAY 7, 1974—Continued

Selected indicators	Model: Label	Model: Variety	Forecast data: 1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Exemptions and deductions:													
Number of exemptions	NEX	798B	211.81	220.07	222.61	225.23	229.81	237.03	242.59	247.33	250.24	253.42	257.28
Value of exemption	VEX	800E	.70	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75
Value of deductions	DEDU	799B	149.05	162.68	176.14	195.08	213.32	230.12	251.48	273.29	293.85	314.98	336.05
Taxable income (NIA basis)	TINC	801I	573.62	638.16	709.58	792.41	868.90	972.15	1,074.41	1,183.86	1,284.81	1,389.72	1,495.75
Indirect taxes	TAX6	721I	2.11	2.00	1.97	1.94	1.90	1.86	1.81	1.75	1.69	1.63	1.56
Social insurance:													
Effective tax rate	TAX8	754I	9.43	10.84	11.19	11.09	10.96	10.78	10.95	10.81	10.73	10.83	10.77
Statuory tax rate	SOCRT	804E	10.40	11.70	11.70	11.70	11.70	11.70	12.10	12.10	12.10	12.30	12.30
Effective coverage	SOCPR	805E	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90
Earnings base	SOCB	806E	9.00	10.80	13.20	14.40	15.30	16.20	17.10	18.00	18.90	19.80	20.70
Ratio, persons contracting social insurance to total	Z1	755E	47.10	46.85	46.58	46.55	46.55	46.55	46.55	46.55	46.55	46.55	46.55

INCREASE DOMESTIC OIL PRODUCTION BY 8,000,000 BARRELS PER DAY BY 1982—MAY 7, 1974

Selected indicators	Model: Label	Model: Variety	Forecast data: 1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Gross national product (current dollars)	GNP*	618I	1,115.2	1,290.1	1,416.3	1,559.3	1,719.3	1,903.0	2,093.8	2,298.7	2,486.9	2,687.9	2,891.5
Percent change			9.4	11.7	9.8	10.1	10.3	10.7	10.0	9.8	8.2	8.1	7.6
Gross national product (1958 dollars)	GNP	165I	790.7	837.4	842.6	864.8	912.3	965.6	1,009.8	1,053.6	1,086.1	1,123.0	1,163.7
Percent change			6.1	5.9	.6	2.6	5.5	5.8	4.6	4.3	3.1	3.4	3.6
Gross national product deflator (1958=100.0)	GNPD	647I	146.1	154.1	168.1	180.3	188.5	197.1	207.3	218.2	229.0	239.4	248.5
Percent change			3.2	5.4	9.1	7.3	4.5	4.6	5.2	5.2	4.9	4.5	3.8
Labor force (millions)	CLFT	288I	86.5	88.6	90.9	92.2	93.9	95.9	97.8	99.9	102.0	104.3	106.6
Percent change			2.9	2.4	2.5	1.4	1.9	2.1	2.1	2.0	2.2	2.2	2.2
Participation rate			59.5	59.8	60.2	60.0	60.0	60.2	60.4	60.5	60.8	61.1	61.3
Percent change			.9	.6	.6	—.4	.1	.3	.3	.3	.4	.5	.4
Manufacturing average weekly hours	H33	210I	40.6	41.1	40.8	40.7	40.9	41.1	41.1	41.1	41.1	41.2	41.4
Percent change			1.7	1.2	—.8	—.2	.4	.4	.1	.1	—.1	.3	.5
Productivity (manufacturing)			608.9	623.5	628.1	645.9	667.6	686.4	699.3	712.2	724.2	470.7	760.1
Percent change			4.8	2.4	.7	2.8	3.4	2.8	1.9	1.9	1.7	2.3	2.6
Money supply (demand+time deposits)	MSPL	692I	558.1	629.1	683.7	749.1	855.4	930.9	986.8	1,050.9	1,116.3	1,199.3	1,269.8

Percent change			12.0	12.7	8.7	9.6	14.2	8.8	6.0	6.5	6.2	7.4	.9
Bond rate (percent)	TR	323B	7.6	7.7	8.4	8.6	9.5	9.5	9.2	9.0	8.9	8.8	8.6
Prime commercial paper rate (percent)	PCP	691B	4.7	8.0	9.6	9.3	8.2	7.8	8.3	8.3	8.3	7.8	7.5
Corporate profits (current dollars)	PBT	737I	98.0	123.5	138.5	133.3	151.8	173.1	192.5	216.1	238.0	271.0	297.3
Percent change			15.3	26.0	12.1	−3.7	13.9	14.0	11.2	12.2	10.1	13.9	9.7
Manufacturing output (1958 dollars)	GPO10	059I	243.7	262.7	264.0	272.6	289.6	309.2	324.6	338.9	348.5	360.5	374.8
Percent change			8.9	7.8	.5	3.2	6.3	6.8	5.0	4.4	2.8	3.4	4.0
Nondurable goods (1958 dollars)	GPO11	060I	103.4	110.1	112.1	116.0	121.4	127.1	131.7	136.6	139.9	143.5	147.7
Percent change			7.6	6.5	1.8	3.5	4.7	4.7	3.6	3.7	2.4	2.6	2.9
Durable goods (1958 dollars)	GPO22	071I	140.3	152.6	152.0	156.6	168.2	182.1	192.9	202.4	208.6	217.0	227.1
Percent change			9.9	8.8	−.4	3.0	7.4	8.3	5.9	4.9	3.1	4.0	4.6
nemployment rate (percent)	UNR	286I	5.6	4.7	5.4	5.3	5.0	4.2	3.9	3.6	3.7	4.0	4.1
Savings rate (percent)	SR	771I	6.2	6.1	6.4	7.3	7.8	8.0	7.9	8.0	7.9	7.9	8.0
Surplus or deficit, Federal (current dollars)	SDF	777I	−15.9	1.0	−5.5	−13.1	−10.6	1.9	15.1	26.1	28.4	29.7	29.5
Surplus of deficit, State and local (current dollars)	SDS	780I	13.1	11.3	8.8	7.5	4.8	5.6	9.5	11.2	10.7	12.5	15.9
RATIOS													
Consumption to disposable income			91.2	91.2	90.9	90.1	89.6	89.5	89.7	89.8	90.0	90.1	90.0
Fixed investment to gross national product			14.9	15.0	14.8	15.1	15.8	16.7	17.4	18.1	18.0	18.2	18.4
Compensation to employees to national income			75.1	74.9	75.4	76.1	76.3	76.9	77.7	78.1	78.4	78.1	78.1
Profits to national income			10.4	11.7	12.0	10.5	10.8	11.1	11.3	11.5	11.7	12.4	12.6
Farm income to national income			2.1	2.5	2.7	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8
Other income to national income			13.2	12.8	12.2	11.7	11.0	10.2	9.6	9.1	8.7	8.5	8.1
Gross national product (current dollars)	GNP*	618I	1,155.2	1,290.1	1,416.3	1,559.3	1,719.3	1,903.0	2,093.8	2,486.9	2,486.9	2,687.9	2,891.5
Personal consumption expenditures	PCE*	619I	726.5	809.0	884.5	969.8	1,049.4	1,150.5	1,254.3	1,363.6	1,464.6	1,566.5	1,670.7
Durable goods	DE*	620I	117.4	131.9	132.7	141.9	153.4	172.4	189.9	204.4	216.0	226.7	237.1
Nondurable goods	NDE*	621I	299.9	338.8	377.1	411.9	444.3	485.4	528.9	576.5	620.3	664.6	710.7
Services	SE*	622I	309.2	338.3	374.7	416.1	451.8	492.8	535.6	582.7	628.2	675.2	723.0
Gross private domestic investment	PDI*	623I	178.3	200.3	216.8	243.9	285.8	339.5	387.6	438.1	468.9	508.9	556.1
Fixed investment	FI*	624I	172.3	193.3	209.0	234.7	270.9	318.1	365.1	415.6	448.5	487.9	532.9
Nonresidential	NRI*	625I	118.2	136.1	159.0	183.1	218.8	257.1	289.2	327.2	352.1	377.0	415.8
Residential structures	RS*	626I	54.0	57.2	50.0	51.6	52.1	61.0	76.0	88.4	96.4	110.9	117.1
Nonfarm	NF*	627I	53.5	56.5	49.2	50.6	51.3	60.3	75.3	87.7	95.6	110.1	116.3
Farm	F*	628I	.6	.7	.7	1.0	.8	.7	.7	.7	.8	.8	.8
Change in business inventories	CBI*	629I	6.0	7.0	7.8	9.2	14.9	21.4	22.4	22.5	20.5	21.0	23.2
Net exports of goods and services	NE*	630I	−4.6	4.7	2.2	−2.5	−4.8	−9.0	−7.9	−5.5	.5	4.9	4.9
Exports	EX*	631I	73.5	100.9	131.2	144.7	161.7	180.2	202.1	224.2	247.2	271.5	296.2
Imports	IM*	632I	78.1	96.2	129.0	147.2	166.5	189.2	210.0	229.7	246.8	266.5	291.3
Crude foods	MCF$	665I	2.9	3.2	3.9	4.3	4.5	4.7	5.0	5.3	5.5	5.8	6.1
Manufactured foods	MMF$	666I	4.3	5.1	6.4	7.2	7.9	8.5	9.5	10.3	11.1	11.9	12.8
Nonfood crude materials	MCM$	667I	5.4	6.7	15.9	17.9	21.7	24.0	26.2	26.2	24.5	23.0	24.2
Semimanufactured goods	MSM$	668I	10.3	13.0	16.1	18.3	20.8	23.7	26.3	29.1	31.5	34.2	37.2
Manufactured goods	MFM$	669I	32.8	42.4	55.8	65.0	73.1	85.3	96.1	107.5	119.1	132.3	147.2
Services	MS$	670I	22.5	25.7	30.9	34.6	38.4	42.8	46.9	51.3	55.1	59.3	63.8

INCREASE DOMESTIC OIL PRODUCTION BY 8,000,000 BARRELS PER DAY BY 1982—MAY 7, 1974—Continued

Selected indicators	Model		Forecast data										
	Label	Variety	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Government purchases of goods and services.	GP*	633I	255.0	276.1	312.8	348.0	388.9	422.0	459.8	502.5	552.9	607.5	659.7
Federal	FP*	634I	104.4	106.3	120.6	134.0	150.9	164.0	178.8	193.8	216.3	243.9	268.0
National defense	FPND*	612I	74.4	73.7	79.4	86.8	95.9	105.6	116.7	129.4	142.8	156.9	171.6
Nondefense	FPOTH*	613I	30.1	32.6	41.1	47.3	55.1	58.5	62.1	64.4	73.5	87.0	96.4
State and local	SL*	635I	150.5	169.8	192.2	214.0	238.0	257.9	281.1	308.7	336.6	363.7	391.7
Education	SLED*	614I	64.5	75.1	85.4	94.9	106.6	116.6	128.2	143.1	157.7	170.7	184.2
Healty and welfare	SLHWS*	615I	29.3	32.4	36.6	41.0	47.8	52.5	57.7	63.5	69.6	76.1	82.9
Safety	SLSF*	616I	12.0	14.6	17.0	19.7	21.9	24.1	26.6	29.4	32.3	35.4	38.7
Other	SLOTH*	617I	44.7	47.7	53.2	58.4	61.7	64.9	68.6	72.7	77.0	81.4	85.8
Gross national product (1958 dollars)	GNP	165I	790.7	837.4	842.6	864.8	912.3	965.6	1,009.8	1,053.6	1,086.1	1,123.0	1,163.7
Personal consumption expenditures	PCE	656I	526.8	554.2	553.6	568.7	591.3	622.3	649.1	675.1	695.5	715.6	738.5
Durable goods	DE	657I	104.0	114.2	107.3	109.7	116.5	128.5	138.3	145.3	150.7	156.0	162.3
Nondurable goods	NDE	658I	220.9	229.1	228.6	232.8	239.9	249.3	257.6	267.2	274.4	281.3	289.6
Services	SE	659I	201.8	210.8	217.7	226.1	234.9	244.6	253.2	262.6	270.4	278.2	286.7
Gross private domestic investment	PDI	660I	122.9	131.9	130.4	135.1	150.6	169.3	181.3	192.8	195.2	202.3	212.7
Fixed investment	FI	319I	118.3	126.5	124.6	128.8	140.9	156.3	168.5	180.6	184.8	192.1	201.9
Nonresidential	NRI	320I	83.7	92.9	98.5	104.2	117.7	130.6	138.4	147.5	150.6	154.5	163.8
Residential structures	RS	318I	34.6	33.6	26.1	24.6	23.2	25.6	30.1	33.1	34.2	37.6	38.1
Private housing starts	HST	790I	2,357.0	2,046.0	1,501.0	1,411.0	1,244.0	1,345.0	1,640.0	1,871.0	1,965.0	2,195.0	2,205.0
Single unit	HSS	788B	1,309.0	1,132.0	821.0	675.0	464.0	385.0	522.0	707.0	857.0	1,098.0	1,065.0
Multiple unit	HSM	789B	1,047.0	914.0	680.0	735.0	780.0	960.0	1,118.0	1,165.0	1,108.0	1,097.0	1,141.0
Nonfarm	NF	317I	34.2	33.2	25.7	24.1	22.8	25.3	29.8	32.8	33.9	37.3	37.8
Private nonfarm housing starts.	HSTA	698I	2,325.0	2,026.0	1,481.0	1,391.0	1,224.0	1,325.0	1,620.0	1,851.0	1,945.0	2,175.0	2,185.0

Additions and alterations	AAH	699B	8.2	7.8	6.6	5.8	6.4	7.4	7.8	7.8	7.7	7.9	8.2
Farm	F	316E	.4	.4	.4	.5	.4	.3	.3	.3	.3	.3	.3
Private farm housing starts.	HSF	791E	31.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Change in business inventories	CBI	041I	4.6	5.7	5.8	6.5	9.9	13.2	13.0	12.3	10.6	10.4	11.0
Nonfarm	NFI	701I	4.5	5.4	5.4	6.2	9.6	12.9	12.7	12.0	10.3	10.1	10.7
Manufacturing	MI	687I	2.3	1.7	3.1	2.1	3.7	5.8	6.3	6.0	5.1	4.8	4.9
Nonmanufacturing, non-auto dealer	NMI	688B	2.6	2.2	3.1	4.1	5.5	6.2	5.7	5.7	5.0	5.1	5.3
Auto dealer	AI	700I	−.4	1.5	−.8	−0	.5	1.0	.7	.2	.2	.3	.5
Farm	FAI	702E	.1	.3	.4	.3	.3	.3	.3	.3	.3	.3	.3
Net exports of goods and services	NE	661I	−2.0	6.7	9.0	8.6	8.8	7.0	6.9	7.0	8.7	10.0	10.5
Exports	EX	042B	56.4	67.7	72.1	75.1	81.5	87.0	92.9	98.3	104.1	110.2	116.7
Imports	IM	043I	58.4	61.0	63.1	66.5	72.7	80.0	86.0	91.3	95.4	100.2	106.2
Crude foods	MCF	677B	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4
Manufactured foods	MMF	678B	3.0	3.0	3.0	3.1	3.3	3.5	3.7	3.9	4.0	4.1	4.3
Nonfood crude materials	MCM	679B	4.9	4.7	6.2	6.6	7.6	8.0	8.3	7.9	7.0	6.3	6.3
Semimanufactured goods	MSM	680B	8.1	8.6	8.5	8.9	9.8	10.8	11.7	12.5	13.2	13.9	14.6
Manufactured goods	MFM	681B	23.6	25.6	27.1	29.2	31.9	36.1	39.5	42.9	46.1	49.8	53.7
Services	MS	682B	16.5	16.8	16.1	16.5	17.9	19.3	20.6	21.8	22.8	23.8	24.9
Government purchase of goods and services	GP	662I	143.0	144.6	149.5	152.5	161.6	166.9	172.5	178.7	186.7	195.1	202.0
Federal	FP	664I	60.8	57.1	59.2	60.1	63.6	65.1	66.8	68.3	72.1	77.1	80.6
National defense	FPND	044E	43.3	39.6	39.0	38.9	40.4	41.9	43.6	45.6	47.6	49.6	51.6
Nondefense	FPOTH	045E	17.5	17.5	20.2	21.2	23.2	23.2	23.2	22.7	24.5	27.5	29.0
State and local	SL	663I	82.2	87.5	90.3	92.4	98.0	101.8	105.7	110.4	114.6	118.0	121.4
Education	SLED	046E	35.2	38.7	40.1	41.0	43.9	46.0	48.2	51.2	53.7	55.4	57.1
Health and welfare	SLHWS	047E	16.0	16.7	17.2	17.7	19.7	20.7	21.7	22.7	23.7	24.7	25.7
Safety	SLSF	048E	6.5	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
Other	SLOTH	049E	24.4	24.6	25.0	25.2	25.4	25.6	25.8	26.0	26.2	26.4	26.6
Addendum:													
World trade	XWT	706E	299.0	339.0	353.4	371.5	401.3	429.4	459.4	487.0	516.2	547.2	580.0
U.S. grants-in-aid abroad	USGA	655E	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9

and equipment spending remains high, as both of these models say it will, and as I agree it is very likely to do.

Eventually, this way, you end up with a potential GNP figure in real terms, and you notice something right away. Both of these forecasts project slower growth in the early 1980's than we have been used to having in the past—not much, but slightly slower, mostly because of the slower growth of the working population. I was very amused in reading Mr. Eckstein's forecast to remember that when I came to work in Washington in 1961 and 1962, the standard rule of thumb was that potential GNP would rise at 3.5 percent a year, because the labor force would grow at 1.5 percent a year and output per worker would grow 2 percent a year. I notice by 1983 we are back to that again. It is easy to keep track of.

When both of these forecasts say that the rate of real growth in the economy will be tapering off slightly toward the end of the decade, that does not necessarily mean that we will be getting better off slower because population growth will also be tapering off. It does mean that very slightly, to a small extent, the country will have a little less incremental output year by year to play with, to do with whatever the Congress and the private economy find sensible to do.

By the way, if productivity were to behave somewhat differently toward the end of the decade from what the forecasts say, I would not be surprised. I cannot speak for Eckstein or Preston. I do not think they would be terribly surprised either. It is unlikely, however, to be very different from what the forecasts say. I did notice that the Wharton productivity figure seems to be a little erratic towards the end of the decade, and there are some ups and downs that seem to me to be a little hard to explain.

Out of the labor force, employment, and the productivity trend you get this potential trend of GNP, and the next step would be to ask if there are any fundamental obstacles in the way of the economy realizing its potential GNP, actually producing it. There are two kinds of obstacles that can arise. We have become a little more familiar with one kind in the last couple years, and both of the previous witnesses mentioned it. You could have, through one surprise development or another, an absolute shortage or scarcity of some key commodity like oil or even food. We have gotten used to that now. But it does not appear to be tremendously serious for the kinds of stories that seem plausible in terms of these models.

The Wharton forecasts provide you with two scenarios, one with heavy dependence on imported oil and one with a crash program to develop an increased supply of domestic oil. You will notice that by 1982 the real GNP differs by only a percent or a percent and a half between those two scenarios. So even that kind of very substantial effort to relieve scarcity of a key commodity does not make a tremendous difference in the real performance of the economy.

These models are not really very good at that sort of thing, so we are fortunate that it does not matter much. I remind you again that these two models were better on the GNP impact in 1974 of the energy crisis than the scarier forecasts that you heard during the course of the year's work.

The second possible kind of obstacle to realizing potential growth is more narrowly economic in character, and so we understand it better and the models can deal with it better. Potential GNP will not be realized unless the country is willing to buy it, unless something happens to provide a market in the form of consumption expenditures, plant and equipment spending, new housing, exports, and Government spending to buy back that potential GNP.

That is what fiscal and monetary policy are supposed to be about. The models could conceivably come up with the answer that a large inflationary or deflationary gap is likely unless very strong action is taken on Government expenditure or changes in the tax laws or in monetary policy.

As things turn out, the two models differ quite a lot between themselves, judged by short-run forecasting standards. For instance, the DRI model projects a personal saving rate of 7 percent or slightly less over the decade. The Wharton model projects a saving rate of 8 percent or slightly more during the decade, and that is a fairly substantial difference. By 1978 the Wharton model is higher on plant and equipment spending than Otto Eckstein's forecast, and lower on housing by a fairly substantial amount.

Those are the kinds of details that reasonable people can differ about, 10 years out, and even a third reasonable can hardly decide between them. But the more important thing is that both of the models find reasonably plausible patterns of demand that will in effect realize steady unemployment rates, although as I say they differ in their particular unemployment rates. Both forecasts come up with fairly high ratios of plant and equipment spending to GNP in the next decade. I do not know if you actually need a giant computer to tell you that, but it cannot do any harm if a giant computer does tell you. It seems to me to be a very plausible story.

On the current price side, the models also differ, but they are bound to be very weak here, especially if they try to look 10 years ahead. Still, another general lesson comes through. They both tell you that the rate of price inflation will be over 5 percent a year on average for the rest of this decade, and that seems to be probably true. They could even both be a little overoptimistic about that.

Both of the models give an inflation rate that comes down to 4 percent a year in the 1980's, but that could just be lack of imagination. Nevertheless, they tell you that there is nothing intrinsic in the situation to suggest Latin-American type two-digit inflation over the 10-year period, and I think they are quite right about that. I thought—and this may come out in the discussion—that the Wharton model's figures for the Federal budget surplus on the national income account is a little odd in some ways, especially as it differs between the two energy scenarios. And I do want to warn you never to look at either of their figures for net exports in 1958 prices, because the whole importance of the net export figure is that what we have to finance is not in 1958 prices, but in 1978 prices.

Let me finish up.

Can these forecasts help you in Congress' job of making long-run policies?

Yes, to a certain extent they can. They can do one very important thing. They can warn you if there is something structurally wrong with the economy. They can warn you off the less plausible stories that you will always be told. They can tell you that you are going to have to be managing a high-investment economy with, by the standards of 10 years ago, a fairly high rate of inflation.

But I do think that the real economic policy problems that Congress is going to face will most often arise from the surprises like the wanderings of the anchovy, the flooding of the soybean fields, the oil boycott, a recession coming along, or something like that. And medium-run models like this cannot tell you about that, or they would not be surprises.

So, even if 10 years from now, hearings like this turn out to involve no people at all, but just two computer terminals, one from Philadelphia, one from Lexingon, Mass., connected to a computer terminal in Washington, D.C., the Congress is still going to have to earn its living the hard way coping with those surprises.

Chairman BENTSEN. You mean there is not going to be any scapegoat that we can turn to. The buck will still stop here.

Mr. Solow, your critique answered many questions, or many comments on the questions that I was going to ask. I have become concerned, obviously, as I think we all are, with the importance of the computers and their projections, and I think that they can make errors which are not all surprises. I wonder if your models give enough recognition to social trends and political trends. I note here on the part of Mr. Preston and Mr. Eckstein and your statement that we are going to have to have an increase in capital investment, and you just seem to assume that it is going to happen.

I am not confident of it if political trends and social trends are weighted. We had testimony yesterday by Mr. Jones, chairman of the board of General Electric, concerning their study of the economy and what was going to be needed in the way of capital investment and what true return was on equity, and the problem of the capital market in obtaining new capital. You talk about tax reform, and we are going to have to have tax reform to try to see that tax levies are more fair than they have been.

But how do we accomplish all of these things and still achieve the social objective of getting more capital formation or more savings, when the trend politically seems to be a penalty against those things and to negate capital formation and savings as far as tax legislation is proposed?

And that is a matter of concern to me.

How do you swim upstream against the pressures of that to provide for capital formation?

I see a trend politically and socially that is going to make it extremely difficult to accomplish those objectives by legislation, that they will continue to be referred to as loopholes, that they are unfair, and that is going to make it difficult to have adequate capital formation.

Would one of you comment on that?

Mr. ECKSTEIN. I think it is the task of skillful policymaking to compromise these different goals. For example, the major thrust of tax reform at this time is not really against capital formation, except in the particular case of oil, that is so complicated by other factors and the leak in profitability that I will set that one aside for the moment.

The kind of proposals that were reported in the paper coming out of the Ways and Means Committee were an attempt to clean up loose ends in the stock option area, the attempt to clean up deductions on recreation and homes and so on. The process of tax reform has mainly focused on unesthetic loopholes, on some people figuring out a way to just pay a lot less than other people.

For example, there is no major thrust at this time to raise the corporate income tax. Even the investment credit and the accelerated depreciation rates seem to be slowly achieving respectability, when they were not at the first when they were first adopted.

Chairman BENTSEN. You are going to have a real attempt to stop accelerated depreciation in this Congress, to knock out or seriously curtail investment tax credits. The argument being that these really do not enter into the investment decisons on capital commitments by industry. I am deeply concerned about an inflation that results from a shortage of capacity, and we are seeing a lot of that today. It seems to me we are seeing it in the steel industry and we are seeing it in other places where we do not have enough capacity and that drives the prices up very substantially.

Mr. ECKSTEIN. The role of an economist in many situations is to review these proposals with the social goals, and to point out there are some general economic implications from them. Often proposals can be changed. There is certainly plenty of room for healthy tax reform to make the economy work better and not worse. I suppose that is part of the case for economic thinking.

Chairman BENTSEN. When we get into the specifics we run into problems. We lack the semantics. I am trying to come up with some legislation now to see that people do not just live off cash flow.

You gentlemen understand terms like that. I do not believe that people should be able to have very substantial amounts of income in this country and not pay any taxes and live off cash flow. I think that there ought to be some minimum tax that they pay, even though we have some social goals involved in a lot of these so-called incentives. Otherwise, I think you destroy credibility in the system.

I am having a difficult time arriving at that and still meeting the social goals, but we are working on that type of thing.

One of the objectives of the Finance Committee is to materially increase the preference tax, as it is termed, that to be put on top of your regular taxes. I am a little concerned about that. I think we should have a tax in the alternative for that purpose.

Mr. SOLOW. I would like to make two comments on the broad question. One is that I think you just put your finger on the route, or on one route, that the Congress can follow to balance the two important objectives of arranging to finance a large flow of investment without damaging present equity. The part of the tax system that has the strongest impact on investment decisions is business taxation—that is, the corporate tax, the investment credit, and all those things that have to do with the net profitability of business.

Most of the complaints about inequity in the tax system arise from inequities in the personal income tax. It is not clear to me that reform of the personal income tax, even if it begins to hit some of those large incomes that now manage to escape taxation more or less altogether, has any disincentive effect on business planning and business investment decisions. I think the Congress has every chance to encourage investment through its treatment of business taxation and recoup on the equity side by reform of the personal income tax system. That is one route that can be followed.

The other lesson that I think comes from all this does not have to do with fiscal policy at all, but with monetary policy. We are going to have, as both these forecasts show— and I do not know anyone, really, who differs—we are going to have a fairly substantial rate of price increase over the next decade. There is no way that by 1981 we can get back to the situation that existed in 1961, with the GNP deflator going up to 1.5 percent a year.

There is a natural knee jerk reaction to meet that inflationary pressure with tight monetary policy. Tight monetary policy is a drag on capital spending. So we will have to, I think, over the next 10 years learn to meet steady inflation by operating at least in part on fiscal policy and not simply exclusively by letting credit tighten and drying up the channels of business finance.

Chairman BENTSEN. Mr. Solow, when you say fiscal policy, are you just talking about deficits or not?

Mr. SOLOW. Oh, no. It is not simply a matter of deficits. There is another piece of economic analysis that maybe ought to be made more explicit here. Mr. Eckstein said at the very beginning that the flow of investment has to be financed one way or another by savings. Now there are three sources of savings in the economy. One is personal savings, one is corporate business saving, and another element of national savings is the balance in the Federal government's budgetary accounts. The United States is unlikely to be a net recipient of capital from abroad, so we can forget that.

Large deficits are a drain or a subtraction from the flow of savings. So when I say fiscal policy, I do not necessarily mean deficits. I may mean a balanced budget, or even a surplus under some circumstances. But that surplus, if it is not to generate fiscal drag—if it is not to eventuate in recession—is going to have to be offset on the monetary policy side.

Chairman BENTSEN. My question, when I said, are you talking about deficits, I am talking about the amount of deficit or the amount of surplus.

Mr. SOLOW. When I say fiscal policy I mean both sides of the Federal budget.

Chairman BENTSEN. Just in those terms?

Mr. SOLOW. Yes, sir.

Chairman BENTSEN. One of the statements, of course, here—and I believe it was Mr. Eckstein who was saying that we are going to have an increase in the military budget for purposes of economic stimulation—Mr. Eckstein, I would say that proposal is highly irresponsible. I would agree with you wholeheartedly that is no justification for a high military budget. The only justification is a question of national security, it seems to me. I totally concur with you, that is the least productive of capital investments that I can think of.

Let me ask you another question about full employment, and we are talking about the DRI model, which, I believe, assumes 4.8 percent unemployment.

Is it possible to also get some improvement in productivity as you work towards 4 percent unemployment, by massive expenditures for vocational education and that type of thing, to help make these people better qualified to do their job?

Mr. PRESTON. I think that kind of expenditure would only show its effects in the long run, and you could not affect movements, cyclical movements of productivity——

Chairman BENTSEN. I would agree totally with that.

Mr. PRESTON [continuing]. By vocational training programs. I think the cyclical changes in productivity that are exhibited in the Wharton model are really a characteristic of the elasticity of the supply curve. Once you move into high rates of capacity utilization, it is a structural part of the U.S. economy that planners have to live with. You cannot legislate that one out of existence.

You are making long-term projections. It is important to realize that this is just one of the rules of the game that you must realize is there. In terms of making long-term projections, it is important to realize where you are on that particular cycle when you make that projection, or your potential output path is liable to be in serious error.

Chairman BENTSEN. Let me ask you another one.

In your input into your computer, is it not reasonable to forecast substantially higher interest rates from now on?

You gentlemen seem to be pretty well in agreement that we may have an inflation at a compounded rate of 5 percent over the next decade. If you are looking at that, does it not also follow that the institutions are going to say, what is our true rate of return on fixed securities?

If we have a 9 percent rate of return and we have inflation at 5 percent, as we get back our money what is it really worth?

What are we truly netting?

Are we not netting something closer to 3 or 4 percent?

Does that not almost dictate that you are going to see high interest rates as long as we have this kind of inflation?

And does it not also follow, then, along the lines that Mr. Solow was saying, that you are going to find it even more difficult to find the capital for investment in manufacturing capacity to hold down inflation?

Do not these things feed on each other?

Mr. PRESTON. The projections that we have on the first table of the appendix attached to my statement there is a projection of the bond rate and the bond rate which is a measure of long-term interest rates, shows an increase on an average above the level of 9 percent, and never dropping below the level of 8.6 percent. Over the course of the 1980's, if you subtract the average rate of inflation from that, you get a real rate of return of 4 percent, which is equal to the real growth rate in the economy.

One of the points that I made was that the cost of all this investment that Mr. Eckstein was talking about is going to be phenomenal in terms of interest costs. Even in our own simulations, we had to exogenously increase the constants of the investment functions to achieve the kind of levels that we thought were necessary in order to deal adequately with the ecological and energy issues. The model itself, given the existing structure, would not have forecast this without help.

The area that it needs help in is the area that you are asking us to provide some common solutions to—that is, the generation of investment. What are the incentives going to be?

In 1961 we introduced the investment tax credit, reduced depreciation, things like that. Those have been worked into the economy by now, and are not a source of incentive any more. They are a source of maintenance of level.

Chairman BENTSEN. Are you then saying that if they were removed that there would be a deterrence?

Mr. PRESTON. If they were removed, I think there would be a disaster.

Chairman BENTSEN. You think it would be a disaster if we removed the investment tax credit and the accelerated depreciation?

Mr. PRESTON. In the long run, you would find—we could make a run of the model—but I know what the run would say because we have made them before. We would sacrifice easily $15 to $25 billion in real investment after the seventh or eighth year.

Chairman BENTSEN. Mr. Eckstein, do you agree with that?

Mr. ECKSTEIN. Yes. One of our collaborators has done a special study on the investment credit recently, and we drew similar conclusions that the incentive provided is very strong. It is one of the ways that this large volume of investment could be realized.

Chairman BENTSEN. Mr. Solow.

Mr. SOLOW. I think that is accurate. Certainly, if one is talking now about simply turning off the investment credit there would be a substantial effect on the volume of plant and equipment spending.

Mr. PRESTON. One of the difficulties is that the investment tax credit at one point in time was used as a cyclical instrument. We took it off, put it on, took it off, put it on. That instrument is very definitely a long-run instrument in affecting the path of the economy and its growth rate and the composition of output.

If you begin to muck around with the composition of output in the long run, you are making very basic decisions about what really is going to be produced 10 years from now.

Chairman BENTSEN. I have tried for a long time to find some indices that you can tie the investment tax credit to so it would not be a political decision by the Congress or the President, and it would relate to the economy. I never could come up with the indices that I thought were sufficiently safe or dependable to do that.

I know one of the arguments that is going to be made on the floor of the Senate is that this does not really weigh very heavily on the part of management in making a decision to make capital investment. But whether it does or does not, it still provides a very substantial amount of cash flow or additional funds to be invested for capital investment.

Mr. PRESTON. I think the steel industry was saved by the investment tax credit. Huge investment and small profits, 7 percent times that doubled their profits. In these heavy industries that have long lives in terms of their equipment, the investment tax credit, I think, really is indispensable. The real question is not whether it should be zero or not, it is what level it should be to reach optimal growth in that area. The argument should not be, should it be zero. It is what level should the credit be set at to achieve optimal growth in the area for long growth to occur.

Chairman BENTSEN. Mr. Preston, this problem I posed to you on high interest rates, and the question of whether or not you could finance this capital investment, I think you are going to see a change, a substantial change in investment. We are institutionalizing savings, it seems to me, in this country. What you see is more and more of these pension funds, insurance companies loaning their money for a fee, but then insisting on a piece of the action, an equity interest. That is about the only way that you are going to get the funds. I think capital investment in inflation markets is what we will see in the years ahead.

Mr. Solow, in trying to achieve these social objectives and still bring equity in the payment of taxes, you make your general point that the inequities are highlighted on individuals.

But does it also follow, then, that in effect you force the incorporation of anyone who is in business so they cannot operate as individuals?

Mr. SOLOW. Do you mean that you bias business in favor of a corporate form and against unincorporated enterprises?

Is that the question?

Chairman BENTSEN. If you bring about this tax reform, does it follow that that results?

Mr. SOLOW. I think that that could conceivably be one of the consequences, yes. The general trend for the corporate form to gain against unincorporated enterprise, and that is likely to continue in any case; and it would probably be pushed along a little bit by tax reform. It is an anomaly, of course, that unincorporated enterprise is taxed at the personal income tax rate, the corporation a the corporate tax rate. I do not see any way out of that.

Chairman BENTSEN. Mr. Eckstein.

Mr. ECKSTEIN. If I could add a couple of additional points. First, on the question of full employment, if you are in the forecasting field you try not to engage in wishful thinking. You try to project as it is likely to happen. So we projected an unemployment rate of 4.8 percent even after the present cycle has spun itself out.

Now, when Mr. Solow and I came to Washington years ago the interim goal was 4 percent on the theory that we would be able to do better. Indeed, we did a small-scale study for this committee a few years ago and we were asked a difficult question: How could we get it below 4 percent?

I think we have gone through two initiatives on unemployment.

First, in the early Kennedy years much emphasis was on area redevelopment which turned out to be a blind alley. We then went through a round of manpower programs, which had some success, but never really created a solid institutional structure, a series of strong institutions in which high quality manpower would be channeled to really accomplish the program. Now we have a period of rethinking of this question. The next administration will surely have to go back to the problem to do this job, how would you get the double unemployment rate down to 4 percent, or hopefully less? I do not think our society would sit still for resigning itself forever to an unemployment rate not far from 5 percent.

These matters do not tell you the answer to that, but somewhere in this country someone should figure out some new approaches in that area.

Mr. SOLOW. That is wishful thinking, but I share the wish.

Chairman BENTSEN. Before adjourning, I would like to submit for the record of this hearing a paper by Robert Hamrin of the Economics Department of the University of Idaho entitled "An Environmental Critique of Economic Growth Models." There has not been much opportunity in these first 2 days of hearings to discuss the environmental aspects of economic growth, but certainly we do not intend to ignore them. This paper, which summarizes and compares the views of a number of distinguished economists and other scientists, will be a valuable contribution to a balanced hearing record. Mr. Hamrin will be joining the staff of the Joint Economic Committee this summer where he will be continuing his work on environmental and other aspects of economic growth.

[The paper referred to follows:]

AN ENVIRONMENTAL CRITIQUE OF ECONOMIC GROWTH MODELS

(By Robert Hamrin, University of Idaho)

The two long range economic growth models[1] and their attendant projections that have been presented to the Subcommittee on Economic Growth are definitely within the traditional mold in regard to their structure, assumptions and general goals. They present detailed absolute and percentage change estimates of the multitudinous features of the economy, all within the general philosophical framework of ascertaining what is the overall effect on the level and growth rate of the Gross National Product (GNP). In other words, economic growth is the prescribed goal and the more there is, the merrier the country will be. The following critique of these traditional models will be nontraditional in that it will not focus on the merits or demerits of the individual assumptions or estimates and show how using the "proper" ones would change some final projections by 1 or 2 percent. Rather, it will be analyzing a particular structural issue that has been virtually ignored in the models: the relationship between economic growth and environmental quality. This omission is quite serious in light of the numerous articles and books recently written which question the compatability of the two and discuss what should be done, or must be done concerning the economic growth of the United States. The questions raised by these concerned natural scientists and economists must be carefully analyzed and subject to public debate and the proper forum seems to have been established in this Congressional sub-committee.

In order to expedite the analysis and debate, the following discussion highlights the substance of the arguments being raised and presents these under three broad topics. The first section examines the charge that there is an in-

[1] Data Resources, Inc., and Wharton.

herent conflict between economic growth and environmental quality, paying special attention to the underlying ecological principles and to the frequently discussed problems of externalities and shortcomings of the GNP concept in accounting for environmental damage. The "orthodox" solutions-change the composition of the GNP, technological improvement, pollution taxes-are then discussed since they are part of the conventional wisdom of economics and often contribute to rather complacent attitudes concerning degradation of the environment. The final section looks at the increasingly emergent solution that there are limits to growth and that once these have been recognized, massive changes will have to take place in the marketplace, in social institutions, but most of all, in our values and goals as individuals and as a society.

ECONOMIC GROWTH VS. ENVIRONMENTAL QUALITY

That there definitely is an emerging group of scholars who are seriously concerned about the effects of economic growth on environmental quality can be demonstrated through a sampling of quotes from their most recent writings:

There is a very real conflict between the goals of economic growth and environmental preservation; although technological changes can mitigate this conflict, it is difficult to see how it can be avoided. (Edward Mason, University Professor Emeritus of Harvard University)[2]

* * * affluence, as judged as conventional measures-such as GNP, power consumption, and production of metals-is itself an illusion. To a considerable extent it reflects ecologically faulty, socially wasteful types of production rather than the actual welfare of individual human beings. (Barry Commoner, Professor and Director of the Center for the Biology of Natural Systems at Washington University, St. Louis)[3]

The root cause of environmental problems is economic and demographic growth * * *. In the United States, economic growth has proceeded much faster than population, as reflected in our rising per capita standard, and while we have some of the world's most severe environmental problems, we are a country of only average density. In other developed countries economic growth also is the more dynamic element. (one of the staff members of Resources for the Future)[4]

The implications of the ecological crisis for the advanced nations are not any less severe, although they are of a different kind. (referring to developing countries) For it is clear that free industrial growth is just as disastrous for the Western nations as free population growth for those of the East and South. The worship in the West of a growing Gross National Product must be recognized as not only a deceptive but a dangerous avator. (Robert Heilbroner, Profesor at New School for Social Research, New York)[5]

The majority of economists and the average American citizen would probably claim that these sorts of thoughts are symptomatic outpourings of a disease that could be labelled "growthphobia." a terminal disease in that it stresses the necessary end to economic growth. Certainly the moribund nature of this disease is worse than that suffered by those afflicted with "growthmania," which at least connotes progress and more-more with which to fight pollution, the energy shortage, unemployment, poverty, urban disamenities, ad infinitum. Which viewpoint should or must be adhered to is certainly one of the fundamental questions that American society must face, and the sooner the debate begins, the greater will be the number of alternative courses of action available.

The viewpoint predominating in the Council of Economic Advisers was made clear in the 1971 Economic Report of the President: "* * * whatever may be true about the relative values of the product included in the GNP and the product excluded from it-the automobile on the one hand and the clean air on the other-there is little evidence that we are witnessing a decline in the value assigned to economic output as a whole." Their own environmental concern was

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[2] Edward Mason, "Reconciling Energy Policy Goals," in Sam Schurr, ed. *Energy, Economic Growth and the Environment*, (Baltimore: John Hopkins University Press, 1972), p. 178.

[3] Barry Commoner, *The Closing Circle*, (New York: Alfred A. Knopf, 1972), p. 295.

[4] "Man and His Environment: The Issues in Perspective," in *Annual Report* of Resources for the Future, (Washington, D.C., 1971), p. 12.

[5] Robert Heilbroner, "Ecological Armageddon," in Warren Johnson and John Hardesty, eds, *Economic Growth* vs. *The Environment*, (Belmont, Calif., Wadsworth Publishing Co., 1971), p. 43.

clearly reflected in one concise sentence: "For anyone to whom clean water is the only valuable product there has been no economic growth since the time of Hiawatha." [6] The basic reason why the future time horizon of this type of viewpoint is of necessity limited will now be delineated.

The most fundamental feature of the contemporary discussion on economic growth and the environment is the necessary meeting and intermeshing of economic and ecological concepts. The critical charge levied at the economics profession is that throughout its development it has blithely ignored the physical constraints of the ecosphere. Its fundamental premise has been that people have unlimited wants, and though acknowledging scarce resources as a limiting factor, the underlying theme was that these desires could be continually (for once met new ones are always created) "satisfied" through economic growth and its foundation stones of increased knowledge, productivity and technology. It is only recently that the whistle has been blown by the natural scientists, (particularly ecologists who study the whole ecosphere and the interrelationships among its living things and its physical and chemical constituents) who point out that the economic system is only a subsystem and as such must interact in harmony with the whole. Though the interrelationships among systems and cycles, as well as the crucial entropy concept are fascinating and enable one to fully understand the delicate balances that must be sustained, the main thrust of the argument can be seen in the following succinct yet forceful statement by Barry Commoner:

Human beings are dependent on the ecosphere, not only for their biological requirements (oxygen, water, food), but also for resources that are essential to all their productive activities. These resources, together with underground minerals, are the irreplaceable and essential foundation of all human activities.

If we regard economic proceses as the means of governing the disposition and use of resources available to human society, then it is evident that the stability of the ecosystem, which ensures the continued availability of resources that are derived from the ecosphere (i.e., nonmineral resources), is a prerequisite for the success of any economic system. More bluntly, any economic system that is to survive must be compatible with the continued operation of the ecosystem.

Because the turnover rate of an ecosystem is inherently limited, there is a corresponding limit to the rate of production of any of its constitutents. Different segments of the global ecosystem (e.g., soil, fresh water, marine ecosystems) operate at different intrinsic turnover rates and therefore differ in the limits of their productivity. On purely theoretical grounds, it is self evident that any economic system impelled by its own requirements for stability to grow by constantly increasing the rate at which it extracts wealth from the ecosystem must eventually drive the ecosystem to a state of collapse.[7]

Within this framework, Commoner sees the practical problem to be one of describing environmental deterioration changes in terms that can be related, quantitatively if possible, to the processes of economic growth, with growth defined simply as the increased production of economic goods. This problem has been cited by many others, but Commoner is one of the few bold enough to attempt an approximation of this relationship. Recognizing that the internal changes in an ecosystem that occur in response to an external stress are complex nonlinear processes, and therefore not readily reduced to simple quantitative indices, his practical expendient is to say that the environmental cost of a given economic process will be represented by its environmental impact (I). His relationship I = Population. Economic Good–Population. Pollutant–Economic Good enables the estimation of the contribution of three factors to the total environmental impact: (1) population size; (2) production (or consumption) per capita; (3) the amount of pollutant generated per unit of production (or consumption) that reflects the nature of the productive technology.

In order to determine the relative effects of these three factors, he studies six productive activities [8] during the period 1946–1968. His results were that the population factor contributes only between 12 and 20 percent of the total changes in the impact index, the "affluence" factor (#2) is no more than 5 percent (except for the automotive pollutants), while the technological changes in the processes that generate the various economic goods contribute from 40 to 90

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[6] Council of Economic Advisors, *Economic Report of the President,* January 1971, pp. 86, 88.

[7] Barry Commoner, "The Environmental Cost of Economic Growth," in Schurr ed., p. 31.

[8] These six were: detergent phosphate, fertilizer nitrogen, nitrogen oxides, beer bottles, tetraethyl lead, synthetic pesticides

percent of the total increases in impact. This latter result provides the basis for his sweeping indictment of American economic growth:

Thus, the chief reason for the sharp increase in environmental stress in the United States is the sweeping transformation in production technology in the postwar period. Productive activities with intense environmental imparts have displaced activities with less serious environmental imparts; the growth pattern has been counter-ecological.[9]

Coupling this counter-ecological growth pattern with some rough estimates of the magnitude of U.S. economic growth and pollution growth yield a frightening scenerio. For instance, the physical volume of production and consumption in 1970 was five times what it was around 1920. Looking ahead to the year 2020, assuming a rather low GNP growth projection of 3 to 3.5 percent per annum, the aggregate volume of production and consumption would be six, eight or even ten times what it is now. When joined with the estimate that the volume of debris and pollution in the U.S. has increased at over twice the rate of increase in the GNP we can envision environmental deterioration of massive scope unless radical changes are made in our production processes and public commitment to a quality environment.

A critical part of the environmental quality problem is that extraction and exploitation of natural resources will continue at an even faster rate as the developing countries increasingly utilize their own resources to feed their own industrialization process. This is an extremely serious trend in light of the charge by Raymond Ewell (Vice President for Research of the State University of New York at Buffalo) that continued U.S. economic growth is dependent upon appropriating an increasing share of the world's natural resources, mainly through establishing and maintaining "friendly relations" with resource-rich parts of the world.[10]

Joseph Fisher, in his last President's essay for Resources for the Future before retiring this year, said that it is a fact that resource and environmental difficulties are likely now and for the future as far as one can see, to be widespread, interrelated and more and more intractable. He draws an interesting analogy between the passing of the American geographic frontier around 1880 and the profound change in the American character and view of life this entailed. and the resource frontier, which viewed on a world scale, ceased to exist around 1970 as increasing numbers of people in the various countries became aware of the planetary constraints of spaceship earth. The conclusion he draws based on this end to the resource frontier is clear and forceful and should weigh heavily on any debate concerning future economic growth:

* * * it does portend dire results some time in the future unless the people of this planet can succeed in coming to environmentally acceptable terms with the resources and resource potentials of their finite world. Largely this mans coming to terms with population growth and with technological and economic growth as well. Programs to achieve population stability in a noncoercive way are called for. A careful economic and social assessment of new technology is required before it is installed. And economic growth must be reformed and redirected along lines that will be socially and environmentally acceptable over the long run.[11]

An integral part of the depletion of resources issue and its relations to environmental deterioration involves the economic concept of externalities (sometimes called spillovers). Though long recognized, in general they have not been considered substantial and have in fact been treated in textbooks as one of those examples of "market failure" that should be mentioned before more important matters are considered. It is only recently, with the increased awareness of the seriousness of environmental pollution, that they have gained their rightful place as part and parcel of economic activity which escape private consideration since others bear the burdens or costs. This is what is meant by the phrase, "social costs exceed private costs." The familiarity with this problem was greatly enhanced by a noneconomist, biologist Garrett Hardin, in his classic article "The Tragedy of the Commons" published in 1968.[12] Its essence is that given a common grazing ground, each man is locked into a system that com-

[9] Barry Commoner, in Schurr ed., p. 63.
[10] Raymond Ewell, "U.S. Will Lag U.S.S.R. in Raw Materials," in Johnson and Hardesty eds., pp. 167–174.
[11] Joseph L. Fisher, "Keeping Things in Perspective," in *Annual Report* of Resources for the Future, (Washington: D.C., 1973), pp. 5–6.
[12] Garrett Hardin, "The Tragedy of the Commons," in *Science,* Vol. 162, December 1968, pp. 1243–1248.

pels him to increase his herd without limit in a world that is limited. Thus, freedom in a commons brings ruin to all. Hardin notes that this tragedy reappears in problems of pollution in a reverse way, for it is not a question of taking something out of the commons, but of putting something in. Still, the calculations of utility are much the same for the rational man finds that his share of the cost of the wastes he discharges into the commons is less than the cost of purifying his wastes before releasing them. Being true for everyone, we are locked into a system of "fouling our own nest" so long as we behave only as independent, rational, free-enterprisers. Thus, external diseconomies became increasingly important primarily because water, air and space continue to be drawn on by private producers without incurring costs, or at least without incurring costs that fully measure social disadvantages, and are used for the disposal or dilution of wastes, again, without incurring costs.[13]

In principle, any social costs of economic activity that are not internalized as private costs should be subtracted in calculating our measures of economic welfare. Certainly, the depletion of per capita stocks of environmental capital is an extremely important type of social cost not recorded in the national income accounts. Nonappropriated resources such as water and air are used and valued as if they were free, even though reduction in the per capita stocks of these resources reduces future sustainable consumption. Tobin and Nordhaus, in their seminal study on taking explicit account of social costs to determine what changes in "growth" will result, take particular notice of the disamenities of urban life:

Some unrecorded social costs diminish economic welfare directly rather than through the depletion of environmental capital. The disamenities of urban life come to mind: pollution, litter, congestion, noise, insecurity, buildings and advertisements offensive to taste, etc. Failure to allow for these negative consumption items overstates not only the level but very possibly the growth of consumption. The fraction of the population exposed to these disamenities has increased, and the disamenities themselves may have become worse.[14]

Thus, the inevitable conclusion is that as these disamenities and environmental deterioration grown in importance, real GNP (or real NNP) will become a more and more deficient measure of net output and certainly will not reflect real increases in human welfare. To use a very simple example, a tree left standing in a national park does not count in GNP. Though it may be worth much more to society in this condition, it is "counted" only when converted into lumber and sold as a marketable commodity. Thus, the idea that increased GNP is automatically a good thing is simply an illusion and rational decisions regarding economic growth cannot be made solely on the basis of the customary income accounts which do not effectively discriminate between what are properly considered costs of economic activity and what are properly considered benefits.

Finally, based on the economic principle of diminishing marginal utility, it is most likely the case that at this stage in the development of the United States economy, the income accounts tend to measure gains or growth by counting increasing numbers of things that have lower and lower values. The trade-off between increasingly valuable (and perhaps necessary) environmental quality and decreasingly valuable material goods must be squarely faced in a world of finite size and resources, particularly in a world where two-thirds of its population still needs many of the basic necessities of life.[15]

ORTHODOX SOLUTIONS

The reason the following solutions are termed "orthodox" is that they are the ones repeatedly discussed and analyzed in recent literature by the mainstream American economists. Since they are so frequently heard, only the main thrust of the arguments will be presented, enough to provide a basis of comparison with the more radical solution presented in the last section.

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[13] Wassily Leontief has shown how externalities can be incorporated into the conventional input-output future of a national economy and once done, conventional input-output computations can yield concrete replies to some of the fundamental factual questions that should be asked and answered before a practical solution can be found to problems raised by the undesirable environmental effects of modern technology and uncontrolled economic growth.

[14] James Tobin and William Nordhaus, "Is Growth Obsolete," in National Bureau of Economic Research, *Economic Growth*, (New York: Columbia University Press, 1972), pp. 49–50.

[15] Paul Barkley and David Seckler, *Economic Growth and Environmental Quality*, (New York: Harcourt, Brace and Jovanovich, 1973), p. 6.

Although many economists are becoming increasingly concerned about the effects of economic growth on environmental quality, their concern stops short of despair because of their inherent faith in the properties of the marketplace to straighten things out before they become too desparate. To put it succinctly, it is not so much the level of GNP growth that is at fault but rather the way we grow, the composition of the GNP. This attitude is well represented by Walter Heller, a "reform" economist who has addressed himself to the growth-environment question a great deal in recent years. He says:

But much evidence supports the view that it is less the fact of growth than the way we grow and the uses we make of our growth that give rise to most of our environmental troubles. And elusive as consensus on the basic growth-environment trade-offs may be, it appears that a consensus on the urgency of changing the forms and uses of growth is already materializing.[16]

The result he sees is that GNP may not suffer greatly in quantity, but it will change in quality as we increasingly inject the costs of clean waste disposal and resource conservation into the prices of our products. Thus, the GNP will contain more environmental safeguards and amenities and less material output, more quality and less quantity per dollar of GNP.

This them echoes almost exactly that held by Barry Commoner, for as indicated earlier he stressed that it is the *pattern* of economic growth, not growth per se, that is the major reason for the environmental crisis. This congruence of opinion is interesting in that Heller strikes very hard at the differences in attitude and orientation of economists and ecologists.

A recent college textbook on environmental economics by Freeman, Haveman and Kneese, three leading thinkers and writers in this field, support the orthodox "pattern of growth" idea fully, but view the pattern choice on a more macro scale:

But long before population growth brings about physical crowding on a global scale, other constraints related to the capacity of the earth to provide food and resources and to absorb wastes will have been met. What these constraints will be, how soon they will be reached, and what consequences can be foreseen depend in part on the pattern that growth takes. Is it a growing population with a constant per capita income and consumption pattern? Or is it a constant population with growing per capita incomes? Or is it somewhere in between?[17]

They later point out that if technological change is not rapid enough to keep ahead of physical resource scarcity, the cost of high-resource-using goods will rise. The result is more services and highly durable goods and away from resource intensive forms of consumption that prevailed in the past. The conclusion is therefore drawn once again that over the long run, this would require very great changes in the composition of output and even in the way of life.

This increasing shift to services and the effect it has on environmental deterioration has been a frequent message in recent writings. Already in the 1970's, nearly 60 percent of the labor force is employed in service activities. However, as Lawrence Hines, an economist at Dartmouth College points out, the impact of the expansion of the government sector and the service industries goes well beyond a simple shift in employment and investment opportunities. He states that "the change in industrial structure will reach to the heart of the economic system, gradually but greatly affecting the economy's productivity and therefore its growth rate, the stability of the nation's income and employment, and the pressure of pollution upon the environment."[18] Thus, whatever the impact of the structural changes in the economy upon the growth rate, a partial solution heralded by many is that the relative decline of the heavy natural resource-using, waste-producing industries in our economy will allay the increasing pressure upon both the environment and the supply of natural resources.

The depletion of natural resources problem has also been virtually assumed away by the conventional economic wisdom. The prevailing standard model of growth in economic assumes that there are no limits on the feasibility of expanding the supplies of nonhuman agents of production. Basically production

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[16] Walter Heller, "Economic Growth and Environmental Quality," (Morristown, New Jersey, General Learning Press, 1973), p. 6.

[17] A. Myrik Freeman III, Robert Haveman and Allen V. Kneese, *The Economics of Environmental Policy,* (New York: John Wiley & Sons, Inc., 1973), pp. 157–8.

[18] Lawrence Hines, *Environmental Issues,* (New York: W.W. Norton & Company, Inc., 1973), p. 68.

depends on two factors, labor and reproducible capital, thereby ignoring the third member of the triad of factors of production, land and natural resources. This simplification of theory has carried over into empirical work, as evidenced in the models presented at this first set of hearings. The justification has been that if substitution for natural resources is not possible in any given technology, or if a particular resource is exhausted, we tacitly assume that "land-augmenting" innovations will overcome the scarcity.

This optimistic view of technology stands in contrast to the tacit assumption of environmentalists that no substitutes are available for natural resources. If so, output would either stop growing or assuredly decline. Therefore, the substituability between capital and labor, and natural resources is of crucial importance to future growth.

In their study on developing an alternative measure to GNP to measure economic welfare, Tobin and Nordhaus reviewed historical tendencies in resource industries which led them to conclude tentatively that natural resources have not become an increasing drag on economic growth. They suggest as a possible explanation that technology allows ample means for substituting away from increasingly scarce natural resources.[19] Two university economists, Paul Barkley and David Seckler, provide a very good concluding perspective on the issue of resource depletion:

At any given point in the future, resource scarcity may or may not be a major limitation to growth. But believing that technology will simply develop to solve whatever problems may occur is a blind expression of faith. No one can predict that technology will not appear, but neither can one predict that it will appear. In such a state of uncertainty and ignorance regarding the future, the rational approach is a conservative one.[20]

The Sub-Committee on Economic Growth should study this matter in further detail as it will become increasingly urgent in terms of the future economic growth of the United States.

That technology, and particularly changes in technology, is the obvious solution to environmental problems (or any others) is a belief shared not only by scientists, engineers or technologists but by most economists. Again, Heller conveys the orthodox view of economists when he states that recent investigations have helped provide affirmative answers to the questions of whether progress in science and technology respond to social and economic forces and whether they can be bent to our will. The reasoning is that for decades we have biased the pattern of technical change in the direction of excessive production of residuals by zero-pricing or underpricing the use of the environment into which they are dumped. It follows, according to Heller, that "if we assess the appropriate charges for waste disposal (and put the right prices on resource amenities), we will not only improve the pattern of production to the benefit of the environment but also stimulate pollution-abating technology." [21]

This is, of course, one of the key solutions propounded by the vast majority of academic economists: the pollution tax or effluent charge. Under such a device, the presently hidden social costs of pollution would be made a real dollar cost and assessed to the offending firms, consumers and municipalities. These costs would then show up in the supply-and-demand relationship that regulates the market system, and the market would then be able to adjust itself to amounts of production, consumption, and pollution believed socially tolerable.

Even such a "fanatical" ecologist as Commoner adheres to an idea similar to this. He says that what is needed is an ecological analysis of every major aspect of the production, use and disposition of goods. This would involve a kind of "ecological impact inventory" for each productive activity, which will enable us to attach a sort of pollution price tag to each product which is needed if we are to judge the relative social values of major products.[22]

One of the problems with this widely proposed solution is that in calculating the proper taxes to assess, we are hampered at every stage by ignorance of: (1) the biological and entomological effects of various types and levels of pollution on human beings, plants and animals; (2) what valuation people put on improvement of worsening of levels of various types of pollution; (3) certain economic considerations that could tell us something about how various pollution

[19] Tobin and Nordhaus, p. 63.
[20] Barkley and Seckler, p. 29.
[21] Heller, p. 11.
[22] Commoner, p. 175.

measures would affect relative prices, outputs, and employment in particular industries and the location of business enterprises.[23]

Aside from ignorance, more intractable problems are raised in the radical critque of pollution taxes. For example:

High pollution taxes would be imposed on capital goods, basic material inputs (for example, steel and paper), and fossil fuels due to their high degree of complicity in environmental destruction. Aside from short-run depressive effects, it is clear that a high level of economic growth could not be maintained in the long run, since it is precisely these sectors which provide the means for expansion.[24]

It is also charged that a pollution tax would probably collect the costs of abatement in a most inequitable manner. Like any excise tax, it would be highly regressive, falling most heavily on those least able to afford it. Most economists agree that the ultimate incidence of the tax will be on consumers in the form of higher product prices. Thus, unless luxury goods happen to have higher price increases than necessities, poor families will end up paying a larger portion of their incomes for pollution abatement than will wealthier families. There is also some evidence that in the monopolized industries pollution charges will be marked up before they are passed on to consumers so that price increases will more than offset the additional costs of production. Then, not only will the wealthy enjoy a cleaner environment, they will increase their profit as well.[25]

The overall optimistic tone of the orthodox solutions and the urgent, quite pessimistic tone of the radical critique of these solutions is vividly conveyed in the following two passages:

If we now put proper prices on air, water, quiet, and landscape, it seems reasonable to asume that the market mechanism will cause new shifts in resource use and technology leading us to conserve *these* resources and let Spaceship Earth cruise on a good deal longer.[26]

* * * the neoclassical analysis of the environmental question is found to be seriously inadequate for a number of reasons. It obscures the social conflict inherent in both the present environmental situation and the proposed tax reform. It ignores the global dimensions and implications of the ecological crisis. It is utopian in ignoring the political realities of a capitalistic society and, in particular, the reforms that corporate interest groups would rather see imposed. And finally, and most importantly, it ignores several ecological irrationalities of capitalist production and consumption that directly contribute to the present and future environmental crisis. Only a broader analysis that looks at the structure of production and consumption and the distribution of political and economic power can fully comprehend the crisis. Marginal changes alone will not save us from an ecological Armegeddon.[27]

"RADICAL" SOLUTIONS: LIMITS OR END TO GROWTH

Using the term "radical" in no way implies that those who espouse these views are radical in their political philosophy, nor even part of the newly developing school of radical economists. What is implied is that these scholars, after examining the economic growth-environmental deterioration relationship, conclude that the neoclassical economic answers may be necessary but are not sufficient answers and that much more fundamental, structural changes are called for. The radical nature of their replies usually relates to the call for some limit to economic growth or even its end:

The benefits of growth are apparent; the costs of growth are subtle and insidious. As growth continues, the strain on the internal structure of society increases. In order to withstand that strain, society becomes rigid and specialized. It loses its flexibility and adaptability—what was a strength becomes a weakness. Today's society, because of a refusal to acknowledge the consequences of growth, is in considerable danger.[28]

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[23] Mason, in Schurr, p. 123.

[24] John Hardesty, Norris C. Clement and Clinton E. Jencks, "The Political Economy of Environmental Destruction," in Johnson and Hardesty ed., p. 90.

[25] Richard England and Barry Bluestone, "Ecology and Social Conflict," in *Toward a Steady-State Economy*, Herman Daly ed., (San Francisco: W. H. Freeman and Company, 1973), pp. 194–5.

[26] Heller, p. 11.

[27] England and Bluestone, in Daly ed., p. 192.

[28] Barkley and Seckler, p. 47.

But if economic and demographic growth is extended far enuogh into the future, our environmental problem is greatly magnified. At some stage it may overwhelm the technical and managerial measures from which we have just derived interim hope. Moreover, the availability of resources, which has not been considered a serious short-term problem, cannot be so treated if we project far enuogh into the future. The earth is finite and growth must stop somewhere, whether arrested first by resource limitations or environmental tolerances. Massive applications of energy permit more complete recycling of materials, and can enable us to stave off these limits, but not forever.[29]

As soon as we are committed to the creation of a long-term, viable world system, our most important task will be to avoid the trauma caused if we actually exceed any of the earth's physical limitations-food production capability, pollution absorption capacity, or resource supply. This can only be done through a deliberate decision to stop physical growth. We must engineer a smooth transition to nongrowth-a "global equilibrium" or steady state in accord with the earth's physical limits. Our generation must halt the growth by developing and utilizing legal, economic, or religious pressures, social substitutes for those pressures that would otherwise be exerted by nature to halt physical growth.[30]

The idea of a steady-state economy is not new-it was thoroughly developed and enthusiastically espoused by John Stuart Mill more than a century ago. The modern proponents of this idea who have done the most to popularize it and begin the process of numerous debates and studies concerning it, is a multidisciplinary group of researchers at the Massachusetts Institute of Technology (as seen in the last quote). In their book, *Limits to Growth,* they warn that approximately another hundred years of exponential growth at present rates of production, population and pollution will probably result in a limit to economic growth and then a sudden, irreversible decline. This dire warning was based on their research which made extensive use of computer models and dynamic system analyses in examining the relationships between five major variables: population, pollution, natural resources, industrial output per capita, and food per capita. The ultimate limitations of economic growth varied with the assumptions made concerning the growth of these five variables; the limitations of food supply, exhaustion of natural resources, and growth of pollution appeared as the most serious constraints in various cases. Particularly startling was that hoped for increases in agricultural yield and new discoveries of natural resources only marginally postponed the approach to the limits of growth.

Since this team was composed solely of scientists and engineers, some people may object to their prescribing limits on economic growth and ask what economists are saying in regard to such an heretical idea. As shown in the last section, most economists are not engaged in such dire predictions. However, some are and their number is growing so we will now turn to the economic perspective.

Leaving aside the historical voices of Mill, Marx, Schumpeter, Keynes (in a certain way) and Alvin Hansen, we can begin our survey of contemporary views with economists who in the very non-radical decade of the 1950's were looking skeptically at what it was they thought we would be getting out of a high rate of growth, given the kinds of uses to which output was being put. Specifically, the C.E.D. published in 1958 a series of essays by economists answering the question. What do you regard as the most important economic problem of the next decade? The most frequent responses were directed to questioning the value of economic growth, having regard to the way product was then being used. Among those writers were Jan Tinbergen, first winner of the Nobel Prize for Economic Science and ironically enough Roy Harrod, the father of modern economic growth. The complaints were not so much that economic growth as properly measured had ceased, or even that it had become slow, but that growth was being misdirected: that private consumption was being more and more devoted to trivial uses. The essay by Moses Abramovitz concluded with these sentences, a message that seems even more pertinent to the present day:

"If we must risk some reduction in our date of growth in order to apply our expanded capacity to more worth, meaningful uses, it is a risk well worthwhile. If we refuse to accept it we may discover that the economic progress of the

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[29] Resources for the Future, *Annual Report* 1971, p. 14.

[30] Jorgen Randers and Donella Meadows, "The Carrying Capacity of our Global Environment: A Look at the Ethical Alternatives," in Daly ed., p. 301.

next generation was an empty achievement, not only in the eyes of the people in other countries, but perhaps still more in our own." [31]

The modern radical critique finds economists arguing that economic growth has not increased the welfare of human beings and that further economic growth will just make matters worse. For those holding a belief, the logical policy position is to call for an end to growth. Though this is unlikely to become part of the platform of any political party in the near future, the fact of its political unpopularity does not itself make zero growth a bad idea. The arguments raised against economic growth touch upon a wide variety of social issues. Just a brief outline of the more important issues will now be presented.[32]

One traditional conservationist argument is that the continuing growth of output and population will eventually mean the extermination of many species of flora and fauna. The basic fact is that the number of sites is fixed and population and output growth continually bid up the prices of these sites and induce landowners to increase productivity per acre. One consequence of the increasing scarcity of habitable space is that the survival of species other than man often become an apparently dispensable luxury, even in the most affluent society.

More recent arguments go beyond these conservationist issues and center on the fixity of the environmental resources of earth. The basic point is quite straight forward. The assimilative and absorptive capacities of the earth's air, water and land resources are finite, and therefore sustained economic growth producing ever higher levels of effluents must sooner or later overwhelm these resources. One of the more sophisticated and outspoken proponents of this view is Kenneth Boulding who developed the vision of Spaceship Earth. His pessimistic conclusion is that society expands environmental capital recklessly in pursuit of the wrongheaded goal of maximizing current output. If he is right, society must alter its basic philosophical position toward the meaning of economic growth. The overriding social goal would be maintenance of environmental resources and would entail acceptance of a lower rate of growth-even a zero rate-of current output toward this end.

One final general criticism of economic growth concerns its harmful effects on amenity broadly conceived to include all social and cultural factors affecting the quality of life. It is alleged that economic growth has, either directly or indirectly, destroyed the best aspects of life found in less economically advanced ages; in particular the pleasures of solitude, contemplation, leisurely conversation, creative art and the like. According to this line or argument, held by such famous economists as Bertrand de Jouvenal, Staffan Linder, and Tibor Scitovsky, economic growth inundates these civilized pursuits by glorifying materialism and requiring too hectic and frenzied a style of life.

The question that now must be considered is whether grow is stoppable. Walter Heller attempts to make an affirmative answer very difficult by stating that the deepest wellspring of modern economic growth is the advance of technology in its broadest economic sense, the advance of knowledge.[33] The logical conclusion is the anti-growth writers must be anti-intellectuals. This is completely contrary to the truth, for nearly all these thinkers cite as an important benefit of a steady-state economy the possibility for increased pursuit of education, cultural affairs, contemplation and the like; in short, greater opportunities for self-enrichment.

A less lofty answer is provided by E. L. Dale Jr., a financial writer for The New York Times, who asserts that the private enterprise economic system operates according to "iron laws," dominated by the law of accelerating growth in productivity and output, which cannot be halted because "the profit motive will almost always propel individual daily decisions in the direction of higher productivity." [34] A similar point is raised by economist K. W. Kapp who made one

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[31] Moses Abramovitz "Economic Goals and Social Welfare in the Next Generation," in *Problems of U.S. Economic Development*, Committee for Economic Development, New York. 1958. pp. 191–99.

[32] The following ideas are drawn largely from Joseph Seneca and Michael Taussig, *Environmental Economics*, (Englewood Cliffs. New Jersey, Prentice-Hall, Inc., 1974), pp. 328–31.

[33] Heller, p 4.

[34] E. L. Dale Jr., "The Economics of Pollution" *New York Times Magazine*, April 19, 1970.

of the most complete studies of the fundamental relationship between environmental externalities and the private enterprise system. His basic suggestion was that conventional private enterprise economic theory is incapable of accommodating the powerful externalities generated by the very source of present economic strength-modern technology.[35]

Thus, once again the environmental crisis demonstrates its proclivity for confronting a basic social issue. It raises the two fundamental questions of whether the basic operational requirements of the private enterprise economic system are compatible with ecological imperatives and to what extent this system is inherently incapable of the massive undertakings required to "pay the debt to nature" already incurred by the environmental crisis?

Two economists from Rutgers College, Joseph Seneca and Michael Taussig, suggest answers to these questions by developing a scenerario of the necessary changes that have to take place to make growth compatible with environmental quality.[36] The major impact of their environmental package would be a massive realignment of relative prices, wherein the prices of all outputs would have to include the full external (marginal) costs of environmental pollution. Speculating about a few of the more important changes in relative prices, they cite: (1) the prices of goods, especially heavy consumer durable goods, would rise sharply, relative to the prices of sources; (2) the price of energy to both households and firms would rise sharply, relative to other prices; (3) use of private automobiles would become much more expensive. They then ask what is the relationship of these predicted relative price changes, in a new proenvironmental regime, to economic growth? Assuming that full employment of resources is maintained through monetary and fiscal policies, they feel that economic growth would resume after absorbing the shock of the revolution in relative prices, but in much different directions.

Their new pattern of growth would involve: (1) a reallocation of resources away from goods to services; (2) a similar reallocation of resources away from the production of goods and services requiring relatively large energy inputs; (3) a revolutionary reduction in private automobile use; and (4) recycling of materials would become a major service industry in the new regime. In brief, these specific predictions lead them to expect that economic growth in a pro-environmentalist regime would be service-oriented rather than goodsoriented, as in the past. Such growth would take the form of improvements in quality rather than increases in quantities produced. They cautiously conclude that this full environmental regime could be implemented gradually over a period of years and that social engineering of change in relative prices is not an environmental panacea but a prerequisite for any substantial progress against environmental deterioration.

A point not raised yet is that all these measures for curbing environmental deterioration are primarily the responsibilty of the developed countries where material growth need not be the source of human progress. It is the developed countries which have a serious obligation to reduce their rates of economic growth, to reduce their waste discharges, to produce more durable goods and to promote sounder consumption styles so that the poor countries can claim their fair share of global clean environment.

More specifically, as Barry Commoner points out, while the solution of the environmenal crisis is necessarily global in scale, it remains true that the United States holds the key to its success.[37] One reason is that the United States does control, and wastefully consumes, such a high percentage of the world's resources. Thus, if in order to survive the environmental crisis, the United States were to establish the necessary ecologically sound, socially thrifty productive economy, it would have a profound impact on the availability of resources to the rest of the world. If this course is not followed, there seems little hope that the developing nations could gain a sufficient share of the world's resources to achieve living standards compatible with a stabilized population. Thus, the country must continually take a broader perspective when considering its goals.

Another dimension of perspective that must be changed involves time. As two members of the M.I.T. *Limits to Growth* study indicate, basically there is

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[35] K. William Kapp, *Social Costs of Business Enterprise,* (New York: Asia Publishing House, 1963).
[36] Seneca and Taussig, pp. 334–37.
[37] Commoner, p. 291.

only one ethical question in the impending global crisis: should we continue to let our actions be guided by a short-term horizon, or should we adopt a long-term perspective?[38] The leaders of the world's societies have a responsibility to adopt the goal of increasing the time horizon that forms the context within which all the activities of mankind are set.

Even if the leaders perspectives are changed, there still arises the ultimately critical question of the response of the people. Can we really persuade citizens of affluent societies that conservation, stability, fragality and a deep concern for the distant future must take priority over the personal indulgence for which they have been culturally prepared, particularly those who may be experiencing it for the first time. Robert Heibroner answers: "Not the least danger of the ecological crisis, as I see it, is that tens and hundreds of millions will shrug their shoulders at the prospects ahead ('what has posterity ever done for us?'), and that the increasingly visible approach of ecological Armageddon will bring not repentence but Saturnalia."[39]

As stated at the outset, this review of contemporary thoughts concerning economic growth and environmental quality is intended to stimulate thought and concern for issues that are seldom considered explicitly by economic growth models, most academic economists and most policy makers. It is hoped that the Subcommittee on Economic Growth will avail itself of its unique opportunity at the national level of government to take the broader and longer time perspective so necessary to not only the future course of American growth but also the development of the other countries of the world. What this ethically responsible perspective involves has well been summarized by Joseph Fisher:

If we look far ahead to the end of this century and beyond, it is clear that continued population and economic growth will ultimately overtax both the capacity of the environment to absorb pollutants and its capacity to provide raw materials including those that yield energy. Technology and general cleverness promise only to stave off the Malthusian day of reckoning, but they can buy us precious time to figure out better ways of handling things and to make appropriate adjustments in our whole style of living, the arrangements of our cities and towns, our aspirations, and our culture generally.[40]

Chairman BENTSEN. Gentlemen, I have some additional questions I would like to submit to you in writing if we may. I think that it has been educational and helpful and interesting. We are very appreciative of your testimony. Thank you very much.

The subcommittee is adjourned.

[Whereupon, at 11:20 a.m., the subcommittee adjourned, subject to the call of the Chair.]

[The following written questions and answers were subsequently supplied for the record:]

RESPONSE OF OTTO ECKSTEIN TO ADDITIONAL WRITTEN QUESTIONS POSED BY CHAIRMAN BENTSEN

Question 1. Both the Wharton and the DRI forecasts predict a continued decline in employment in the agricultural sector. The Wharton forecast predicts no increases in agricultural output through 1980. Are these forecasts realistic in light of the anticipated strong demand for agricultural products over the next several years? If the forecasts are realistic, given current policies, then should we not be initiating policies designed to step up agricultural productivity and agricultural output?

Agricultural employment appears to have been rising in recent months. Is it possible the economy has reached a turning point here which the models have failed to pick up?

Answer. DRI does project a continued decline in agricultural employment. We also project a large increase in output. It looks to us, without claiming to be a great source of independent expertise on the details of agriculture, that the productivity improvements that lie ahead are still great. For one thing, the in-

[38] Randers and Meadows, in Daly, p. 301.
[39] Heilbroner, in Johnson and Hardesty, eds., p. 45.
[40] Fisher, *Annual Report* 1973, p. 9.

crease in the supply of useable land under the changed agricultural policies will serve to raise output, even in the face of the high cost of fertilizer. We also see no end to the process of mechanization. Indeed, even at this time, a substantial percentage of all agriculural employment is still in the small, low-productivity, low-income farm sector which is disappearing.

Question 2. The DRI forecast shows no increase in real terms in residential construction spending from 1972–1980. The Wharton forecast shows an increase significantly below that of other major GNP components. Is this because changing demographic factors will reduce the need for new home construction, or is this forecast based on the assumption that, with a strong demand for business investment funds, housing will be at a disadvantage in tight credit markets? In general, do you expect the U.S. population to be more adequately housed in 1980 than at present, or less so? Would you recommend any new policies to make funds available for housing?

Answer. The lack of real growth in residential construction is primarily due to the above-trend results in 1972–73. During that period, long term capital was somewhat over abundant in the United States, and housing, as it always does, acted as a kind of sponge to absorb this capital. The volume of inflows into the thrift institutions was astronomical, as a relatively easy monetary policy combined with a high saving rate.

The fundamental demographic driving force of our econometric model for housing implies an average level of housing starts of about 2.25 million by 1980. This is based on the adult population to be housed, a gradual increase of real incomes, and relatively high mortgage interest rates. The availability of long-term capital looks to us to be limited in the years ahead because of the competing needs for capital. Higher transportation and land costs also serve to limit residential construction, although this is likely to express itself more in the smaller size of units and in the changed geographic patterns within the metropolitan areas.

Question 3.(a) The Wharton forecast shows the combined government surplus (Federal, State and local) reaching approximately $16 billion in 1980. The DRI forecast, which assumes a Federal tax cut in 1977, shows a combined surplus of $13 billion. Do you feel that such a surplus, under conditions of full employment, is a desirable way of increasing the supply of funds available for private investment? Or will the rising surplus over the period to 1980 create a problem of "fiscal drag" which should be corrected by tax cuts or expenditure increases?

(b) While the combined government expenditure total is similar in the two forecasts, the Wharton forecast for Federal purchases is substantially higher than DRI, and the forecast for State and local spending is correspondingly lower. What are the basic assumptions underlying the forecast for Federal purchases, particularly defense purchases? What accounts for the substantial difference between the two forecasts of Federal purchases?

Answer. A thirteen billion dollar surplus for all levels of government by 1980 is not a fairly large amount, particularly considering that a significant portion of it is simply the surpluses of the retirement funds of state and local governments. The surpluses of the operating budgets of all levels of government are substantially smaller. We do not attach any particular significance to this surplus, indeed take it as a first approximation to a rough budget balance. There is an inherent tendency in an economy with rapid inflation to produce budget surpluses because of the large response of revenues to rising prices. The progressive income tax and the corporate profits tax both have a very strong revenue response to inflation.

Between now and 1977 one tax cut will probably be necessary to offset the unintended revenue rise created by inflation. Thereafter, the question will have to be settled in terms of social choices. If the administration and the Congress decide to channel more resources through the public sector, all of the revenue growth could be spent. Let me add, however, that the basic civilian tasks of government are still done by the state and local governments, and this is where the larger part of the expenditure increases will be. Thus, unless there is a continuing shift of functions from the local to the Federal level, some further diversion of revenues in the opposite direction will have to occur, either through a growth of revenue sharing, or through more specific grants.

The DRI forecast for real Federal spending mainly derives from the military component, of course. We assume that there is virtually no real growth in the level of military spending. Since the peak of the Viet Nam war, military spending has fallen very substantially. The successes of our Secretary of State and the attitudes of the other major world powers do create the very real possibility that we will not need to divert increasing resources back to military spending. The credibility of our military establishment is also quite low at this time, and the public's memory on matters such as this is quite long.

On the question of the division of spending between the Federal and state and local level, DRI assumes that, in a general way, the present division of functions is preserved.

Question 4. The Wharton forecast shows quite low rates of productivity gain in the manufacturing sector, especially from 1977–1980, when the annual gain drops below 2 percent. The shift toward services may explain lower productivity growth for the economy as a whole, but what is the explanation for such low gains within the manufacturing sector?

What are the DRI estimates for productivity change in manufacturing?

Answer. DRI does not project a significant slowdown in productivity in manufacturing. Our reduction of the overall growth rate by a few tenths of a point, because of the need to divert capital to energy and pollution control, is concentrated in manufacturing of course. Thus, the DRI forecast implicitly projects manufacturing productivity to be lowered correspondingly. Acting as an offset, however, is a tremendous volume of investment in new plant capacity in the basic processing industries, capacity which will embody a later technology, and hence a lesser use of labor.

LONG-TERM ECONOMIC GROWTH

TUESDAY, JUNE 11, 1974

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:15 a.m., in room 1202, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senator Bentsen.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Richard F. Kaufman, general counsel; William A. Cox, Lucy A. Falcone, Jerry J. Jasinowski, L. Douglas Lee, Courtenay M. Slater, and Larry Yuspeh, professional staff members; Michael J. Runde, administrative assistant; Leslie J. Bander, minority economist; George D. Krumbhaar, Jr., minority counsel; and Walter B. Laessig, minority counsel.

OPENING STATEMENT OF CHAIRMAN BENTSEN

Chairman BENTSEN. The hearing will come to order.

We are pleased to have you before us, Mr. Ash.

This morning it is my privilege to call to order the second session of the Joint Economic Committee's Subcommittee on Economic Growth.

I am delighted to welcome our first witness in this series, Roy Ash, the Director of the Office of Management and Budget, to give us his assessment of the outlook for American economic growth.

I urged that the examination and improvement of the Government's role in economic development be a chief priority of this subcommittee.

The high standard of living we enjoy in this country has been built by hard work and initiative and it must be safeguarded and complemented by a high standard of economic leadership.

It is distressing that in recent years Government has often failed to provide genuine economic leadership. The American people are rightfully concerned about the health of our free enterprise system and the adverse impact of mismanaged Government involvement in the economy.

It is our purpose here to consider the adequacy of existing information on the U.S. economy and to evaluate the ability of the Government to put that information to use efficiently and effectively in meeting the economic challenges we face together as a nation.

Since meaningful economic forward planning can be undertaken only after we have made explicit what our long-term economic goals are, part of our task is to help in establishing those goals.

The subcommittee hopes to offer constructive policy options to insure greater continuity, coordination, and responsiveness in systematic economic policymaking. The improvement of our institutional machinery can be an important first step to better influence the growth of our economy in the years ahead.

The President recently told the American people to work together to solve our economic problems. I agree with the President wholeheartedly. This subcommittee is part of that effort.

But those who are asked to support the economic decisions of this, or any, administration must understand the reasons behind those decisions, what the alternatives were, how the decisions were made, and who benefits by them.

Since the OMB plays a major role in formulating Federal fiscal policy, I am eager to hear from Mr. Ash as to what is being done by the administration to enhance our long-range economic capabilities.

We are pleased to have you before us, Mr. Ash.

STATEMENT OF HON. ROY L. ASH, DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

Mr. Ash. Thank you very much, Mr. Chairman. I have a statement that is about 15 minutes long. I think it would be very useful if I could read it fully.

Chairman Bentsen. By all means.

Mr. Ash. Mr. Chairman, I appreciate your invitation to discuss the long-term prospects for the United States economy and the role that the Federal Government might play in improving those prospects.

This is a particularly useful time to discuss the longer run development of the economy. In the past 2 years, the U.S. economy has been buffeted by major changes in the economic environment which may never again recur: The long overdue adjustment by this country to an unrealistic exchange rate, weather conditions in many parts of the world which resulted in crop shortages, the war in the Middle East, the subsequent embargo on oil shipments to the United States, and the decision by Arab oil-producing states to increase prices. These factors contributed to a major economic disruption—most visible in the 1½ percent decline in real output in the first quarter of 1974 and in sharply higher inflation rates—from which the economy is only just now beginning to escape. Events of this sort inevitably lead to ex post facto calls to keep the barn doors closed. The question is asked whether with better foresight, better planning, or different institutions, we might have avoided these disruptions. This question deserves serious study.

I am not overly sanguine about the prospects for making very large improvements overnight, either in our forecasting abilities or in our abilities to avoid the effects of shocks to the economy. As much as we would like to have perfect foresight, even the most advanced modern techniques are not sufficient to avoid the consequences of essentially unpredictable events. However, I support continued efforts to improve our forecasting capabilities to the extent that this is possible.

Any major business in the United States or elsewhere tries to look ahead and plan its actions accordingly. At the same time, much of what will develop will not have been foreseen and is beyond the control of those who do the planning. While the Federal Government has greater opportunity to control the economic environment than does private business, it, too, is limited. It is neither possible nor desirable to attempt to control the development of the economy completely. Market economies place the desires of the people above those of central planners, however well intended. Also, market economies reflect the preferences of the people better than planned economic systems. Moreover, the state of the planners' art is not sufficiently advanced to give us much encouragement about replacing a market economy by one run by government decree. Given this perspective, it remains essential for us to look ahead to anticipate problems as best we can in the setting of the decentralized market economy in which we now operate.

Toward this end this administration introduced 5-year projections into the budget. As far back as 1971, we proposed a major reorganization of the executive branch which would enhance our ability to anticipate future developments. And we have made a number of proposals which I believe would enhance the growth potential of the economy. This is not the place to make the case for those proposals which are still pending in Congress. I mention them only to indicate my agreement with the proposition that we can do more to improve our ability to plan for the future and to reduce impediments to the growth of our economy. We must use the available tools to increase our knowledge of the future. We must attempt to remove more of the limitations we have imposed on the efficient operation of the economy. And we must avoid placing any fetters were now there are none.

I would like to address a few remarks to the question of why be concerned with growth at all. We recognize that gross national product does not include some goods, including leisure time, which we may value to a greater extent than some of the items which are included. And more importantly, the concept of gross national product does not exclude some costs which must be borne somewhere in the economy. In the last decade we have been made aware that air and water pollution are often the byproducts of industrial and municipal activities.

We should also recognize that it may be desirable to trade off a higher rate of economic growth against greater certainty that the economy will not be disrupted in the way it was this past fall and winter. Project Independence is seeking ways to achieve this security at a minimum cost in terms of growth potential, but a somewhat smaller growth potential is inevitable if we are to achieve the independence we seek.

However, economic growth plays a valuable role in facilitating the attainment of the objectives of the society in which we live. Take the problem of poverty for example. With rapid economic growth it is far easier to mitigate poverty than if there were no dividend from economic growth. If to make someone better off we had to make someone else worse off, I believe that social progress would come much more slowly.

With these ideas in mind, let me go on to consider OMB's procedures for taking account of long-term economic prospects. The biggest challenge we face is to link our current decisions to future events about which our knowledge is, at best, imperfect. At OMB we make this linkage by building a long-term point of view into our annual decisionmaking cycle. Our approach does not involve the use of a single planning model of the economy. Instead we draw upon work done inside OMB, elsewhere in the Government, and in the private sector. We have access to and use the output of virtually every public and private forecaster of economic events in both the short and long run. I think it is very important to use a pluralistic approach because no single planning model could successfully incorporate all of the many insights into the functioning of the economy which we have available to us.

We are deeply concerned over the effects of the budget on long-run growth. Since the long run grows out of the short run, we see our task as beginning with current problems and merging them into longer run considerations. The clearest example of this is OMB's involvement, jointly with the Treasury and the Council of Economic Advisers, in fiscal policy. High employment and price stability will go a long way toward insuring that the Nation enjoys maximum economic growth.

Regarding this goal, we are concerned about the flexibility we have for using changes in expenditures and taxes to stabilize the economy. We have discussed the increasing uncontrollability of the budget a number of times in the past before this and other committees of the Congress. Also we have expressed our interest in obtaining more flexibility for changes in both expenditures and taxes. I believe this is important if, in the long run, we are to achieve the objectives of full employment, economic growth, and price stability.

Another example of our interest in linking short-term decisions to longer run considerations is the welfare reform proposal in the President's budget. OMB has a strong interest in encouraging the development of a welfare system which is genuinely compassionate yet does not detract from the functioning of the economy. Similarly, on a number of fronts we have been encouraging the development of new federalism concepts to decentralize the decisionmaking process in the United States. This is very much a long-run effort although it takes place in the context of day-to-day decisions.

We have recently led a cooperative effort with a number of Federal agencies in examining the likelihood of shortages of raw materials in the years to come. These shortages could result either because of cartel actions on the part of foreign suppliers or because available sources are dwindling. Tentative conclusions suggest that materials shortages will be less of a problem than first thought. However, my point in bringing this up is not to discuss possible conclusions but rather to illustrate the concept of OMB as a catalyst on problems which deal with possible obstacles to long-run economic growth.

More recently we have become concerned over the immense requirements for capital to finance the large investments necessary to support a growing economy in the coming decade. A study of this situation is being led by the Council of Economic Advisers. We have not yet reached any conclusions, but I doubt that the economy will require massive assistance from the Federal Government if its vital energies are not sapped by unwise Government policies.

The long-run forecast of the U.S. economy, which we use for planning purposes in OMB, assumes that the economy has a rate of growth sufficient to move toward fuller employment of labor resources in the near term and then a rate of real growth in line with the growth of potential in the longer term. We assume that policies which will produce this result will be implemented by this and subsequent administrations.

During the next decade the rate of growth of potential output will decline from its current 4 percent level to about 3.5 percent per annum. The rate of growth of potential is determined by such basic factors as the growth rates of the population and the labor force, the increase in the capital stock, and the rate of technological change, which greatly influences the productivity of the factors of production. Let me review each of the factors briefly.

The bulge in population resulting from the postwar baby boom has recently permitted an extremely rapid growth in the labor force. In subsequent years there will be a smaller number of potential entrants into the labor force and thus a somewhat smaller rate of growth of potential. After 1980 this phenomenon will be dramatically visible. There may be offsets in the rising labor force participation rate of women, but a full offset is not likely.

The capital stock is expected to grow in line with the growth of potential after the next few years, during which an even faster growth rate is likely. By 1980 current capacity limitations will have been largely eliminated. Most of the increase in the share of output devoted to investment will be in the nonresidential categories.

The investment sector is one in which government policies have especially large effects. Government policies affect incentives to save and invest in new capital, and they affect the composition of new capital investment as well. We must carefully evaluate the high levels of investment indicated by current government regulations and other policies. We should continue to review policies that require very large investments for one objective, such as pollution abatement, and thus reduce the capability of the economy to raise the average American's consumption of food, clothing, and shelter.

Productivity improvements are the remaining determinant of the rate of growth of potential output. I see no reason why we should not continue to have as rapid growth in technology as we have experienced in the past. There has been no slackening in the search for new knowledge which is ultimately converted into improved technology. Moreover, the high rates of capital investment, which have been forecast for the short run, will speed up the process by which new technology is transformed from the drawing boards into production processes.

Other factors which have accounted for substantial productivity growth in the recent past—such as higher levels of educational attainment in the labor force—will also continue for the foreseeable future.

In short, I see no substantial barrier to the continued growth of the economy in line with the rate of growth of potential. The principal threat to this forecast is the tendency to overregulate the market economy We have seen that rigid government policies have been partly to blame for the economic disruptions we have suffered in the past 2 years. An outdated policy of fixed exchange rates permitted the value of the dollar to get out of alinement. The export sectors of the economy were forced to operate in an increasingly difficult competitive environment. Price controls had similar effects: When cost-push pressures were greatest, controls were fairly effective in keeping price rises down, but overtime, serious economic distortions developed, investment incentives were undermined and, when controls were lifted, there was a bulge of price increases in order to correct the distortions. Yet, almost daily, there are new proposals to eliminate some alleged abuse by imposing more regulations on the economy. Here, I think, lies the major danger to the continued growth of our economy. There are other economic problems—unacceptably high rates of inflation being the most severe—which will confront us. But I do not believe that achieving economic growth will be a serious problem in coming years.

The primary focus of long-range projections by OMB has been upon sketching the implications of current budgetary policies over the next 5 years. This administration placed before the Congress 5-year projections in every budget it has submitted since the budget for fiscal year 1971.

The budgets for fiscal years 1972 and 1973 projected 5-year trends in the allocation of all the Nation's economic resources. These projections included State and local governments as well as the private sector, taking into account the Federal budget and the impact of Federal policies. These projections produced a rough picture of the allocation of resources among transportation, health, education, investment, and so on.

In the 1974 and 1975 budgets, efforts were centered on the presentation of detailed previews of the budget for the year following the budget year. The objective was to stimulate some debate over budgetary priorities a year before the formal presentation of the presidential budget.

In addition to our 5-year budget projections, we are attempting at OMB to consider a number of longer term factors in the development of budget and economic policies. This is not as simple a task as it might seem on the surface. First of all, we operate in the context of a democracy where public officials are facing the electorate every 2 years, every 4 years, or every 6 years. This inevitably tends to focus attention on immediate concerns with less priority given to longer range, but perhaps more important, ones. Second, we are under constant pressure to concentrate on immediate problems or crises. This, too, tends to detract from effective long-range analysis.

Nevertheless, we are pushing ahead. One approach which may produce fruitful results is our attempt to consider more systematically alternative policy instruments—spending, tax expenditures, regulations—when devising solutions to problems. We are also going to examine the planning assumptions used by Federal agencies to insure that reasonable and consistent long-range economic assumptions are used. We want our long-range analysis to be practical and relevant.

It should be based on the most reliable available data. Our analysis should not only indicate areas where government can play a useful role but also where market forces will be most effective in achieving our objectives.

Finally, let me mention a vitally important piece of legislation which will shortly be passed and sent to the President. The Budget Reform Act represents an important opportunity for the executive and legislative branches to work together in developing the kinds of policies which will focus attention on long-run problems. The act calls on both the executive and legislative branches of the Government to concentrate more on the future implications of current actions. We welcome this cooperative effort and we see it as a major opportunity to bring long-run budget trends under better and more rational management.

Thank you, Mr. Chairman.

Chairman BENTSEN. Thank you very much, Mr. Ash.

In listening to your testimony it appears to be rather generalized, and it does not give us enough in the way of specific recommendations that I think we should have in trying to work together to help our country in a day when we have double-digit inflation and double-digit interest rates.

You say the administration has made many proposals to enhance the real potential of the economy, but you have not dealt in any specifics. I would like to know specifically what proposals you are referring to.

Mr. ASH. Let me first discuss one area that is so much in the fore front now; namely, the subject of energy. I am sure we all know that if we are to have economic growth and control inflation, we must increase supply relative to demand. We have put before the Congress a package of nearly 20 energy proposals, a number of which deal with increasing supplies of energy resources.

Chairman BENTSEN. Let me give you a sample on that of the administration's positions which gives me some concern. Secretary Simon reiterated that statement last week, and George Shultz made that statement last year. That was that only tangible drilling costs, expenses for drilling, could be charged off against income from oil production. And yet that precludes about 80 percent of the financing that the independent driller gets in this country if you use that type of approach. In the first quarter of this year the small independent driller, as opposed to the major companies, drilled approximately 90 percent of the exploratory wells in this country. I will give you an example. In the State of Texas the independent small producer drilled 1,334 exploratory wells in the first quarter this year. The major companies only drilled 141.

This particular provision does not bother the majors, but it does hit the independents. And yet, the independent is the one that finds most of the new reserves in this country.

And then I look at a situation like the Export-Import Bank, which is helping finance the exportation of drilling equipment and drilling pipe with low-cost loans. They have financed over $460 million worth of drilling equipment on 7 percent loans with over $200 million of their own loans. I do not see how this can help, when we have a shortage of drilling pipe in this country, when we are trying to encourage drilling here to build up the domestic reserves so we will not be subject to the exploitation of the Middle East countries, so we will not be in a position where we have our foreign policy held hostage to it. The Arabs have told us quite candidly that they will turn those valves off again when it serves their political objectives.

I do not understand that kind of a policy. I wonder what the administration is talking about doing there.

Mr. Ash. In the matter of legislation that deals with domestic oil production, one of the great difficulties is to develop a package of legislation that would contribute substantially to increasing supplies. I realize that some aspects of the whole set of legislative proposals now being considered would seem to be counterprodutive if considered in isolation. I would suggest that the proposed legislation be viewed in terms of the overall effect of the whole package on oil production. While I would not take issue with the points that you have made about particular aspects of it, I think the whole package taken together would increase domestic production. Of course, we in the administration would encourage any information, discussion, or debate that would go in the direction of increasing supplies because that is certainly our goal.

Chairman Bentsen. Mr. Ash, I propose—and, of course, the major companies strongly resist my proposal—to change the offshore leasing programs so that a very large part of the increase in product is given to the Federal Government as compared to what is now done. And I think that means it will diminish the bonus payment, so a lot of small independents will get out there and compete and bring it onstream much faster.

Mr. Ash. Mr. Chairman, I think that question is a very important one. At this time OMB, working with the Department of the Interior, the Department of the Treasury, and others in the Government, is attempting to reformulate the OCS leasing policy. As you may know, we are planning to conduct an experiment in making offerings that will change the basis from the present bonus bidding to one that will give a bigger portion of the payment of royalties to the Government. The first offering on this experimental basis will be made in September. I certainly believe that we ought to find ways to get more of that offshore oil in front of us faster.

Now, there is a trade-off that is very important and very difficult that is critical to the analysis now being made; namely, the trade-off between very quick access to oil and the price that the Government gets for its ownership of that oil. However, since the May bidding brought in somewhat less revenue than we had expected, there is some question as to whether bonus bidding does maximize Government revenue.

Chairman Bentsen. There is no question in my mind that that is correct. And we do not know how expensive this oil is going to become over future generations. But if we have more royalties going to the Federal Government, we have protected ourselves and we have protected the taxpayer. And I think we will bring it on stream a great deal faster.

Let me move into another area, if I may.

You talked about food supplies. And that concerns all of us, because of the substantial part of inflation last year that is attributable to the increase in cost of commodities, food and oil. I am concerned with a policy that I have seen taking place in this administration and previous administrations concerning the Department of Agriculture's budget. Back in 1955, 10.7 percent of the Agriculture budget was spent on research and development, now it is down to about 2.5. Under this administration we have seen the number of employees in research and development in agriculture cut by 10 percent since 1970. I think that is counterproductive. Some of the great breakthroughs in research and development in years past have been in agriculture. And if you are going to have low-cost food, then you have to have plentiful supplies. We saw in a period of 15 years that corn yields have doubled because of R. & D. We saw the production of milk from dairy cows increased by 50 percent by a study of genetics. It seems to me that we ought to be spending substantially more.

I see that in your 1974 budget you have gone above 1973, but just about enough to keep up with the rate of inflation. And it seems to me that we have to go beyond that in order to have more real breakthroughs on food production so that we can help the consumer in this country fight inflation.

Mr. ASH. I certainly agree with you, Mr. Chairman. The agricultural industry is one of the great assets of this country, not only for its domestic value, but also for its international value. We do have a comparative advantage relative to virtually every country in the world, and it just makes good sense to exploit this advantage to the maximum extent possible.

Chairman BENTSEN. But how do you justify cutting the number of employees, then, in research and development in agriculture by 10 percent since 1970?

Mr. ASH. The data that I have from the 1975 budget show that the amount spent for research and development by the Department of Agriculture has increased from $349 million in 1973 to $389 million in 1974, and we have budgeted $416 million in 1975. The total amount spent for research and development has been moving steadily upward, at least over the past 2 years.

Chairman BENTSEN. I think you will find that your budget is about even with the one in 1960 when looked at in constant dollars.

Mr. ASH. That may well be, Mr. Chairman. I do not think there is one other point that should be made here. A few decades ago the agricultural industry was composed of many small firms—and not even firms, but small individual farmers—generally unable, both in terms of resources and technical capabilities, to do research and development, so there was a very important role for the Government to play in research and development As the size of production units becomes larger and larger, private agriculture is undertaking a bigger proportion of research and development in that industry so that even though the Government's proportion may be approximately flat in constant dollars, I am sure that if we were to add in the private sector, we would find a considerable increase in total expenditures on research and development.

Chairman BENTSEN. Mr. Ash, I am not as optimistic on what large corporations have done in research and development on food production. If you are talking about the major corporations that have gone into farming, most of them have done a very poor job of it, and a lot of them are trying to get out of it. We can go down the list and name some of them that are selling off their farm holdings. With the kind of profit deficiencies and the way they operate, normally a board of directors does not commit much to research and development.

Mr. ASH. There is a lot of research and development in areas related to agriculture such as harvesting machinery and equipment and fertilizer. These related industries also increase the productivity of our agricultural industry.

Chairman BENTSEN. Let's talk about increased productivity that is a result of—education. We are becoming one of the major service-oriented societies in this country, and one of the hardest areas to increase productivity is in the service industries. This administration has been curtailing the expenditure in vocational education. Yet you have a great number of people among the unemployed who are capable of doing a job if they are trained for it, if they are educated for it.

I went down and visited the Texas State Technological Institute, which has Government financing involved in it. And there I found that 93 percent of those graduates had come from families that had been receiving welfare. And they were receiving an average of six job offers apiece. And time and time again I talked to graduates who said that they already had their job offers waiting for them. And why shouldn't this administration be supporting a substantial increase in vocational education expenditures?

Mr. ASH. First, Mr. Chairman, I absolutely agree with the basic point that you are making, that vocational training should play a much greater role in the educational process in this country. Having myself been a trustee of one private institution that engaged in vocational training along with its secondary education curriculum. I am absolutely convinced that there is a tremendous need and opportunity to increase vocational training. I believe that vocational training has to be built into the basic structure of our educational system rather than stand alongside in separate institutions with separate activities. If you take into account the proposal included in our 1975 budget for consolidated educational grants to supplant some of the heretofore categorical programs in the elementary, secondary, and vocational schools, the totals are up. But our basic rule is that the elementary, secondary, and vocational systems should not stand apart, and that the secondary system itself should include strong vocational content. Therefore we, would like to see Federal funds used to strengthen the secondary and vocational system broadly across the country rather than to support individual vocational activities.

Chairman BENTSEN. Mr. Ash, we lose the number in there when we lump it altogether. The number I have for vocational education in the Federal program by function shows vocational education, 1973, actual, \$624 million; 1974, \$596 million; and 1975 estimate, \$334 million; the recommended budget authority for 1975, \$63 million.

Mr. ASH. But then you will also notice, Mr. Chairman, that in 1975 we proposed a consolidated educational grant program of \$1.91 billion to be spent across a wide range of programs, including vocational education. And the subtotal of that consolidated educational grant and the individual programs, increased from $6.863 billion to $7.578 billion, in 1 year. So there was a farily large increase.

Chairman BENTSEN. Again, we have trouble following through when it is phrased that way. And we get into much broader categories, where we feel that the specificity has substantially declined. I will look more closely at your numbers and study them more fully. But it is a matter of grave concern to me, when you are trying to increase productivity of all the people in this country. I believe there are a lot of people on the lower rung of the economic ladder that are capable of earning a lot more if properly trained.

I look at the unemployed percentage for blacks, and it is much higher than it is among whites, and I think that with education we could lower that figure. I think they could become a more productive part of the community if they have the skills and opportunities, and they could raise their standard of living very substantially.

Mr. ASH. I agree with that, Mr. Chairman. And having been in the private sector in earlier years, I have seen that there is more activity in vocational training in the private sector than the public sector. But in the public sector, our basic view is that instead of narrow categorical programs, which in many cases are not as effective as they might be, the Federal Government should move toward decentralization in program-making. We should provide the resources which should be put in the hands of those closer to the problems, so that they can apply them, with greater effectiveness than could be achieved by the Federal Government.

Chairman BENTSEN. Let us look at the question you raised on capital needs because this is a matter of great concern to me. You say that we must not have any Government policies that stifle capital functions, and I certainly agree. But I would like to know what particular Government policies you have to help in that regard. I listened to the economists from General Electric who projected that U.S. business would have to raise $3½ trillion over the next 12 years. That figure is what was presented before this committee. It is in current prices, $3½ trillion, as compared to $1½ trillion that was invested in 1962 to 1973. A number of our witnesses made reference to this potential obstacle in the way of economic growth.

In your October long-range outlook you project that investment will likely raise faster than consumption to correct for the shortage of industrial capacity in the seventies. You also refer to some of the nonproductive environmental quality investment, for example, which does not add to new capacity but takes a lot of capital.

What I want to know is specifically what are you proposing in that regard for capital formation for increased saving, and what you are talking insofar as the tax policy? Are you proposing a tax cut for consumers, or are you talking about some tax reforms, or are you talking about some kind of tax incentive for business? Specifically, what does the administration have in mind?

Mr. ASH. Mr. Chairman, as my statement indicated, a comprehensive analysis of the problem is even now underway in the administration but is not yet finished. I would not disagree with the figures that you have cited for the capital needs of the economy. But the question of what particular things the Federal Government could and should do is still open. We have not reached any final conclusions, but I can suggest some possibilities.

First, we believe—and I am sure that most people believe—that the private sector, rather than the Government, should be the source of financing private sector needs.

Chairman BENTSEN. I prefer that, too. But let us look at the realities of the situation today. You tell me what we ought to be doing. Let us take steel, for example, where you are short on capacity, and the price of steel is escalating substantially. How are you going to raise capital when you have a debt equity rate that is very high; when you have a price multiple of only five times earnings? That means if you go to the equity market you have to find something that you can invest in that is going to give you a 40 percent return before taxes, and you are not going to find that in the steel industry. So what are they going to do?

Mr. ASH. That is the definition of the problem as we tentatively see it. The amount of retained after-tax earnings plus depreciation in the private sector is not adequate to replace plant, to increase productivity, to provide the necessary tools for 2 million people a year entering the labor force, without continuing to borrow more and more money relative to the net worth. That trend—if we can validate with data that that is the trend, but it certainly seems to be—has to be stopped and turned. Now, how can it be stopped and turned? If we adopt the premise that the capital for private use should come from within the private sector rather than from the Government—and I think that is the premise that we must adopt—then there are two places where that capital is going to come from. It is going to come from increased retained before-tax earnings or from tax reduction. This will require either a wider spread between cost and prices or a smaller effective tax on earnings that are generated within an industry. It is very hard to look outside these two possibilities and find some other source for that capital. It really must come from those two sources if we expect to have a private economy with private capital growing at the rate that the country must continue to grow.

Now I am sure that under wage and price controls we in many cases discouraged the investment of capital by limiting the spread between cost and price. Right now with our present inflation and with the multiples as low as they are, the private sector will not go into the market and add to its equity. We must get our inflation rates down so that multiples will go up to encourage the sale of equity securities in the market.

Chairman BENTSEN. But how do you do this when you are short on capacity? Say, you are short on steel, you are short on paper—and that obviously escalates the price. And you talk about leaving your options open. But the problems are very real, and they are crying for solutions. And I am asking again what this administration is proposing?

Mr. ASH. I wish there were a simple single answer. There are many partial answers that together will be the answer. The most important thing now is to reduce inflation rates.

Chairman BENTSEN. But if you do not increase production in these industries where you are in short supply, how do you get inflation down?

Mr. ASH. Well, there are many tools to reduce inflation. I agree that one of them is to increase the supply relative to demand. But it is not the only tool. We also have fiscal tools and monetary tools, and we are applying those to get inflation down.

Returning to one of your earlier questions concerning what we have before the Congress. We also have a trade bill. The basic purpose of international trade is to improve the economies of every country, including our own, contributing to a reduction of inflation in the process. At home, the wage and price settlements that will take place this year will affect the rate of inflation that will occur in future years. I would hope that the kind of discussions we are having here in this committee will make as many people as possible aware of the implications of these settlements so that we will have the responsible behavior which will help control inflation.

So there are many fronts that we have to work on, supply and demand, monetary and fiscal policy, and wages and prices. And we must work simultaneously on all of these fronts.

Chairman BENTSEN. We have a number of economists that testified before us, Mr. Ash, and they said that we could look to continued high inflation for the next 10 years, as a result of higher prices for raw materials, for energy, for higher wage costs. They were almost unanimous in their projection that we would be looking at something in the are of 5 to 6 percent compounded for the next 10 years. Do you agree with that?

Mr. ASH. It is very possible. The factors in the world economy could bring that result. And I am sure that most of us would like to have a lesser rate. But the industrial countries of the world have decided as a matter of conscious policy, political, social, and economic policy, to seek a lower unemployment rate than we have had in earlier years. The net result of this and other political and social forces undoubtedly will give rise to higher inflation than we have had in the past.

Chairman BENTSEN. If that is the case, in spite of other things that might be done to try to alleviate it, I have been asking you for specific proposals to curb that inflation. And I have only had general answers, that you are keeping your options open. But again the problems are very real and desperately need solutions. And we want consideration of them here.

On the other side of the coin, are there any ideas being considered for helping live with what apparently is an inevitable inflation, from the way you phrase it?

Mr. ASH. I am not sure that my answers have been general. Monetary policy is not generalized. It is very particular, very specific, and something that is felt across this whole country. The constraints that we are attempting to put on the expenditure side of the Federal Government were very specific last year, so specific that I became a defendant in at least a hundred lawsuits for having been too stringent in attempting to use fiscal policy to control inflation. And I lost most of those lawsuits. But these efforts were very specific.

Let me go to the last part of your question concerning what we are doing to make the consequences of inflation more bearable.

Chairman BENTSEN. Are you giving any thought at all as to some sort of an indexation?

Mr. ASH. That is what I was about to explore. We already have in this country considerable indexing that not many people realize. Five million workers, 29 million social security recipients, 2 million retired military and Federal Civil Service employees and their survivors, and 600,000 postal workers have their payments indexed to the CPI. Five million Federal military and civilian employees are indirectly indexed through the comparability adjustment system. In addition, 13 million food stamp recipients and 24 million recipients of subsidies to the school lunch program are indexed to the food component of the CPI. Thus, a large number of people in our society today already have their incomes indexed including many of the groups which have the greatest need to be protected from inflation.

But indexing cuts both ways. Indexing can also be a contributor to inflation. If you look at the indexing procedure for Federal Government retirement pay, you will find that it has produced inflation adjustments bigger than the increases in the consumer price index.

Chairman BENTSEN. How about a savings bond, would you consider at all the indexing of a savings bond?

Mr. ASH. I suppose it is something to be considered. In general I would say that we already are some way down the road in indexing. But rather than saying, let us index everything like Brazil, we should take these steps one at a time and consider each case on its own merits.

Chairman BENTSEN. My concern is that if you went to an index savings bond, what would happen to the thrift institutions of our country?

Mr. ASH. There would be a problem of loss of deposit. But on the other side, there is some consideration being given to indexing mortgages through variable interest rates or variable maturities which could be a way to permit savings institutions to compete for funds more effectively.

Chairman BENTSEN. Some of them already have a variable interest rate built into their loans.

Mr. ASH. And one thing that has been considered—and up to this stage we do not see our way to an effective answer—is a mortgage that would have a constant payment but a maturity varying with changing interest rates. It turns out that this is easier said than done. To construct such a mortgage would sometimes result in a principal balance going up under some circumstances and not going down at all. The consolation is that the value of the asset is going up by the very same factors that caused the principal of the mortgage to go up.

Our proposed reform of financial institutions deals with this matter of savings institutions and real estate mortgages, and suggests ways by which mortgage money could be made more broadly available to those who are borrowing it. And this may be a partial solution to some of our problems. If we could find a single answer that would solve all of our economic problems, that would be great. But rather we must march across a broad front pushing each good idea as far and as fast as we can so that we will be able to have a favorable impact on the economy.

Chairman BENTSEN. Has the administration given consideration to the possibility, because of the aberrations of the weather, of going back to some kind of stockpiling to protect us against situations where we might have shortages of food in this country?

Mr. Ash. Yes, sir. While it is very difficult to forecast weather very far ahead, and certainly even more difficult to control it, we are moving in two areas. We have reached an agreement with the Soviet Union and some other countries to exchange information about worldwide crop supplies. As to stockpiling, we have had discussions with other countries about mutual stockpiling and we hope some agreements will come out of these discussions. There are some basic differences between what we think we should do in this country and what other countries will do. The Soviet Union, being a state economy, would undoubtedly have government-owned stockpiles. I believe that in this country there would be greater advantages to privately owned stockpiles, providing those stockpiles, in the aggregate, met our national needs. We are not exactly sure what mechanism should connect the Federal Government to the potential private owners of those stockpiles. But we think we should certainly attempt to work out means for maintaining private stockpiles before we have the Federal Government in the business of maintaining massive stockpiles of products, particularly of food.

Chairman Bentsen. Let us look down the road and try to get a picture of how the U.S. economy may grow in the next several years.

You referred to business trying to plan ahead. And certainly a nation has to try to plan ahead. The subcommittee has already begun to hold hearings with private experts on long-range economic prospects for output, inflation, unemployment, per capita income, and other major aspects of the economy. I realize that the Office of Management and Budget has attempted to do this.

I have in front of me the OMB October 1973 long-run outlook. I believe it is a forecast you have used.[1] I would like to question you on several aspects of that outlook.

I will ask you first if you agree with the various conclusions of the outlook?

And second, what new policies are you developing to meet upcoming economic problems?

On economic growth, due primarily to demographic changes, the OMB analysis shows a significant decline in the rate of real economic growth in the late seventies and early eighties.

I think the Department of Labor also projects a real drop in GNP from about a 4-percent annual increase for the period 1968 to 1980 to only a 3.2-percent increase after 1980.

The OMB study says that this decline in real economic growth is apt to generate "far more social and political conflict."

Do you agree with this assessment that we can expect real economic growth to decline in future years unless present policies are changed? And what policies are you changing to meet that projected decline in economic growth?

Mr. Ash. Mr. Chairman, the simulation that was included in our October outlook was a projection based on the key demographic trends in the economy. As I indicated in my statement, with the lower birthrate and smaller increases in our productive work force, extropolations from current data indicate that real economic growth will decline from 4 percent per year to about 3½ percent per year. This would not mean a lesser rate of increase per worker as we believe that

[1] See forecast, beginning on p. 259.

productivity will continue to go up. But that will have fewer people in the work force so we expect a lesser rate of real economic growth.

Chairman BENTSEN. It sounds pretty serious to me when you say it is apt to generate far more social and political conflict. That is a direct quotation I have out of the study.

Mr. ASH. It may be out of an October 1973 staff study. I personally have no expectation of that kind.

Chairman BENTSEN. Then you do not endorse what is in the study?

Mr ASH. I am sure it is not in our most recent outlook completed last month.

Chairman BENTSEN. This is a direct quotation?

Mr. ASH. We will see if we can find it.

Chairman BENTSEN. In the October outlook?

Mr. ASH. We can find it. But I do not share that view. In fact, quite the contrary. My basic view is that zero economic growth will create social problems. As I said in my statement, we have many social problems in this country and around the world, and the best way to solve them is to apply the resources from our incremental growth each year rather than transfer resources from one person to another. And we must have continued growth in order to have this annual increment.

Chairman BENTSEN. You say if it is zero growth, then you have really got problems, and that part you agree with.

Mr. ASH. We do not expect anything like zero growth. I am not talking about population growth, I am talking about economic growth. We must continue to have economic growth so that we will have a dividend to divide up each year.

Chairman BENTSEN. But if it is a lesser economic growth, if it approaches zero economic growth, is that not a serious problem?

Mr. ASH. It is a problem only if you mean zero capital growth. Aggregate growth rates are not the same as per capita growth rates. With slower population growth, our economy can grow at 3½ percent per year and still have a faster per capita growth rate than with faster population growth and a 4-percent growth rate. The per capita growth rate is the relevant statistic with which to analyze the social issues that are continually in front of us. When we project the basic factors that underlie our economy, we foresee a geometrically growing economy over the years ahead which will provide us with that increment of output that will allow us to deal with our present problems as well as those which will confront us in the future.

Chairman BENTSEN. Again, on employment, you said—or at least your October report says—that although the labor force is projected to grow at a lower rate in future years, the unemployment rate will continue to stay higher than 5 percent during the seventies.

The study also states that the declining world birthrates and early retirement by male workers will significantly reduce the available supply of manpower. What is your assessment of the availability of manpower, and whether we will be able to reduce unemployment below 5 percent in the seventies?

Mr. ASH. There are a number of questions here. Let me answer them separately.

First, you are quoting from a staff study which is not an administration position. It is a study prepared for those in the administration——

Chairman BENTSEN. Is it an OMB position?

Mr. ASH. It is a staff position, it is not my position as Director of OMB. It is a study which has been prepared for me to consider along with other information.

Chairman BENTSEN. Do you agree with this position or not?

Mr. ASH. Let me point out that which I agree with and that which I do not. If we can go directly to the unemployment rate, we have to realize that our yardstick is changing. Unless we recognize that our yardstick is changing, our measure with that yardstick might be misleading. And the yardstick is changing because of a substantial change in the composition of our work force. We have many more teenagers and many more women in the labor force than we had when a 4 percent unemployment rate was established as a goal of national policy. A 4-percent unemployment rate then is now equivalent to some higher number if the composition remained the same. You may want to ask Mr. Stein about the analysis in the Economic Report this year of the meaning of these substantial changes in the composition of the work force. I think we need to make allowances for these changes in comparing different periods.

Just as an example, a 4-percent unemployment rate in 1960 might have the same meaning as a 5-percent rate in 1980. So if our yardstick has grown 25 percent, we ought to take that into account when we look at unemployment figures.

Chairman BENTSEN. One of the things that is of major concern to this Nation, of course, is our dependence on the importation of raw materials. Of the 13 basic raw materials required by a modern economy like the United States, in 1970 we had to import almost 6 of those basic materials. The Department of the Interior projects that by 1985 the United States will depend primarily on imports of supplies of 9 of these 13 basic raw materials. And that includes the principal ones like iron and tin and bauxite.

How serious do you regard this question of shortage of minerals? When will your study of this problem be completed, and what strategy is the administration developing in this problem area?

Mr. ASH. We saw the potential seriousness of these commodity problems last fall at the time of the oil shortage, which suggested that we should look at other commodities. We have done so. That study is now nearing completion, and should be completed in just a few weeks. At this time I can draw the tentative conclusion that the problem is fortunately nor nearly as serious as we had feared 6 months ago. It appears that there are very few commodities that will require special Government attention.

My general conclusion is that we are considerably better off than we had thought last fall, and we believe that we will have a manageable situation in all commodities. Compared with the rest of the world we are exceedingly fortunate in this country in having virtually everything we need, or at least adequate substitutes. But we do expect to identify a few commodities which will require special policies.

Chairman BENTSEN. Is bauxite one of those?

Mr. ASH. It may be, but we do have a substitute in alumina which, though it is more costly, is available in this country. Thus the consequences of being shut off from supplies of other commodities are not, as in the case of oil, going without, but rather of a somewhat higher priced product, and possibly some substitution. But I think that we have a manageable situation in front of us and will be able to assure ourselves with a high degree of probability that we will not have the kind of problems that we had with oil.

Chairman BENTSEN. And you think the administration will have some positive proposals on these other minerals within this year?

Mr. ASH. Yes, Mr. Chairman.

Chairman BENTSEN. Back on this question of inflation again. The administration has said from time to time that the current inflation is the result of excessive fiscal stimulus. My understanding is that the fiscal 1974 budget is now balanced. How much of the current inflation do you think is attributable to budget busting? And what about fiscal 1975?

Mr. ASH. The fiscal 1974 budget will be close to balanced, so I don't think it has been a significant contributor to inflation.

Similarly, the fiscal 1973 budget——

Chairman BENTSEN. So the inflation in 1974 was not the result of excessive stimulus of the budget?

Mr. ASH. From January 1973, to the present, the period during which the most serious inflation has occurred, the Federal budget has been approximately in balance on a national income account basis, which is the way to determine the budget's effect on the economy. So recent budgets have not contributed significantly to inflation. It is possible that previous budgets set in motion some inflationary factors that are still in the system, but fiscal policy has been a relatively minor factor in the present inflation.

Looking ahead, the fiscal 1975 budget will not be a balanced budget. The budget which we have put before the Congress anticipates a deficit of about $11 billion in fiscal 1975. However, this would represent a full employment surplus of about $9 billion in that same period. As we indicated when we presented the budget for fiscal 1975, we are driving a middle course between an actual deficit of $11 billion on one hand and a full employment surplus of $9 billion on the other hand. We are doing so because, we forecast some increase in the unemployment rate during the latter part of this calendar year, that is the first half of fiscal 1975. And the unemployment rate will probably go beyond 5½ percent. Thus the proper fiscal policy involves an actual deficit which still represents a surplus on a full-employment basis.

But to the extent that we can legally do so—without getting into the situation of 2 years ago where our actions were reversed by the courts—we are looking at every opportunity to reduce that fiscal 1975 deficit from $11 billion. We hope we can reduce the deficit to about $6 billion. So I do not think that the Federal budget for fiscal 1975 will contribute to inflation.

Now when we look ahead to fiscal 1976—and I think we should do so even though it is sometime ahead of use—while we cannot at this time forecast what economic conditions might prevail or the basic fiscal policy we should pursue, we expect to have a valanced budget. And assuming that a balanced budget would be sound economic policy for that year, we would send such a budget to the Congress.

Chairman BENTSEN. I would agree with your statement earlier, that there are other policies besides budget policies to try to deal with inflation. I think in particular the President's recent radio address, when he said he was going to request authority to establish a cost of living task force to monitor prices and wages is a good idea. But you know what is a little frustrating to me, Mr. Ash, is that I can remember voting on the floor of the Senate for a monitoring task force that was supposed to do just that. And yet, I saw the administration lobbying very intensively against it. I just do not understand that.

Mr. ASH. I do not know of anybody lobbying against a cost-of-living task force. At one point the task force was tied in with other elements of the bill that we did not particularly want, and we objected to those other elements. But we wanted a task force and we still want it.

Chairman BENTSEN. I thought that was what Senator Muskie's amendment finally boiled down to. He had something very much stronger in it at first, but then a later amendment was introduced which in effect just called for the monitoring of these inflation aspects.

Mr. ASH. He had some form of standby control mechanism as I recall. And we do not want standby wage and price controls, and standby authorities——

Chairman BENTSEN. They did not. In the final version there were no standby controls at all, it was just a monitoring agency. But the way the minority party was voting, and the leadership of the Republicans on the floor of the Senate, it became very apparent to me what the administration was doing. And I cannot understand the President turning around and saying this is what he wanted.

Mr. ASH. I cannot understand it either, Senator. I know for a good part of its course, the bill was considered unacceptable, but we, including myself personally, were out supporting the idea of a task force with a monitoring authority. And I know of nobody in the administration who was against such a task force. But it was coupled to something else, and we were against the something else. We would certainly like to have the task force.

Chairman BENTSEN. If the administration was not opposed to the Muskie amendment, which I interpreted purely as a monitoring device with no standby controls, if the administration was not opposed to it, then you surely ought to have a little better communication with your leadership in the Senate.

Mr. ASH. It is my recollection—and I may be wrong—that even at its last stage the Muskie bill had in it some objectionable provisions.

Chairman BENTSEN. Then we would be very interested in seeing the details of the new proposal, because I am sure the President is as deeply concerned with this as we are. I would like to see the details of it. And if they are not available, I would like to know when that legislation would be forthcoming.

Mr. ASH. If you think there would be any possibility of such legislation being passed, we would be——

Chairman BENTSEN. Mr. Ash, I am certain if we had known the administration was supporting Senator Muskie's amendment, I am convinced that if all it had was the monitoring device that it would have passed.

Mr. ASH. I wish I had the benefit of its exact language, because those of us in the administration at no time preceived it as being just a monitoring device.

Chairman BENTSEN. I think that as strongly as many of us felt on the Democratic side of the aisle about this, that something was needed, that the administration will find a very receptive atmosphere if it now is serious in its proposal and sends that legislation to us so that we can see what they will accept.

Mr. ASH. Let me take that as my assignment for the day. I will work on it.

Chairman BENTSEN. One of the concerns I have, Mr. Ash, is the failure to anticipate economic problems, or to coordinate policy to deal with current problems. I have just cited an instance of what I interpreted as a failure to coordinate policy, and the problem of the Federal Government to develop sufficient information and to use it properly. There is a great lack of basic data about economic activity in particular sectors of the economy. Mr. Dunlop has recently argued before the Joint Economic Committee that we need to develop a whole new set of statistics that look at the micro aspects of the economy, and how individual markets are performing in terms of output price, costs, employment ,and so forth. Perhaps even more important than our failure to develop some of the data we need about economic activity has been the apparent failure to organize that data in a systematic way, sorting out the relevant and the irrelevant, and looking at how the parts fit together and trying to identify the potential problems.

I would assume that in your position as head of OMB that you have the primary responsibility for maintaining and improving our information system about economic activity. Why do we have these deficiencies, and what are you doing in the way of trying to correct that kind of situation?

Mr. ASH. Mr. Chairman, I think you have raised a very important point of policy. And it is one that I am sure should be examined by your committee, others in Congress, and the administration. This is an issue of the private sector versus the public sector, both for compiling information and for using that information. In this country it has in the past been considered the job of the private sector to know all about the roof bolts, which are used in coal mines, for example. So the Government has not attempted to maintain detailed information, industry by industry, product by product. We believe that the market economy works, that if there is a temporary shortage of roof bolts, the private sector will move in and fill that shortage. And it would probably do so much better than the Government. One need only look at the Soviet system to see that a Government planned economy is less efficient than a market economy.

From time to time, we have seen instances where it has been important and valuable for the Government to enter into some particular sector of the economy. But we should think very carefully about the roles of the Government and the private economy when we talk about taking that first step toward a planned economy. So I would be very wary of the suggestion that the Government should collect and analyze micro data of all the activities in this highly complex society.

Chairman BENTSEN. You know the Federal Trade Commission is now compiling information by line of business on prices, profits, and costs. In the past I believe you have opposed that program.

Mr. ASH. Yes.

Chairman BENTSEN. Do you still oppose it?

Mr. ASH. I do. As I have indicated, I am very skeptical that the Government can use such data effectively.

Chairman BENTSEN. Are they going to have adequate money to fund that program?

Mr ASH. I suppose they will make a request in next year's budget, and we will have a discussion about it. My own view—and my view may have less importance on this issue than it does on other issues in the Government—is that this is not only an expenditure of Federal moneys, but an expenditure of private moneys as well, and that these expenditures will not produce benefits which would justify them. But as you may remember, the Alaskan pipeline bill carried a rider that removed OMB authority to deal with this particular issue. So my view may not prevail.

Chairman BENTSEN. I think your views are important.

Thank you very much, Mr. Ash. We appreciate having your testimony. It has been helpful in our deliberations.

Mr. ASH. Thank you.

Chairman BENTSEN. The subcommittee stands recessed. We will hear from Mr. Herb Stein in this same room tomorrow.

[Whereupon, at 11:50 a.m., the subcommittee recessed, to reconvene at 10 a.m., Wednesday, June 12, 1974.]

[The following forecast was subsequently supplied for the record by Chairman Bentsen:]

[Extract of mimeographed pp. 23–33, OMB staff forecast entitled "Economic Outlook," dated Oct. 24, 1973]

THE LONG RUN OUTLOOK

The short-run outlook surveyed the economic horizon through mid-1975. This section, with far greater uncertainty, scans the economic horizon from 1975 to 1985.[10] While the model results[11] provide a summary of changes to be anticipated, this section concentrates on some of those with implications for Federal decision-makers.

The long-run model was constructed separately from the short-run model; consequently, the estimates for mid-1975 for each model are significantly different. Reliance on economic data through mid-1975 should be placed with the short-term forecast. The long-range model makes no attempt to estimate annual or biannual fluctuations that result from short-run cycles. It is intended to estimate long-run cycles and the general, secular trend of change.

The long-run outlook for the U.S. economy is for continued expansion of output and income, however at a declining rate. Prices are anticipated to rise slowly. Total government is expected to grow faster than GNP, particularly at the local level. Trade and foreign investment should grow at twice the increase in GNP and tie the U.S. economy more closely with economies abroad.

OUTPUT AND INCOME

The total of all goods and services produced each year should rise by over 50 percent from 1975 to 1985 (Appendix page 31). Real per capita disposable

[10] Modeling of the U.S. economy for the 10-year span was dependent upon the relatively few models that exist that reveal the interactions of one sector upon another. The Data Resources and to some extent the Chase Econometrics models were used; a dynamic input-output model and the National Planning Association projections were also reviewed. The OMB long-run modeling effort is experimental, but is scheduled to be operational for policy analysis by the Spring Planning Review, April 1974.

[11] Results of the long-range projection are contained in tables in Appendix—pages 31 to 35.

income will increase by about 40 percent (Appendix page 35). A person classified as a middle income receiver will rise to the level in 1985 of a person currently classified as an upper receiver. By the year 2000, real per capita income will have doubled.

The income outlook raises a fundamental question concerning Federal policies to transfer wealth from one generation to another. Should the transfer be from the poorer present generation to the richer future generation? Federal policy for water projects, R&D, and other future payoff projects are affected by this issue. Currently, there is probably a net redistribution towards the wealthier future generation. However, use of inexpensive timber stocks and environmental quality deterioration are examples of transfers from future generations to the present. On the other hand, acceleration in economic growth requires increased investment which is by its very nature a transfer from the present to the future.

The economic and population forecasts identify the increasing number of people 55 and over who will become dependent on the active labor force (Appendix page 36). First, the proportion of the population over 55 is increasing. Second, the participation rates of those over 55 are expected to decrease: for example, from 30 percent to 12 percent for those over 65, and from 85 percent to 74 percent for those 55–64 years old. This occurs because of lower retirement ages and more generous pensions. By 1985, this reduced participation will remove over a third of a million men from the labor force annually, and they will enter the ranks of dependency in real, if not financial terms, sharing the products of the active labor force in the same way that children do. This trend will likely continue through the year 2000.

This phenomenon should raise a signpost of caution when considering further liberalization of pensions. The smaller work force of tomorrow may rebel against the larger per capita burden of providing resources for a much larger retired population. Improved pensions won today may be threatened by the larger burden tomorrow. This burden can be diminished by less-than-full adjustment for inflation in future years. Federally mandated liberalization of private pensions as well as Federal retirement programs or the socail security programs raise this kind of issue.

POTENTIAL OUTPUT

Potential as well as actual output growth begins to decline in the 1980's (Appendix page 33), and will likely continue through the year 2000. The rise in the participation of women during the 1970's and early 1980's offsets the general decline in new workers because of the declining birth rate since 1957, the decline in the participation rate of male workers, and the decline in the work week. But by 1985–1990 the growth in the female participation rate and the growth in labor hours will decline. Then the growth in potential output will follow.

The aging of the labor force, as well as the population, will undoubtedly be a factor in reducing the rate of innovation and productiivty. Although the forecast optimistically projects productivity of 3.3 percent even though the rate has been only 2.8 percent since World War II, the aging of the work force and the decline in the proportion of workers and people in their prime innovating years of 25–40 will likely cause a trend downward in output per man hour, to an annual rate perhaps as low as 2 percent by the year 2000.

The likely slow-up in potential and, as a consequence, actual output raise the spector of future social stress. With actual growth sustained by a potential of 4.3 percent, it has been possible to redistribute income or cash without diminishing the income of any significant block of citizens. But with a potential of say 2.8 percent in the future, redistribution to resolve social problems becomes more difficult and risks taking away from someone's previous level of income to give to another. This is apt to generate far more social and political conflict. Efforts to increase productivity appear to be the only relief for such a threat unless society reduces the trend for more leisure time instead of work, or begins to produce more future labor participants by having babies above the zero-population level now prevalent. Also, additional expenditures for high payoff research and development could help raise productivity.

INVESTMENT

Investment will likely rise faster than consumption (Appendix page 31), reflecting decisions to increase capacity for future output. This will follow the nationwide and worldwide shortage of industrial capacity in 1973, 1974 and

1975. However, an increasing proportion of investment will be required for "non-productive" environmental quality investment. Consequently, capacity-short conditions will likely exist for most of the 1970's for a few industries, such as paper.

Judging from the worldwide reaction from the depletion of raw materials inventories (including food), greater investment will likely be made for higher levels of inventories of these items. The failure of the worldwide feed grain crop in one year could be socially devastating in the United States as well as abroad. We are still suffering from the mild short-harvest of feed grains in 1970; for example, beef prices should remain above normal for another three years because of it.

Residential investment (Appendix page 31) is forecast to grow modestly with housing starts returning near the 2 million unit level per year through most of the 1970's, but housing starts will begin to decline as household formations slow and as a result of the anticipated rise in the relative price of housing in comparison with other consumer purchases. During the next 10 years, greater pressures will develop to modify adequate supply of inputs such as lumber, to change archaic government building codes, and to change subsidies for housing such as capital gains provisions and property tax and interest deductions.

TRADE AND FOREIGN INVESTMENT

After the adjustments of 1973 and 1974, the outlook for trade is good throughout the next 10 years (Appendix page 31). Exports, as a percent of GNP, will likely double during this period from about 6 percent now to 13 percent in 1985. In addition to political and social ties, increasingly, the U.S economy will be intertwined with other countries' economies. The rapid rate of growth will require adjustment of domestic labor force, with declining industries releasing labor for the expanding industries. The President's trade adjustment proposal should help to facilitate the necessary changes. The adjustments for trade, however, are just a part of the total adjustments likely to occur from other causal forces such as changes in environmental quality regulations and fundamental shifts in consumer preferences and income.

Petroleum products promise to be the largest growth category of imports for the next 10 years. Agricultural products and producers durables promise to be growth categories of exports.

Foreign investment, both by Americans abroad and by foreigners in the United States will likely grow, but with increasing pressures to control multi-national corporations by host countries or originating country. The basic balance for the U.S. should remain healthy.

A new international monetary arrangement should evolve but with considerably more flexibility than the Bretton-Woods established system of the post-World War II period. This likelihood for flexibility provides an opportunity to modify, phase down or phase out a number of capital control programs, import restrictions and export promotion either through negotiation or unilaterally. Removal of these programs will likely increase foreign exchange expenditures by about $2 billion and reduce Federal outlays by ¾ billion dollars.

PRICES

Prices are forecast to remain at a historically high level (Appendix page 33), about 3 percent through the 1970's, climbing slowly in the 1980's. As in the case with most industrialized economies the U.S. is building in inflationary pressures. For example, social security benefits, which will total over $125 billion in 1976, will rise based on an automatic cost of living escalator. Cost of living escalators are being bargained into other public and private pensions and wage bargains, especially as a protection against the inflation of the last seven years. Rachet arrangements are also found in certain pricing arrangements, reducing downside flexibility. These provisions are making it necessary to accommodate to a higher level of inflation to maintain an acceptable growth in employment and an acceptable unemployment rate.

The inflation we are apt to experience may impact disproportionately on low and middle income people. Necessities may grow faster than services, housing may grow faster, education costs may rise faster, and medical costs may grow faster. This trend promises to redistribute income on a level not previously dealt with in the United States. Undoubtedly this will create pressures for reforming the tax structure and income maintenance programs.

INTEREST RATE

Inflation also appears in interest rates (Appendix page 33). The forecast anticipates a trend increase in interest rates to match the trend in inflation. If there is a risk-free interest rate on long-term investment of 4 percent, then a current interest rate should reflect that rate plus inflation; 4 percent real interest plus 3+ percent inflation equals 7+ percent. This phenomenon will require increasing outlays to service the national debt.[12] In time, pressures will mount to lift ceilings imposed by government, such as state usury ceilings.

EMPLOYMENT

Employment is forecast to grow at about 1½ percent per year (Appendix page 35), with the rate declining in the 1980's reflecting the slow-up in the birth rate and the reduction in the growth of the participation rate of women. This rate will not be fast enough, however, to bring the unemployment rate below 5 percent in the 1970's. If the full employment budget can be used as a crude judge, it would require additional Federal expenditures of $17–44 billion to bring the rate to 4 percent. However, the inflation generated by such a move would likely be unacceptably high. Consequently, pressure will mount for special programs to hire the unemployed through such current programs as public service employment.

In addition, there will likely be increased awareness that the tradeoff of inflation and unemployment necessitates a change in the definition of "full employment." The current definition is based on the trade-off of 4 percent unemployment for 2.8 percent inflation and was based on the labor force of 1955, with a smaller proportion of high-turnover teenagers and women. The new definition is likely to be in the range of 4.5 percent to 5.0 percent unemployment during the next 10 years traded off against a 3 to 4 percent inflation rate. As the work force ages and fewer teenagers enter the labor force (with their higher unemployment rates) the definition might be lowered.

GOVERNMENT

Total government is forecast to continue to grow faster than the growth in GNP, as it has during the past 40 years (Appendix page 32). Total taxes as a proportion of GNP are anticipated to rise from one-third to nearly two-fifths from 1975 to 1985. Between the years 2000 and 2020, total government taxes could be one-half of GNP, a level reached by Sweden in 1973. In addition, the growth in regulation may be faster than the growth in the other two instruments for carrying out public policy, taxes and expenditures. The growth in regulation and its impact on the economy has been greater than changes in taxes and expenditures during the last two years.

These projections are necessarily based on past trends and current and likely future incentives for more government. This anticipated growth in government can be thought of as reflecting the "revealed preference" of American citizens and accepted as appropriate, or it can be thought of as unnecessary intrusion into the private sector and slowed down. It does raise the fundamental question of the role of government in what has previously been identified as a predominately free enterprise economy.

State and local governments are forecast to grow more rapidly than the Federal Government, a trend evident since 1950. This is likely to be true for both receipts and expenditures, although more decentralization has been and will likely be evident by expenditures, because of the likely continuation of the growth in Federal grant-in-aid and state aid to local governments.

The composition of Federal taxes is expected to continue the shift from a progressive tax structure, where higher income levels pay a higher proportion of their income in taxes, toward a proportional tax structure, where all income levels pay roughly the same percentage of their income for Federal taxes. This is and will likely continue to occur because social insurance taxes and contributions are

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[12] The differential impact of inflation on Federal outlays has been estimated in an interesting paper written by the Budget Review Division, Office of Management and Budget.

growing more rapidly than other Federal taxes. This raises fundamental questions of equity.

Also, it erodes an important "automatic stabilizer" for fiscal policy purposes. When the economy was booming, personal income taxes in the early 1960's could be expected to rise 1.4 times faster than the increase in income and thereby automatically cooled down the economy. When a recession occurred, income taxes would decline 1.4 times faster than the decline in income and thereby cushion the decline. As a result of tax changes since the early 1960's the automatic stabilizer has been reduced from about 1.4 to 1.2 times income changes. Between now and 1985, the forecast indicates a further decline to about 1.0.

If progressive tax structure is preferred, then consideration should be given to the funding of a larger proportion of income maintenance through progressive personal income taxes or modify social security taxes and contributions so that they are at least proportional or even progressive.

Within the Federal budget, transfers are anticipated to continue to increase as a proportion of the Federal budget. Both transfers to state and local governments and to individuals rise faster than total outlays during this period. Inasmuch as transfers are generally uncontrollable, Federal expenditures will be less flexible and therefore less useful for fiscal policy purposes. If flexibility for fiscal policy purposes is desired, it will have to come increasingly from greater flexibility to change taxes, as has been proposed in the form of a variable investment tax credit, a variable surtax on personal and corporate income taxes, or a variable involuntary savings program.

However, as the average age in the population increases, demand for Federal programs that are old-age oriented, such as health and income maintenance programs, will rise. Demand for state and local programs that are children oriented, such as education, will decline. This phenomenon will require a rethinking of roles among levels of government or reduce the likelihood for rapid decentralization.

LONG-TERM ECONOMIC GROWTH

WEDNESDAY, JUNE 12, 1974

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10 a.m., in room 1202, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senator Bentsen.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; William A. Cox, Jerry J. Jasinowski, L. Douglas Lee, and Larry Yuspeh, professional staff members; Michael J. Runde, administrative assistant; and Walter B. Laessig, minority counsel.

OPENING STATEMENT OF CHAIRMAN BENTSEN

Chairman BENTSEN. The hearing will come to order. This morning the Subcommittee on Economic Growth is pleased to have as its witness Mr. Herbert Stein, chairman of the President's Council of Economic Advisers, who will be addressing us on the subject of long-term economic problems of this country. I know, Mr. Stein, the committee is looking forward to having you back next week on some of the short-term problems facing us. Although it is difficult, we must try to develop a more detailed picture of how the U.S. economy may grow in the next several years, and determine how we are equipped to stimulate steady and balanced economic growth.

While the long-range outlook for inflation, unemployment, output, real per capita income and other major aspects of the economy can not be an exact map of the future, it can provide an early warning of approaching problems and thus enable us to coordinate and apply our energies more efficiently and effectively.

At the end of 1974, we may not have the double digit inflation we are seeing today, but the consensus of most experts is that inflation will continue to rise at about 5 percent compounding during the next decade.

Although the labor force is projected to grow at a slower rate, many analysts estimate that unemployment will remain around 5 percent during the 1970's. The administration has argued that the definition of the full-employment concept should be altered to accept an unemployment rate a percentage point higher than the 4 percent objective we use today.

We had Mr. Roy Ash before this subcommittee yesterday suggesting a change in the full-employment formula. If we accept a higher

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unemployment rate and a higher inflation rate, what does this imply for per capital real income and our standard-of-living over the next decade? Can we count on higher productivity with an increasing shift in employment to the service sector? Without higher productivity we may already face a significant slow-down in the rate of real economic growth in the late 1970's and early 1980's.

These are signposts of long-term trends in our economy which are not the consequence of unforseen chance events. They represent major challenges to steady economic growth in the years ahead.

In Roy Ash's testimony before our subcommittee yesterday, there was little to reassure me that the administration was really coming to grips with our country's long-term economic problems. There was no indication of new ideas or new policy initiatives to control long-term inflation, or reduce unemployment, or ward off commodity and capital shortages.

The spending, taxing, borrowing, and regulatory policies of the Federal Government give our economy substantial direction. It is vital that we have a greater understanding of the long-range economic outlook and the Government's role is fostering stable economic growth.

The Employment Act of 1946 established the Council of Economic Advisers and gave it the responsibility to "formulate and recommend national economic policy to promote employment, production, and purchasing power under free competitive enterprise." I am interested in hearing what new thinking and proposals Mr. Stein can provide us about the administration's efforts to improve our economic capabilities. Please proceed, Mr. Stein.

STATEMENT OF HON. HERBERT STEIN, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. STEIN. Thank you very much, Senator Bentsen.

I think if you have invited me here to reveal our new thinking on the management of the economy, we can have a short hearing because I do not believe that management of the economy is by any means identical with novelty and in any case we have added to our thinking ad nauseum, there is very little to say in addition about what our thoughts are, either old or new. We have a view of the principal problems before the country and I think we have made that fairly clear in the last several weeks, but in any case I will try to respond to your letter.

I do regret that I was unable to write a comprehensive answer to the questions you submitted. There just was not time. There are a lot of other things going on. I will make some introductory remarks which may serve to put the apple on the table and we can then discuss a little further and I will try to answer your questions.

I especially appreciate the thoughtful and considerate nature of your invitation. You recognize that the many complex and difficult questions remain unanswered and ask me only to devote my best efforts to the issues you raise.

With respect to your first question, about the real growth of the U.S. economy over the next 10 years, probably the best that we can do at present is the estimate of the rate of growth of potential output to 1985 recently made by the Bureau of Labor Statistics. This study was reported fully in the Monthly Labor Review of December 1973. The table which is incorporated in my statement summarizes the results, with some minor modification and interpolations, which we have made to give us some dates which are more convenient for use than the ones that they use.

[The table incorporated in Mr. Stein's statement follows:]

TRENDS IN THE UNITED STATES ECONOMY

[Percent; annual rate]

Item	Actual change, 1965 to 1973	Projected change in potential GNP and related items	
		1974 to 1980	1980 to 1985
GNP (1958 dollars)	3.9	3.8	3.2
Labor force	2.0	1.7	1.1
Average weekly hours	-.5	-.3	-.3
Output per man-hour	2.2	2.5	2.4
Output per worker	1.9	2.2	2.1
Output per capita, all ages	2.8	2.9	2.2
Population, 16 and over	1.7	1.4	1.0
Population, all ages	1.0	.9	1.0

Note.—Details may not add to totals because of rounding.

Source: Council of Economic Advisers.

Mr. STEIN. Essentially this estimate assumes that total output per worker will rise at the same rate as in the recent past in the various sector of the economy, that annual hours of work per worker will continue to decline slowly, and that recent trends in the proportion of the population in each age-sex category who are employed will continue, but at a gradually diminishing rate until the proportions stabilize in 50 years. With these assumptions the only thing that changes dramatically in the next decade is the rate of increase of the labor force, which slows down a great deal as we leave behind the period of most rapid rise of the working-age population. This does not, however, reduce the rate of increase of output per worker. It does affect the rate of increase of output per person significantly, because of a slower increase in the proportion of the population in the labor force.

Of course, such a projection is quite mechanical, especially because it makes no allowance for changes in the rate of growth of productivity. There are various reasons why productivity might rise more or less rapidly than in the past. However, the rate of productivity growth changes slowly and these figures are probably a good point of departure for thinking about the problem.

It should be noted that the figures for the future are annual rates of change that would be associated over a considerable period with a constant utilization of the labor force. Actually, the rate of change between any 2 years might differ because of variations of unemployment rates and also because "potential" does not grow smoothly from year to year.

These figures suggest as a first approximation that output per person in the United States might be rising during the rest of this decade at about the same rate as in the years 1965–73, which was 2.8 percent in the earlier period and projected to 2.9 percent in the period 1974 to

1980; but would then rise less rapidly for several years as the labor force grew less relative to the population. Per capita output then might be growing at the annual rate of 2.2 percent. Of course that should not be identified exactly with a slowdown in the rate of output to affect the consumer because it will be associated with the fact that we would have a larger proportion of the population outside the main productive ages which are also the main consuming ages. But anyway it does mean a less rapid rise in per capita income.

Your letter asks me to comment on whether the perspective rate of growth represents a satisfactory social outcome. It seems to me that there are three kinds of answers to this question:

One, we can deny that the question has any real meaning, deny that the outcome is "social" or has any social standards. In this view the gross national product is "national" only in the statistical sense that someone added together the product of all of the people of the United States. All of the output is produced by someone and belongs to someone. The increase of output is caused by someone who saved, invested, researched, and so on and it belongs to someone who decided to do these things in order to get the increased output and increased income that goes with it. If one takes this approach, the level of output and rate of growth achieved are automatically satisfactory because they are the amounts that were chosen by the people who had the option of bearing more or less cost in order to get more or less output or growth. If people had wanted something different they would have done something different.

I have taken this position in the past and I think there is a great deal in it. However, it is not a completely satisfactory position. For one thing, the Government makes a great many decisions that affect output and growth, and the position that whatever happens is best, implies that the Government makes its decisions in a way that is either neutral with respect to growth or that is consistent with the preferences of the people about growth. I am prepared to believe that individuals know what is best for them, including what rate of increase of their own output is best for them, considering the cost they would have to pay. But if Government is in the picture and can't be gotten out, then one must admit the possibility that the actual outcome is not the best. This is aside from the difficult question whether there is a social interest in growth different from the sum of the interests that individuals feel in their private capacities.

Two, a second approach to the question of whether the growth rate is satisfactory is to search for the optimum growth rate. This was a more popular pastime 15 years ago than it is today, although there are still people who indulge in it. Fifteen years ago the answer usually given was 5 percent, because that was a little more than we had. Today, if any answer is given to the question of the optimum rate of growth, the answer is more likely to be zero. But it seems clear to me that the attempt to determine a total rate of growth which is optimum and a proper goal of policy, without specification of the means to achieve it and evaluation of their costs makes no sense. I believe that more growth is better than less. I believe that growth means an increase in the flow of some quantity in which the components are valued according to the values that human being assign to them and that an increase of this quantity by human standards must be good. If the increase of the thing we are measuring is not good it shouldn't be called growth and we are measuring the wrong thing. But it makes no sense to say we want more growth, without reference to the costs of getting it.

Three, the useful meaning of the question "is the expected rate of economic growth satisfactory?" is another question. Do we know any way to increase the level of output or the rate of growth that is worth its cost? I believe that the answer to this question is yes. In the annual reports of the Council of Economic Advisers in recent years we have discussed policies for influencing growth, and I attach excerpts from three of these reports to this statement.[1] There opportunities for increasing output and growth by means that are not too costly may be found in the fields of international trade, transportation, budget policy, taxation, and other areas of Government action. I might mention here that the President has recently directed the Chairman of the Council of Economic Advisers to assemble a high-level group to study the capital requirements of the American economy and means of satisfying those requirements or the cost of satisfying them, and this study is obviously very closely related to the question of the possibility of increasing the rate of growth in a way that is worth while.

This view of the satisfactory rate of growth helps to explain what can and cannot be meant by planning for growth. The fact is that innumerable actions of Government affect the level of output or its rate of growth in some way. What we want is to assure that in each of the cases where the growth effect is important it is taken into account as part of the decisionmaking process. But this is different from trying to have all of these decisions made by a single body that looks at them only from the standpoint of growth. There is never a decision that does not affect many objectives other than growth and they all need to be taken into account. An agency set up to plan Government policy toward growth would supersede most of the Departments of Government and make their decisions from one special point of view.

It seems to me that the function of the central agencies, like the Council of Economic Advisers and of the OMB, is not to supersede the Departments or to second-guess them but to assure that they have taken the relevant considerations into account. One of those is the effect on output and growth. The CEA has tried to do this in the policy issues in which it has been involved, either at its own initiative or at the initiative of others.

What I am talking about is managing the inevitable or actual functions of government so that they take account of the value to be placed on economic growth. This is quite different from managing the growth of the country. The country's growth will be basically determined by private decisions, and these decisions will usually be reflective of the needs and interests of the people if the Government's decisions, in its necessary sphere, are also made with due account of those needs and interests.

With those opening remarks, I would like to hold myself available for questions now.

Chairman BENTSEN. Fine, Mr. Stein.

[The attachments referred to in Mr. Stein's statement follow:]

[1] See attached excerpts, beginning on p. 270.

CHAPTER 3

Uses of the National Output

INTRODUCTION

BY ANY USUAL MEASURE, AMERICA ENTERS THE 1970's a wealthy nation which is growing wealthier at a rapid rate. Per capita national income in 1969 was about $3,400 and had increased in real terms about 40 percent since 1959. It is expected to increase 20 percent more by 1975.

Despite this, or perhaps because of it, Americans are becoming acutely aware that being rich and growing richer does not solve all of our problems. The realization that we expect more than the economy can produce, productive as it is, points the way to the real problem, which is to make sure that the output is used efficiently to meet our most important needs. There is a growing sense that the limited national output is not being used in this way.

The focusing of increased attention on how the national output is divided comes after a generation in which it had seemed that the country could make a quantum jump in available output that would dramatically improve the quality of life. In fact, for a time this was true. During the 1930's, when the Nation was producing far below its economic capacity, we expected that our needs could be satisfied by the return of production to reasonably full employment. During World War II, when the economy actually operated at capacity, private citizens could foresee a large increase in the output available to them after the war.

Later, in the 1950's and early 1960's, many people were impressed with the possible contribution that a "small" increase in the annual rate of economic growth—from 3 or 4 percent to 5 or 6 percent—would make to providing the output available for every kind of purpose. "Faster growth" became the source from which all new claims on the national output would be met. But in time this was seen to be largely an illusion. The basic full-employment growth path of an economy is not readily raised by any of the policy instruments that we now know about. The country could count on sustained growth to increase its capacity for doing many things. It could not count on being able to boost the growth rate at will to support every new claim.

Although the necessity to confine total uses of output to a growing but limited productive capacity is becoming more recognized in principle, it tends to be ignored in practice. This is obvious in Federal Government policy involving claims on resources. Even when the economy is operating at fairly full employment it is possible to increase Government expenditures, to reduce taxes, and to finance Government borrowing by monetary expansion. This may seem to provide an escape from the limitation on resources and the necessity for hard choices that all individuals and State and local governments face. But in fact it does not. All it does is let inflation choose which demands are satisfied and which are not. A mature people can find a better way to make these choices. The basic problem is to make better decisions about the uses of the national output. This chapter discusses the role of the Federal Government in this process.

The attention given here to the Federal Government's role in allocating the national output may seem excessive for a nation committed to a free-market, decentralized economic system. The idea that the Federal Government must make hard decisions to allocate the limited resources within its own budget is commonplace. The idea that it does or should influence the allocation of the output of the entire economy is not. However, the Federal Government does have an important influence on decisions about the use of resources in the private, as well as the Government sector. Perhaps that influence should not be as big or as detailed as it is. Nevertheless a large influence exists, and much of it is inevitable or desirable or both. This influence should be recognized, its effects appraised, and decisions consciously made to achieve the effects that are preferred.

In 1969 the Federal Government purchased and used, mainly for defense, 11 percent of the gross national product. The remainder, except for a small amount of net exports, was used for personal consumption, for private investment, and for State and local government purposes. The Federal Government was a major influence in the division of the remainder among these three categories and within them. While it purchased only about 11 percent of the national output for its own use, it collected about 20 percent of the national output in taxes and social insurance contributions. It returned the difference to State and local governments in grants, to households in transfer and interest payments, and, since there was a budget surplus, to private capital markets for investment through repayment of Government debt. Grants to State and local governments to finance purchases (as opposed to transfer payments) were about 13 percent of their purchases. Federally financed transfer and interest payments to persons were equal to about 11 percent of consumer expenditures. The funds supplied by the Federal surplus to capital markets and available for private investment were 6 percent of gross private domestic investment. The relative amounts of these flows, and the taxes used to raise the revenues, substantially affected the division of the available output among these three broad categories.

Federal decisions also influence the division of the output within these categories. The Federal Government not only provides the States and localities with billions of dollars in grants, but it provides these grants through hundreds of separate programs for specific purposes. The taxes it collects from households and the transfers it pays to them come from and go to particular classes of persons, and thus affect the distribution of income and the composition of consumer spending. Taxes levied on specific items, such as automobiles or alcoholic beverages, also affect what is consumed. Facilities and services provided by the Federal Government stimulate private consumption or investment expenditures that are complementary with them or curtail private expenditures that are competitive with them. For example, Federal expenditures on highways encourage private expenditures for automobiles and trucks.

THE DECISIONMAKING PROCESS

The Federal Government has a large and pervasive influence on the allocation of the national output. Its decisions in this role fundamentally affect the national welfare. There can be no single, scientifically determined "best" allocation of the national output. Differences of interest, value, and opinion among people are inevitable, and they are not of a character that can be resolved objectively. They must, however, be reconciled, and it is the function of the political democratic process to do this.

Given the distribution of interests and the location of powers to make decisions, there is still much that needs to be done to reach better decisions—to make sure that as far as possible the consequences of decisions are known and are taken into account as they are made. Decisionmakers need to know the longrun as well as the immediate results of what they do, and the indirect as well as the direct results. They need to see the options that are open to them, and there must be an opportunity for differing viewpoints to confront each other. The effort to improve decisionmaking has a long history, in which the establishment of the modern budget, the consolidation of the Appropriations Committees in Congress, the development of the Executive Office of the President, and the creation of the Council of Economic Advisers were milestones.

THE LEVEL OF DECISIONMAKING

One basic requirement for good choices about the use of the national output is, of course, that they should be made at the right level and by the right people. The mere size of the Federal Government will influence the division of decisionmaking between it and the non-Federal—private, State, and local—parts of the community. There is a strong case for holding down that size in order not to load responsibilities on the Federal Government beyond its capacity to discharge them, as well as for other reasons. The character of the Federal activities is probably as important as their volume in determining the location of decisionmaking. For example, Federal tax policy inescapably influences the total amount of consumption expenditures by private households, but some kinds of taxes go further and influence the composition of consumption. Similarly, the Federal Government probably cannot avoid influencing the total rate of private investment, but different Federal policies can involve more or less Federal influence over the character of the investment.

The problem of the appropriate level of decisionmaking has become critically important in the relations between the Federal Government and the States and localities. The amount of Federal financial assistance to the lower levels of government has grown markedly in the postwar period. This growth has raised the question whether the Federal Government should be a neutral supplier of funds or should attempt to determine how States and localities use these funds, and their own. Undoubtedly there is room for some Federal intervention in the decisionmaking process. However, grants for highly specified purposes have reached a degree of detail which is neither necessary nor efficient.

The Administration has proposed to alter the Federal-State-local relationship by instituting a system of revenue sharing, through which the Federal Government would supply funds without dictating their use. In addition the Administration has asked for authority to consolidate some of the innumerable specific grant programs when they relate to similar functions. In these ways it is hoped to improve the overall decisionmaking process.

BUDGETARY BALANCE AS DISCIPLINE

Balancing the Federal budget has long been a symbol and instrument of discipline in Government decisionmaking. The requirement that if some expenditures are raised others must be cut or taxes must be increased has forced Government officials to count the costs of expenditures. In recent years the Nation has become more sophisticated about budget deficits and surpluses. It has learned that the size of the surplus or deficit will and should vary with economic conditions. It is now learning that the longrun average size of the surplus or deficit should be determined by the amount of savings it is desired to make available for private business and housing investment in total. But this does not reduce the relevance or value of the budget-balancing discipline.

Once the appropriate longrun average size of the surplus or deficit has been determined, that goal should not be changed except upon reconsideration of the longrun objectives. Shortrun fluctuations in private demand will sometimes require offsetting temporary changes in tax rates or Federal expenditures. And the size of any specific year's surplus or deficit will inevitably depart from the target level as a result of economic fluctuations, even with tax rates unchanged and expenditures at longrun levels. But achieving the desired average budget position over a period of years means that on the average expenditures can grow only as fast as full-employment revenues.

Beyond that, expenditure increases in one area must be matched by expenditure cuts in another, or by increased taxes. In principle, every decision on Government expenditures should reopen the question of the desirable size of the surplus or deficit. In fact, Government cannot operate that way. The objectives served by the surplus or deficit, although important, are remote and indirect. These objectives will suffer if they are implicitly reevaluated every time an expenditure decision is made. In their day-to-day decisions about spending, Government officials need to be confronted with costs that are obviously and directly within their purview and responsibility. This means that they must at least count costs that appear in the form of tax and expenditure requirements to meet a given surplus or deficit target.

The budgetary discipline in the Federal Government can only be self-discipline. If the old symbolism of the balanced budget is losing its force, a new understanding of its value must replace it.

TOWARD IMPROVING FEDERAL DECISIONS

Although a budgetary rule that requires the balancing of additional expenditures against additional revenues has an essential role in Federal decisionmaking, it is by itself far from a sufficient guide to the discharge of the Federal Government's fiscal responsibility. This rule tends to focus attention on the shortrun aspects of what are also longrun commitments. It forces the counting of costs, but it does not provide realistic information on what the costs are. It concentrates on choices among uses of the relatively small part of the national output that is within the budget without adequately revealing the effects that the choices will have on the larger part that is outside the budget.

This Administration has taken several important steps to improve decisions about the allocation of resources. The President established in July 1969 the National Goals Research Staff to identify alternative goals important to Americans and to study long-range social trends of significance for national policy. The Cabinet level Urban Affairs and Rural Affairs Councils and the Cabinet Committee on Economic Policy are interagency groups the President has formed to coordinate the development of policy. The Defense Program Review Committee, on which the Chairman of the Council of Economic Advisers and the Director of the Bureau of the Budget serve, helps to assure that the broad picture of total national resources and claims enters into the process of decisionmaking for defense.

As a further step toward improving the organization of the Executive Branch for making its major policy decisions, including those which importantly affect the allocation of the national output, the President established the President's Council on Executive Organization—the Ash Council.

In 1965, a new effort was inaugurated throughout the Government, in the planning-programing-budgeting system, to evaluate more objectively the costs and benefits of existing and proposed programs. Building on this beginning, the Administration is now focusing economic analysis primarily upon major policy issues. By examining especially carefully the most important programs, scarce analytical resources are economized; thus analysis can penetrate further into the decisionmaking process. Potential savings from improved decisions can be large.

Analysis of the possible implications of proposed decisions before they are taken is, although speculative, obviously necessary. Equally necessary, and somewhat less speculative, is evaluation of the results of decisions after they have been taken. Persistent efforts to evaluate existing programs are necessary if the Nation is going to be able to do the new things it wants to do. One of the steps in this direction was the President's instruction to the Office of Economic Opportunity to establish a research and evaluation office capable of independent appraisal of Federal social programs affecting the disadvantaged. Evaluation of the results of Government programs remains one of the most urgent needs of Government as it seeks to make effective decisions about the use of resources.

Besides assessing the full costs and benefits of Federal programs, agencies must take into account the time pattern in which benefits and costs of programs occur. The Government, like private firms and individuals, must recognize that benefits are worth more if they occur today rather than tomorrow. Accordingly, agencies have been directed to apply a discount factor to all programs which have costs or benefits that occur 3 or more years in the future. Studies have been undertaken to determine the appropriate factors to use in this kind of calculation. In addition, explicit account is being taken of risks involved in public projects.

The Administration is seeking to formulate the larger choices it faces in the allocation of national output in the light of the competing options. Among the most important steps in this direction have been the interrelated studies conducted through the National Security Council and the Cabinet Committee on Economic Policy. These studies examined alternative defense strategies with their associated costs and alternative nondefense Federal programs. Various defense strategies were translated with rough accuracy into a large number of possible forces and budgets. Similarly, alternative nondefense Federal programs were developed. The studies revealed the probable effects of different combinations of defense and nondefense programs on private consumption, housing, other investment, and State and local expenditures, given the limit set by potential national output. These studies in the Cabinet Committee have also explored trade-offs among various nondefense programs within resources that will be available from continued economic growth and assumed reductions in defense expenditures. All of these studies have served as background for consideration of long-range revenue and expenditure decisions.

FUTURE NATIONAL OUTPUT AND THE CLAIMS UPON IT

The last few pages have discussed mainly the budgetary *rules* and decisionmaking *procedures* that might improve Federal Government decisions. These decisions affect the use of the entire national output, as was pointed out in this chapter's introduction. The substance of the priorities problem is to allocate the future national output among alternative uses in a rational way that reflects decisions about national priorities. This tailoring of Federal decisions concerning allocation to a view of national priorities requires—

1. An estimate of what the future national output can be.
2. A view of the claims upon the national output—the things we would like to do with it—that are eligible for serious consideration.
3. A view of the policy measures that would be necessary to bring about satisfaction of some claims rather than others.
4. A decision about the claims to be satisfied and the policies to carry out the decision.

Step 4 in this process must, of course, ultimately reflect Government decisionmaking at the highest level. This section undertakes a tentative approach to the first three steps. No one can now confidently draw comprehensive and detailed conclusions on these first three steps. But even the rough and preliminary estimates presented here reveal much about the priorities problem confronting the Nation and establish the need for further efforts to analyze it.

Projections of available future output and the potential claims on it can move discussion of the priorities problem from vague and sometimes easily ignored knowledge to the concrete realization of just how limited the available output will be. First, a projection will be made of available output—GNP in real terms for the years 1970–75. Then visible claims on this output by consumers, governments, and business will be projected. Adding up these claims and comparing the total to available GNP will indicate the magnitude of the priorities problem. The projections will also provide a framework for discussing various policy alternatives that would meet various sets of claims on the output.

The principal objective of this section, therefore, is to estimate the claims against GNP and to show how different patterns of allocation of the GNP can be achieved. Since it is assumed throughout that the projected real GNP is in fact achieved, the only problem discussed here is how the GNP is to be allocated. The projected GNP can be achieved by any one of a number of different combinations or "mixes" of fiscal and monetary policy, which will differ in the allocation of the total GNP that results from them. In these terms this section is concerned with which mix will give a desired allocation of the total GNP. In the short run, this is probably an exaggeration of the choices available; the number of mixes consistent with economic stability may be more limited. But for the long run, which is the appropriate context of this analysis, the assumption of a given GNP achievable with any of a large variety of policy mixes and resource allocations is reasonable.

Since the problem here is allocation of a projected real GNP as it moves along its growth path, the projections are made in constant 1969 prices. This does not imply any forecast about the price level; rather the assumption keeps the focus on the allocation problem.

POTENTIAL AND PROJECTED GNP

The output the economy would be capable of producing when operating at an unemployment rate of about 3.8 percent—called here potential output—is estimated to rise by about 4.3 percent per year in real terms. This results from projected growth of the labor force at 1¾ percent per year, a decline in annual average hours of work per person of one-quarter of 1 percent per year, and an increase of output per man-hour in the total economy of 2.8 percent per year. Projected available output is assumed to be below potential from 1970 until 1972, as a result of policies to slow inflation, but to equal potential output thereafter.

The resulting illustrative projections of available GNP at 1969 prices are shown at the top of Table 13.

CLAIMS ON THE NATIONAL OUTPUT

To list uses of the national output which though desirable would exceed potential output is not difficult. But that is not the purpose here. The purpose is to present the claims that already exist. The largest part of the claims is found in the usual consumption behavior of households, given the incomes they would be earning and the taxes they would be paying, and in the investment behavior of businesses, given the total output and demand projected. Other claims exist in the form of ongoing Government programs, goals stated in legislation, and proposals made by the Administration.

TABLE 13.—*Gross national product, 1969 and projections for 1970–75*

[Billions of dollars, 1969 prices; calendar years]

Claim	1969, actual	Projections					
		1970	1971	1972	1973	1974	1975
Gross national product available	932.3	944	980	1,042	1,103	1,150	1,200
Claims on available GNP	932.3	944	980	1,042	1,100	1,144	1,188
Federal Government purchases	102.0	93	89	88	87	87	86
State and local government purchases	112.7	116	120	125	131	137	142
Personal consumption expenditures	576.0	594	620	664	704	735	769
Gross private investment	141.7	141	152	166	178	186	192
Business fixed investment	99.3	103	105	111	116	120	125
Residential structures	32.2	29	34	40	46	49	49
Other investment	10.1	10	14	15	16	17	18
Excess of claims	.0	0	0	0	−3	−6	−12

Note.—Projections are based on projected Federal expenditures (see Table 14) and their influence on various components of GNP.

Detail will not necessarily add to totals because of rounding.

Source: Council of Economic Advisers.

Large claims not recognized in these estimates exist and new ones will emerge. However, it is sufficient here to show that the existing, visible, and strongly supported claims already exhaust the national output for some years ahead. This is not to say that no other claims will be satisfied, or that claims included in these calculations should have preference over claims not recognized here. The basic point is that if other claims are to be satisfied some of those recognized here will have to be sacrificed.

The projection of claims on the national output shown here corresponds to a projection of Federal spending. Federal spending affects not only the Federal Government's own purchases of goods and services but also the purchases of State and local governments, through Federal grants to them, and the purchases of consumers, through Government transfer payments. The method of estimating the claims is described briefly here and in more detail in the Appendix to this chapter.

1. The estimate of Federal spending includes a *baseline* projection of the costs of the Federal Government's 1970 program, in 1969 prices, and the costs of new programs already proposed by the Administration. The baseline adjusts the 1970 program for changes related to population, workload, and pay increases in 1969 dollars. The new initiatives, shown separately in Table 14, project the 1969 dollar costs of proposed new programs, such as the Family Assistance Program and Revenue Sharing, and proposed expansion of existing programs.

2. State and local spending is the estimated consequence of projected growth of GNP (in 1969 prices) and population to 1975 plus the grants included in the Federal expenditure projections of Table 14.

3. Personal consumption is the expenditure that would result from the amount of income that households would have available if the projected GNP at 1969 prices were produced, present tax laws remained in force (with the income tax surcharge expiring June 30, 1970), and governments made the transfer payments included in the government expenditure projections.

TABLE 14.—*Projections of Federal expenditures, national income accounts basis, 1970-75*

[Billions of dollars, 1969 prices; calendar years]

Priority category	1970	1971	1972	1973	1974	1975
Federal expenditures	189	192	196	200	204	206
Baseline	188	186	186	188	190	191
Purchases of goods and services	92	88	87	86	85	84
Transfer payments to persons [1]	56	59	62	65	68	70
Grants-in-aid	22	22	22	23	23	24
Other	19	16	15	14	14	14
New initiatives	1	6	10	12	14	15
Purchases of goods and services	1	1	1	1	2	2
Transfer payments to persons [1]	0	3	6	6	5	5
Grants-in-aid	0	2	3	5	6	7
Other	0	0	0	0	0	0

[1] Excludes transfer payments to foreigners, which are included under "Other."

Note.—Detail will not necessarily add to totals because of rounding.

Source: Bureau of the Budget.

It is assumed that personal saving is 6.5 percent of personal disposable income.

4. Residential construction expenditures are the amounts consistent with reaching the goal specified in the Housing and Urban Development Act of 1968 along the path of housing construction shown in the Second Annual Report on National Housing Goals.

5. Business fixed investment in real terms is estimated to decline as a fraction of privately produced real GNP from 12 percent, which it has averaged since 1966, to 11.5 percent by 1975. This would continue the downward trend of the ratio of capital stock to real output experienced since World War II.

6. The two other components of real GNP—inventory investment and net exports—are both projected to rise slowly with their total growing from $10.1 billion in 1969 to $18 billion in 1975 (in 1969 prices).

BALANCING CLAIMS AND RESOURCES

The results of these calculations are summarized at the bottom of Table 13 in the figures on the excess of claims over resources. The projected claims, which assume no addition to present Federal nondefense programs beyond those already proposed by the Administration, would approximately absorb all available resources through 1973 and leave room for significant additions only by 1975.

The basic lesson of the estimates is that the country is already at a point where, despite prospective rapid growth of output, a decision to satisfy an existing claim on a larger scale or to satisfy a new claim will require giving up something on which people are already counting.

These estimates are based on a number of assumptions which may turn out to be wide of the mark. Even a generous allowance for errors in the assumptions, however, is unlikely to change the fundamental picture. And some of the assumptions may themselves be optimistic. If potential output grew by only 4.0 percent rather than 4.3 percent, the excess of claims would increase, but only slightly, because consumption expenditures and business investment, which amount to about 80 percent of total claims, would also be smaller. On the other hand, the excess of available output over claims would be a little larger, about $4 billion more in 1975 (in 1969 prices), if personal savings were 7 percent of disposable income instead of the 6.5 percent assumed here. This is possible, but it is no more likely than that the personal savings rate should turn out to be 6 percent, which would increase claims on available output. Other departures from the assumptions are possible—certainly there will be some—but none seems sufficiently large or probable to change the conclusion. Moreover, there is little reason to expect that these departures will all be in the same direction.

Inability to meet all the visible claims would not deny that the country is rich and growing richer. The most comprehensive index of the economic condition of the population—real per capita personal consumption—would rise about 3½ percent per year under the Table 13 projections, compared to 2½ percent per year in the period 1957 to 1967. The conclusion is simply that choices must be made.

In fact, of course, choices will be made. The total of satisfied claims cannot exceed the available output. Policies, whether of omission or commission, will determine which claims get satisfied and which do not. The following discussion of ways in which claims and resources can be brought into balance is not intended to support any particular claims or any particular ways of meeting them. It is only intended to illustrate the options that are permitted and not permitted by the arithmetic of the economic system.

If the projections of output prove reasonably accurate, and Federal expenditures run at the projected level, or higher, with taxes unchanged, trimming of claims on output would fall mainly on investment. Private saving, together with the Federal surplus, would be inadequate to finance all the private investment claims shown here through 1973. Interest rates would rise, and, while this might stimulate saving, the main effect would be to make funds scarce and expensive and keep some investment demands from being met. Since housing is more sensitive to the supply of funds than other investment, the shortfall would probably be relatively larger in housing. If, however, the shortfall occurred in capital outlays of businesses, productivity would tend to be adversely affected, and the economy's rate of growth would lag.

Government policy could bring about a different pattern of resource allocation. If it were desired to do so, the combined investment claims shown here could be satisfied by either of two approaches, or some combination of them. One would be to hold Federal expenditures down, below the level projected here through 1973 and not too much higher thereafter. Federal purchases of goods and services would be lower, and State and local purchases and consumers' purchases would also be lower as a result of smaller grants and transfer payments. With purchases in these categories lower, more of the national output would be available for investment. As a corollary to this, there would be a larger budget surplus, which would make more funds available to finance private investment. To obtain the same level of investment with higher Federal expenditures, the second alternative would be to raise taxes to restrict private consumption, thus releasing resources for investment and sustaining the budget surplus needed to finance investment. These methods of generating a surplus to finance a desired total of private investment would not in themselves assure any particular division of the total between business investment and housing.

What has been said about the combination of taxes and expenditure programs that would be required to permit satisfaction of the private investment claims implies a certain relationship between the Federal surplus and private investment. The surplus must be large enough, when added to private saving, to finance the private investment. The higher the private investment desired, the larger, in general, will be the budget surplus required. This is the main longrun implication of a budget surplus.

The additional surplus that would be required to support an additional amount of private investment, say $1 billion, would probably be larger than $1 billion if the additional surplus is created by raising taxes to reduce consumer spending. This is because the higher taxes will probably reduce private saving somewhat, and the surplus must be large enough to cover the additional investment desired plus the loss of private saving. Thus, on the assumption used in this section that personal saving is 6.5 percent of personal income after tax, additional personal taxes and a further surplus of $1.07 billion would be required to increase the total of private saving and the surplus by $1 billion.

These are propositions about the national income accounts budget, which, unlike the unified budget, does not include as an outlay the net lending of the Federal Government. To the extent that net lending of the Federal Government to finance private investment is already included in the unified budget as outlays, the surplus that would be required in the unified budget would be smaller. The required surplus would be the excess (if any) of desired private investment over private saving plus Government net lending. That would not, however, affect the amount of taxes that would be required to bring about a given amount of private investment. It would only mean that part of the taxes would be used to finance the Government lending, rather than the repayment of Federal debt which would permit private lenders to supply more funds to private investment.

CONCLUSIONS

The estimates of this section are, of course, hypothetical calculations based on inevitably somewhat arbitrary assumptions. The costs of programs now on the books may turn out to be different from projections used here. Moreover, programs now in being can be modified or eliminated if people decide that costs are excessive or that other things are more important. The capability of the economy to grow may be different from what has been assumed. Nevertheless, for all of their necessarily hypothetical character, these estimates do highlight three important points that have major implications for fiscal policy. First, existing claims upon the growing available national output already exhaust the probable output and real national income that the economy can generate for several years to come. The satisfaction of a new claim, therefore, necessarily will require the rejection of another claim which now exists. Second, the Federal Government's fiscal policies will directly affect which claims on our national income are satisfied—not only the direct Federal claims but also State, local, and private claims. Federal actions that increase State, local, or private expenditures—even if those actions are not reflected in the Federal budget—

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generate claims against the national output. Therefore, the Federal Government should be concerned that its extrabudgetary as well as its budgetary actions do not generate excessive claims or do not cause more important uses of the national output to be displaced by less important ones. Third, the level of private investment in business plant and equipment, and particularly in housing, is necessarily directly affected by decisions that determine the character of the budget and the target for a longrun average surplus or deficit. The budget and the budget surplus should not be regarded merely as conventional symbols of sound finance; they have a profoundly important functional role in achieving national goals.

APPENDIX

Basis for Estimates of Output and Claims

POTENTIAL AND PROJECTED GNP

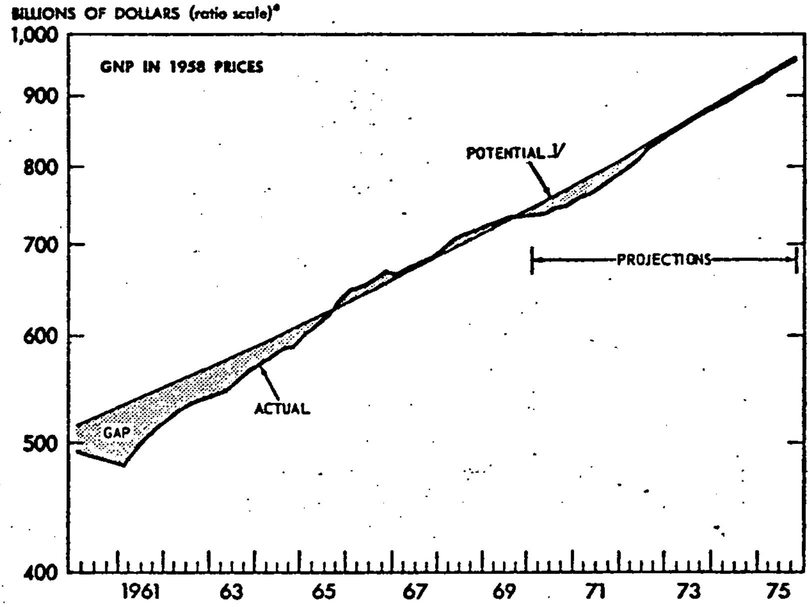
The available total output by years from 1970 to 1975 is estimated in two stages, one yielding potential output and the second yielding projected available output.

Potential output is considered to be the output the economy would produce when operating at a 3.8 percent unemployment rate. This is slightly above the rate in the last half of 1969 when actual output was considered to be close to the potential. The annual growth of real potential output is determined by the growth of the labor force, estimated at 1¾ percent per year, the decline in annual average hours of work per person, estimated at one-quarter of 1 percent per year, and the growth of output per man-hour. In the private sector of the economy, output per man-hour is estimated to grow by about 3.1 percent per year—less than in the early 1960's when resource utilization rose, but more than in 1965–69 when the economy operated under excessive demand pressure. Allowance for the fact that productivity growth in the Government sector, which produces about 9 percent of national output, is zero by definition (because Government output is measured by labor input) reduces the overall productivity growth rate to about 2.8 percent per year. Combined with the estimates of labor input, this yields about a 4.3 percent rate of growth of potential real GNP.

Projected available real output lies below potential output from 1970 to 1972 because some gap between actual and potential output is necessary to slow down inflation. A gradual closing of the gap is projected to permit the potential to be regained without reviving inflation. Potential and projected real GNP, in 1958 dollars, are shown in Chart 8. Projected available GNP in 1969 dollars is shown at the top of Table 13.

Chart 8

Gross National Product, Actual and Potential



*SEASONALLY ADJUSTED ANNUAL RATES.
1/ TREND LINE OF 3.5 PERCENT FROM MIDDLE OF 1955 TO 1962 IV, 3.75 PERCENT FROM 1962 IV TO 1965 IV, 4 PERCENT FROM 1965 IV TO 1969 IV, 4.3 PERCENT FROM 1969 IV TO 1970 IV, 4.4 PERCENT FROM 1970 IV TO 1971 IV, AND 4.3 PERCENT FROM 1971 IV TO 1975 IV.
SOURCES: DEPARTMENT OF COMMERCE AND COUNCIL OF ECONOMIC ADVISERS.

CLAIMS ON THE NATIONAL OUTPUT

Federal Expenditure Projections

Federal expenditure projections are presented before those for the private and State and local government sectors, because the level and nature of Federal expenditures affect the other expenditure components. The amount of Federal transfer payments to individuals affects consumer expenditure, and the level of grants affects State and local purchases. Because of these effects it is convenient to have an initial projection of Federal spending preparatory to making projections of expenditures in the rest of the economy.

Baseline Expenditures. The cost of the 1970 Federal program, adjusted for increases in workload and pay increases at 1969 prices, gives the projection of baseline expenditures in Table 14, broken down into purchases of goods and services, transfer payments, grants, and other expenditures.

The major increases in the baseline are projected for *transfer payments,* which rise by $14 billion (in 1969 prices) from 1970 to 1975, and *grants* to

State and local governments, which rise by $2 billion in that period. Much of the increase in transfers will be due to increased coverage and population growth, as more people receive checks for social security, disability insurance, and so forth. But part will also be due to higher real benefits. Much of the increase in grants will come in essentially open-ended programs, such as Medicaid, in which the Federal Government must provide matching funds if the States choose to provide funds for the program.

New Initiatives. The costs at 1969 prices of new programs proposed by the Administration in the Fiscal 1971 Budget are added to the baseline expenditures to give the projections of Federal expenditures used here. These in turn are broken down into purchases, transfer payments, grants, and other expenditures.

The costs of Federal programs at 1969 prices are projected to rise from $189 billion in 1970 to $206 billion in 1975. Two aspects of these expenditure projections are especially noteworthy. First, the projections include expansions of transfer and grant programs and a reduction of purchases. Expanded Federal programs would focus upon providing money to people in transfers, and to States in grants, rather than upon purchasing output directly. Second, projected Federal expenditures build up rapidly through 1974 and rise less rapidly thereafter. If this path were in fact to materialize, the claims-resources position would be tighter in the early 1970's, and a bit easier in the middle 1970's. But this flattening out of the expenditure path may instead reflect simply the difficulty of seeing more than 3 or 4 years ahead. As these years arrive, further proposals for new programs or extensions of existing programs can be expected to come forward. Thus it should probably be assumed that the position will be just as tight in the middle 1970's as in the next year or so.

State and Local Government Purchases

State and local government purchases of goods and services at 1969 prices are projected to grow with real GNP, population, and projected levels of Federal grants-in-aid from 1970 to 1975. Projected growth of these items yields the estimates of State and local purchases shown in Table 13. In 1969 dollars, State and local purchases are projected to increase from $116 billion in 1970 to $142 billion in 1975, or at an average annual rate of 4 percent. Of the $26 billion increase in State and local purchases from 1970 to 1975, $8 billion is projected to be due to population increases. This leaves a projected increase of $18 billion over and above the cost of providing State and local services at the present per capita level. This $18 billion represents an increase of 2.8 percent per year in the real per capita quantity of the services provided by State and local purchases, compared to the 1962 to 1968 average increase of 3.8 percent.

Personal Consumption Expenditures

Consumer spending is a fairly stable fraction of personal income after taxes, aside from shortrun variations. Personal income other than transfer payments is assumed to be 73 percent of GNP. Adding to this transfers by Federal, State, and local governments gives total personal income. Projected Federal, State, and local personal taxes are subtracted to arrive at disposable personal income, which is allocated between consumption expenditures, personal interest and transfer payments, and personal saving.

The projections assume a saving rate of 6.5 percent, and 2.5 percent for personal interest and transfers, leaving 91 percent for consumer spending. The projections of consumer expenditures in 1969 prices, based on the projected Federal expenditures, are shown in Table 13.

Two important assumptions in the consumer spending projections should be noted. First, the 6.5 percent saving rate is near the middle of the 4.9–7.4 percent range experienced since 1960. Second, the projections in the table assume present tax law.

Private Investment Demand

The remaining four elements of private demand are estimated independently of the Federal expenditure projections. These are business fixed investment, residential construction, inventory investment, and net exports.

Business Fixed Investment. Since cumulative net business investment equals capital stock, the projection of investment should yield an accumulated capital stock consistent with the projected GNP path and a reasonable capital-output ratio.

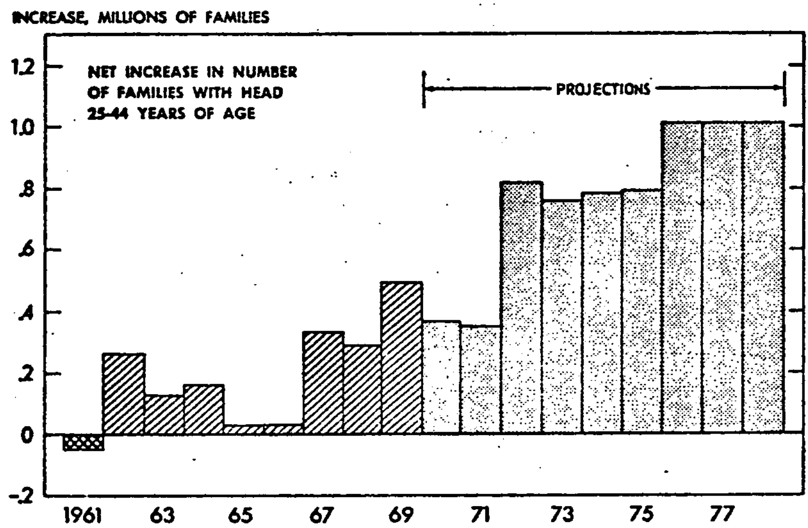
Since 1966, real business fixed investment has averaged 12 percent of real private output. It is estimated that if this fraction gradually falls to 11½ percent by 1975, the ratio of capital stock to real output would continue the slow downward trend experienced since World War II. The projections of business fixed investment in 1969 dollars are shown in Table 13.

Residential Construction. A key area of the projections is residential construction. Twice in the last half decade homebuilding has been severely squeezed by the competition of the Federal deficit and high business investment for the supply of private saving. Moreover as Chart 9 shows there will be a substantial increase in the rate of family formation in the next 5 years. Both because of the backlog of need created by the housing declines in 1966 and 1969–70 and because of the increased demand for housing generated by family formation, the number of housing starts is likely to rise considerably in the early 1970's.

In the Housing and Urban Development Act of 1968, Congress stated a goal of 26 million new housing units to be constructed from fiscal year 1969 to fiscal year 1978. The Second Annual Report on National Housing Goals to be submitted by the President this month projects a path of housing construction, including both conventional and mobile homes, to 1978 which will meet the goal and is considered feasible. The conventional

Chart 9

Net Family Formation



SOURCES: DEPARTMENT OF COMMERCE AND COUNCIL OF ECONOMIC ADVISERS.

housing starts portion of this path, on which the residential construction projection is based, is shown in Chart 10.

This path of starts gives the residential construction projection in 1969 dollars shown in Table 13. The projection assumes residential construction expenditures per start (in 1969 dollars) of $21,800— the 1959–68 average— from 1970 to 1975. This cost figure will turn out to be high if the cost-reducing potential of Operation Breakthrough, the industrial housing program of the Department of Housing and Urban Development, is fulfilled.

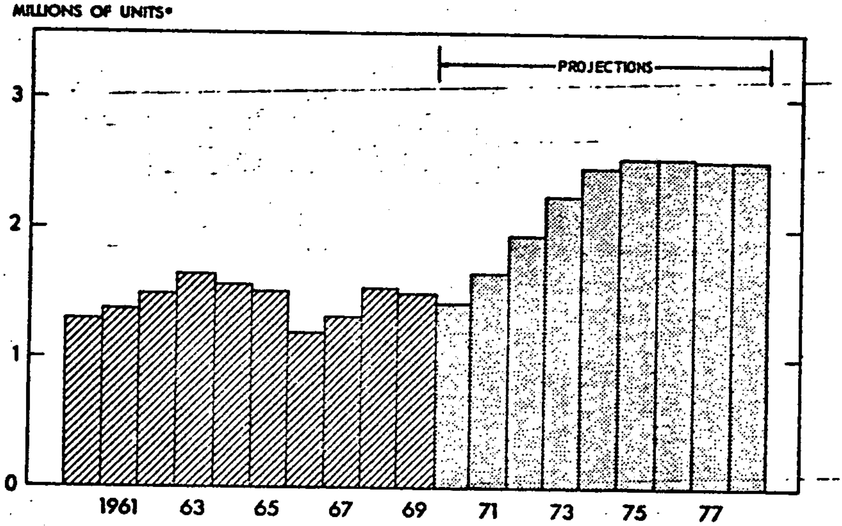
The two small remaining components of GNP—inventory investment and net exports—are both projected to grow roughly in line with GNP from 1970 to 1975. Inventory investment along trend is expected to be roughly a constant fraction of GNP, perhaps 1 percent. This would maintain an approximately constant ratio of stocks to final sales. Net exports are projected to expand from the 1969 low as the U.S. trade position improves.

Total Expenditure Projections

The second line of Table 13, "Claims on available GNP," which adds up the expenditure projections assuming projected Federal expenditures, shows total visible claims on potential GNP.

Chart 10

Housing Starts



*TOTAL PRIVATE AND PUBLIC. DATA EXCLUDE MOBILE HOME SHIPMENTS.
SOURCES: DEPARTMENT OF COMMERCE AND DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

To avoid confusion, it should be noted here that the "Claims on available GNP" of Table 13 is *not* the equilibrium GNP in 1969 dollars that would result if the "exogenous" investment and government expenditures were realized. This is because consumer spending is projected on the basis of present tax law, transfer payments in the Federal spending projections, and *available GNP*. Thus the difference between available GNP and "Claims on available GNP" is the reduction in exogenous expenditure needed to bring the demand for output down to the level of available GNP.

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CHAPTER 3

National Priorities and the National Output

INTRODUCTION

THE COUNTRY'S ATTENTION THIS YEAR is focused on the problem of raising total production and employment to the point where we are fully using the Nation's capacity to produce. But we cannot afford to neglect measures that will promote continued rapid growth of that capacity and bring about its utilization for the most important purposes. Our success in achieving these goals will significantly affect the quality of American life for years to come.

In recent years the desirability of increasing production has been more strongly challenged than previously, and at the extreme there are some who look upon economic growth as the mere enlargement of a quantity without human meaning or value. But economic growth means increasing capacity to produce what is wanted—as is indicated by the term "goods and services," meaning a good for or service to someone. The product is not measured in tons or miles or calories. It is measured by the value that someone puts on it. The key question is whose value counts.

In the measures of total output commonly used in the United States, the value of products is what purchasers pay for them. That is determined not only by the purchasers' preferences but also by conditions of supply. The conditions of supply in turn reflect the natural and technological circumstances at a given time as well as the preferences of suppliers of labor and capital. Thus the value by which a product is measured synthesizes the preferences of consumers and suppliers of resources as expressed in markets and in the political process. For example, a pound of butter counts for more economic output than a pound of coal because it combines a higher consumer valuation and a higher cost to produce. The most comprehensive measure of economic output, gross national product, is in fact defined as the market value of the Nation's output of goods and services. The same decentralized process that determines the values used in measuring the output also determines what gets produced.

For anyone whose values differ greatly from those of the general synthesis, the measurement of economic growth will be different from that commonly made. For anyone to whom clean water is the only valuable product there has been no economic growth since the time of Hiawatha. The argument is ultimately a matter of taste, and the only comment one can make on it is that most people do not feel that way. The capacity of the economic system to produce what is valued by today's population—as represented in the market and in the political process—has increased rapidly and continues to do so. One can say no more about economic growth than that those whose decisions are reflected in the composition of output are better able to satisfy their desires in a growing economy. But if the markets are competitive and the decisionmaking process is democratic, that is saying a good deal.

The case for production is not necessarily the case for a particular statistic of production such as the gross national product, and the case for economic growth is not necessarily a case for increasing the gross national product. The GNP is not a perfect measure of all the activities comprehended in the idea of economic output. This has long been recognized, and it has most recently taken on new meanings and a new sense of urgency through growing concern for the environment. Many deteriorations or improvements of the environment are not accounted for in the gross national product, even when they are incidents of the production process. This is only a newly conspicuous example of those limitations of the GNP statistic which have been well known for a long time.

On the other hand, the gross national product measured in real terms does not count as "product" many benefits which are provided as a part of the production process, such as training, education, health care, and even cars and subsidized meals for employees. Only the cost of developing a public park goes into GNP, though the new park may add economic value to other properties in the neighborhood. Nor does the GNP include the value of the large amount of productive but unpaid work done in and out of the home, such as the housewife's services. It can take no account of changes in the burdensomeness of work, or the length of the workweek, or the wider choice of products available; and it only inadequately accounts for the consequences of the introduction of new products.

Despite these limitations the GNP statistic has made a great contribution to understanding how the economy is working. And, although GNP is not a complete measure of economic production, still less of "welfare," its level and rate of increase are positively associated with what most people and most societies consider an improvement in the quality of life. All over the world, in countries whose cultures and values differ widely, we see a drive for increasing the measured gross national product. Moreover, insofar as we are able to measure conditions of life not incorporated in the GNP, such as mortality and morbidity rates, educational attainment, and cultural facilities, these tend to improve in countries with higher per capita GNP. Evidence of a relation between GNP and the popular preference is seen in migration within the United States. There is a large net movement to those parts of the country, especially the metropolitan areas, where all the attributes, desirable and undesirable, of a high-income industrial society are most intensely present.

While the Nation has been engaged in a new and earnest soul searching about the role of growing material affluence in the good life, it is probably true that in general the American people prefer a rapid growth of GNP and its consequences. There is, in fact, a good deal of evidence that in the years ahead the demands on our capability to produce will be growing in intensity rather than diminishing. One of the great merits of the American system, however, is that those who do not share this common preference have the opportunity to make alternative choices. An important virtue of the market system for organizing economic activity is, therefore, precisely that we can more closely tailor our productive activities to the wide-ranging diversity of individual wants and preferences.

This is not to say that growth of measured GNP is an absolute to be furthered at all costs. As individuals and as citizens we clearly do many things that reduce the growth of GNP, and we fail to do many things that would accelerate it. This is perfectly reasonable; growth of GNP has its costs, and beyond some point they are not worth paying. Man wants more than is counted in GNP. People's values change. Conditions of life change. These may lower the point beyond which more growth of GNP is not worth its costs. Even so, growth of GNP would still be an objective about which we are not indifferent.

In any case, whatever may be true or become true about the relative values of the product included in the GNP and the product excluded from it—the automobile on the one hand and the clean air on the other—there is little evidence that we are witnessing a decline in the value assigned to economic output as a whole. This means that great importance must be assigned to the basic factors which influence our total capacity to produce. These are in the long run essentially the same for producing GNP as for producing other benefits. They are the size and competence of the population, the state of knowledge, the stock of capital, and the effectiveness with which these are combined. We can foresee no diminution in the need for these factors if we as a people are to come closer to meeting our objectives. In fact, as we shall show below, the existing propensities of the population and the policies of the Government constitute claims upon the GNP itself that can only be satisfied by rapid economic growth.

In the long view of history, the average rate of economic growth in the United States has been exceptionally high. In the latter part of the 19th century per capita real incomes in the United States and industrial Europe were roughly equal. But by the middle of this century U.S. real per capita income and output were roughly double those in advanced European economies. We expect that the rate of growth of real per capita income in the 1970's will be even higher in this country than our historical average. This will happen solely because we will have unusually rapid growth of the labor force relative to the growth of the population. Without special policies to encourage productivity gains, a faster rate of growth of output per worker or per worker-hour than the country has experienced since the end of World

War II does not seem to be a reasonable expectation. There is some evidence that the higher rate of growth of the labor force might also affect productivity favorably, but there are also reasons for fearing that productivity may rise less than in the past. One reason commonly cited is the increased proportion of the population that will be employed in industries whose gains in productivity are slow. Although there is no assurance that productivity in the U.S. economy will rise as fast as in the recent past, extraordinary increases in the rate of productivity have been achieved by some other countries, notably Japan. This fact at least raises, though it does not answer, the question whether there are applicable policies that would also accelerate productivity here.

The rates of growth of total capacity to produce and of output per hour of work will depend principally on the decisions of individuals and businesses—decisions about saving and investing, about the education of children and the training of adults, about the pursuit of opportunities to earn higher incomes. Still, the actions of Government also affect the rate of growth and must be evaluated from that standpoint. The policy of this Administration has been aimed at sustaining the rate of growth of productivity to which we have been accustomed and if possible raising that rate moderately. A drop in the rate of growth of productivity below the expected increases in real wages and in real taxes would generate difficult tensions, especially when the illusions of inflation were fully recognized. A higher rate of productivity growth would be desirable to satisfy escalating demands, but in the American free market economy the Government's ability to stimulate growth in productivity is limited.

Some of the major policies of the Administration to promote growth may be briefly noted:

The struggle against inflation is itself critical for economic growth. The institutions for mobilizing savings in the United States and channeling them into investment depend basically upon reasonable confidence in the value of the dollar. Many kinds of investment which make a valuable contribution to growth would suffer if the future stability of the general level of prices became highly uncertain.

The Administration has kept Federal spending on a path that would not exceed the revenues the tax system would yield under conditions of full employment. With this policy the Federal Government does not absorb private funds to finance a deficit when the amount of private investment is crowding against the supply of savings.

Despite the stringency of the budget position, the Administration has supported a continued strong Federal effort to promote research and development. Total obligations for the conduct of research and development in fiscal 1972 will be $16.7 billion, according to the Budget just submitted, up 8 percent over 1971. For research alone the increase will be 9 percent, and most of that is outside the defense program. Obligations of the National

Science Foundation for research will be 44 percent higher than in 1971 and 71 percent higher than in 1970.

The Administration has supported an increase in manpower training programs as a means of speeding up the improvement of the capabilities of the labor force. Training is also a way of helping workers to adapt to changing requirements in labor markets and thus of reducing the amount of unemployment. The Budget submitted by the President in January provided for an increase of 40 percent in outlays for manpower programs, between fiscal year 1970 and fiscal year 1972. In addition the Administration has proposed a reorganization of the training programs to improve their effectiveness and adaptation to local needs.

A new expanded program of student loans, grants, and work-study payments with subsidies based on need has been proposed to ensure that the post-secondary education of those persons whose higher education would be most valuable to themselves and to the Nation is not limited for financial reasons. It is estimated that 2.5 million students will receive benefits from this program in fiscal 1972.

The Federal Government is the largest employer in the country, having over 2.5 million civilians on its payroll at the end of 1970. An increase in the productivity of these workers would have a marked effect on average productivity in the economy as a whole. The Administration is making a determined effort to improve management and personnel utilization throughout the Federal service. Probably the most fundamental step in this direction was the reorganization of the postal service to permit the application of businesslike standards of investment and management.

TAXES AND GROWTH

In 1969 the Administration supported repeal of the investment tax credit. At that time it was an excessive stimulus to business investment in view of competing demands on the economy. In the Tax Reform Act of 1969 the Congress went considerably beyond this. By changing a number of provisions of the tax law, it raised the tax burden on investment, through higher levies on corporate profits, and thereby reduced both the supply of internal funds available for business investment and the incentive to invest. At the time the Administration suggested that if Congress considered the particular changes essential for reasons of equity or other considerations it should offset their overall effect by reducing the corporate profits tax rate. Congress did not, however, accept that suggestion.

The repeal of the investment tax credit, combined with the other features of the Tax Reform Act of 1969, yielded a tax revision that was excessively burdensome on business investment, and the Administration recognized that this imbalance would need to be redressed at an early date. Surveys of business investment for the period immediately ahead now indicate a flattening in money terms and probably some decline in real terms in this key ingredient for future economic growth. This is an appropriate time to reduce the burden on business investment. Accordingly, the President has announced a revision of the depreciation rules that will provide greater incentive for business to invest in capital equipment. This will be accomplished by permitting tax lives which are shorter by 20 percent for most types of equipment. Although the effects may build slowly, the stimulus to business investment will help to support the recovery of the economy as well as to stimulate economic growth and productivity.

THE NATIONAL COMMISSION ON PRODUCTIVITY

Recognizing the importance of economic growth in the future of America and the contribution that all sectors of the society could make to it, the President in June 1970 established the National Commission on Productivity. The Commission included representatives of business, labor, the general public, and the Federal Government. Its basic function is to recommend policies, not only for the Federal Government but for others as well, to speed up the rise in productivity.

The Commission was established against the background of concern with the inflation problem. The importance of productivity as an offset to increases in labor costs per hour is well recognized. However, the purposes of productivity improvement and the interests of the Commission extend beyond the control of inflation. Improvement in our levels of living, including improvement of our physical environment, depends on productivity gains. The stakes here are high. If we could, for example, increase the rate of productivity growth by only one-tenth of 1 percent a year, we could produce $15 billion of additional output per year by the end of this decade.

In pursuit of its objectives the Commission has organized itself into four working groups, designated by the general topic which each will examine. They are:

1. Education and research.
2. Management organization and capital.
3. Labor and management policies and practices.
4. Government activities.

Each of the working groups has within its scope a large number of potential policy questions and programs for review. Each group will consider the broad, aggregative issues coming under its jurisdiction—such as the impact of education and of research and development on productivity; capital investment needs and their implications for savings; practices in collective bargaining that lead to higher productivity and higher rewards to workers; and the influence of Government actions such as procurement, regulation, and construction contracting. The Commission also plans to make studies or recommendations about specific industries, especially where productivity is relatively low; the utilization of scientific and technical manpower; and methods of improving productivity in Federal, State, and local government.

ECONOMIC GROWTH AND NATIONAL PRIORITIES

If it is agreed that economic output is a good thing, it follows by definition that there is not enough of it. This fact means in turn that choices must be made among uses of it. Each of us is constantly encountering this necessity in the management of his private affairs. By and large the way the national output is used is decided by millions of decisions of private households. But the question of how it ought to be used—commonly labeled the question of national priorities—has been a matter of increasing national concern. There are several reasons for this. First, the degree to which the Federal Government influences the uses of the national output has increased, and the degree and pattern of Federal influences that are desirable is itself an open question. Second, the validity of private decisions about the use of resources is increasingly being challenged.

The effects that Federal policy may have on the uses of the national output are usually considered in the context of the annual budgetmaking and appropriations process. The underlying notion is that a certain amount of money, presumably representing claims on the national output, is to be allocated to Federal use and then divided up among alternative Federal uses, such as defense, health, or highways. The annual budgetary process is essential because it forces periodic evaluation of many Federal programs, and it will undoubtedly continue to be a basic framework for making decisions. However, if we are to understand and control what we are doing, it is necessary to go beyond the annual allocation of the Federal budget total and consider over a longer span of time and within a wider framework the Federal influence on the allocation of the total national output.

There are several reasons for viewing national priorities in a larger context. One is that many Federal budget decisions strongly influence State and local decisions as well as private decisions. It is often difficult to quantify exactly how and to what degree these other decisions will be affected, but in some cases the influence is clearly substantial. There are many ways in which Federal budget decisions influence private and State and local decisions. The volume of Federal transfer payments affects the level and composition of private consumption. The volume and character of Federal grants-in-aid affect the level and character of expenditures by State and local governments. The volume and character of Federal loans, interest subsidies, and tax provisions affect the volume and character of private investment. Federal provision of services and facilities, such as highways, influences the level and character of private and State and local spending, since these services and facilities in some cases compete with and discourage non-Federal expenditures and in other cases complement and encourage them.

Although it is often difficult to define precisely how these Federal decisions influence non-Federal decisions, the pervasiveness of the phenomenon means that the influence of Federal on non-Federal decisions cannot be ignored. One major purpose behind the projections of GNP and its components that were presented in the 1970 *Economic Report of the President* and are continued this year is to account for some of the indirect effects of Federal budget decisions.

A second major reason for analyzing Federal budget decisions in a broader context is that the consequences of decisions almost always extend well beyond the annual reach of the budget. For example, the Housing and Urban Development Act of 1968 stipulated a goal of 26 million housing units for the 10-year period 1968–78. This Federal decision about national priorities actually concerned the share of GNP devoted to housing, not the share of the Federal budget related to housing. But it was also a declaration which had an important bearing on the targets for national investment and savings and on use of resources for the entire 1968–78 period. Such decisions are, of course, not irrevocable and need to be reconsidered in the light of changing conditions and goals. This is not, however, a substitute for initially exercising as much foresight as possible. There are many other examples of Federal laws or budget decisions that have important and long-lasting implications for the determination of national priorities. The recent act to increase Federal pay commensurately with private wages and salaries links the Federal budget to wage increases in the private sector. The proposed automatic increases in Social Security payments in response to increases in the consumer price index is another example of budget decisions for the future that are built into current law and are therefore beyond control except by further legislation. Another extreme example that illustrates the degree to which future decisions about priorities are made today is Federal loan subsidies. Such subsidies may be very small for any one year, including the initial year, but they do commit the budget to large and growing outlays in future years. Sections 235 and 236 of the National Housing Act, for example, provide for mortgage payments and interest subsidies entailing new commitments for 1971 amounting to an estimated $400 million. If the programs remain on the books and new commitments continue at the 1971 rate, the annual outlay would ultimately stabilize at $14 billion per year, since the subsidized mortgages have an average term of 35 years. While these programs are playing an important role in the achievement of social objectives, they do limit flexibility in changing the budget in the future and in changing the composition of future national output.

A third reason for making projections for the entire economy rather than for the budget only is that many Federal decisions which affect the allocation of the national output do not pass through the Federal budget. This is true of many regulatory decisions and decisions about monetary policy, for example. A Federal decision to require antipollution devices will require additional investment that can only be made at the expense of other uses of our national output. This investment will then not be available for projects that improve efficiency in the more orthodox sense, and therefore gains in measured productivity may be smaller, product prices higher, and increases in the array of goods and services available to consumers smaller. While this decision to require antipollution devices does not enter the budget, it does require or imply an important decision about national priorities and the uses of national output.

The pervasive effects of Federal decisions throughout the rest of the economy and through time require close scrutiny of Federal decisions to ascertain their total impact. Unfortunately, many of the linkages are not well known and can only be approximated at this time. Even such a rough outline, however, may be more helpful than ignoring the problem entirely.

FUTURE NATIONAL OUTPUT AND CLAIMS UPON IT

This section presents estimates of the total output that would be available in 1975–76 if the capacity of the economy were fully utilized. It also offers some very tentative estimates of the uses that would be made of that output as a result of existing Federal programs and of the claims and propensities observed among private businesses, households and State and local governments. The estimates are summarized in Table 26.

The procedures for deriving the potential supply of GNP and the visible private and government demands when the economy is operating at potential are similar to those used in the 1970 *Economic Report of the President.* The projections of Federal expenditures incorporated in the estimates are shown in Table 27.

The *gross national product available* is estimated on the basis of assumed characteristics of supply in the economy in the next 5 years. The principal element in this computation is an assumed 3-percent trend rate of increase of productivity (output per labor-hour) in the private economy. No method exists for estimating precisely the productivity growth of the economy over a long period, since it is subject to the rate of technical progress, the industrial composition of output, the mobility of the labor force, and many other complex influences. Behind the assumption of 3-percent productivity growth is an industrial composition of output that shifts fairly rapidly toward the service sector and the government sector. This shift toward sectors with historically low rates of productivity gain and low levels of productivity tends to generate a lower rate of productivity increase for the entire economy. The assumed rate of technical progress varies, of course, from industry to industry. The specific detail behind this productivity assumption is available in Table A–15: *The U.S. Economy in 1980,* Bureau of Labor Statistics Bulletin No. 1673. The total labor force and the civilian labor force are assumed to rise about 1.8 percent per year in line with projections of the population and of labor force participation rates. It is also assumed that average hours worked will decline by 0.2 percent per year in the private sector.

These assumptions, and others about how output will rise as the total labor force increases and about the private and government composition of final output, yield a potential growth rate of GNP of about 4.3 percent. The actual real GNP could in any year be above or below the potential,

Table 26.—*Real gross national product, 1955, 1966, and 1969, and projections for 1975–76*

Claim	Actuals			Projections	
	1955	1966	1969	1975	1976
	Billions of dollars, 1969 prices				
Gross national product available	569.0	845.5	931.4	1,199	1,251
Claims on available GNP	569.0	845.5	931.4	1,188	1,232
Federal Government purchases	69.8	88.3	101.3	83	83
State and local government purchases	53.8	94.4	110.8	140	144
Personal consumption expenditures	344.3	519.2	577.5	768	802
Gross private domestic investment	96.9	137.5	139.8	192	198
Business fixed investment	55.1	92.0	99.3	128	134
Residential structures	34.5	29.4	32.0	52	52
Change in business inventories	7.3	16.1	8.5	12	13
Net exports of goods and services	4.2	6.1	1.9	5	5
Unallocated resources	.0	.0	.0	11	19
Addendum: Federal surplus or deficit (−), national income accounts basis	5.6	−.2	9.3	25	32
Per capita personal consumption expenditures	2,083	2,637	2,842	3,529	3,641
	Percent of total GNP available				
Gross national product available	100.0	100.0	100.0	100	100
Claims on available GNP	100.0	100.0	100.0	99	99
Federal Government purchases	12.3	10.4	10.9	7	7
State and local government purchases	9.5	11.2	11.9	12	12
Personal consumption expenditures	60.5	61.4	62.0	64	64
Gross private domestic investment	17.0	16.3	15.0	16	16
Business fixed investment	9.7	10.9	10.7	11	11
Residential structures	6.1	3.5	3.4	4	4
Change in business inventories	1.3	1.9	.9	1	1
Net exports of goods and services	.8	.7	.2	(1)	(1)
Unallocated resources	.0	.0	.0	1	2
Addendum: Federal surplus or deficit (−), national income accounts basis	1.0	.0	1.0	2	3

[1] Less than 0.5 percent.
Note.—Projections are based on projected Federal expenditures (see Table 27) and their influence on various components of GNP.
Detail will not necessarily add to totals because of rounding.

Sources: Department of Commerce and Council of Economic Advisers.

Table 27.—*Projections of Federal Government expenditures, national income accounts basis, 1975–76*

[Billions of dollars, 1969 prices; calendar years]

Type of expenditure	Projections	
	1975	1976
Federal Government expenditures	216	217
Purchases of goods and services	83	83
Transfer payments to persons [1]	84	86
Grants-in-aid	30	30
Other	18	18

[1] Excludes transfer payments to foreigners, which are included under "other".

Note.—Detail will not necessarily add to totals because of rounding.

Sources: Office of Management and Budget and Council of Economic Advisers.

though it is the object of policy to keep a reasonable balance between actual and potential output. This chapter is concerned with the allocation of the total output when it is equal to potential.

Briefly stated the other major components are determined as follows:

1. *Claims on Available GNP.* These are the sum of the demands for output (items 2 through 7).

2. *Federal Purchases.* These involve a projection of the costs of existing Federal programs and new initiatives proposed by the Administration. The dollar costs of existing programs have been increased where this is proper to allow for the growing population, the rising workload, Federal pay increases, and relative price increases of the goods the Federal Government buys. These dollar costs are then deflated to 1969 prices.

3. *State and Local Purchases.* The growth of these purchases in real terms is assumed to be a function of the rise in real GNP, Federal grants-in-aid, and the population.

4. *Personal Consumption.* Purchases by consumers are assumed to be a function of real GNP, Federal personal taxes, State and local taxes, Federal transfers, State and local transfers, and a level of personal saving that averages 6.5 percent of personal disposable income.

5. *Business Fixed Investment.* In real terms this component is estimated to be about 12 percent of real private GNP in 1976. This proportion has been adjusted upwards from the assumption used in the 1970 *Economic Report of the President* because of the shortfall of actual below expected investment in 1970 and 1971 and because of the effects of the recently adopted accelerated depreciation allowances.

6. *Residential Construction.* In real terms this component is estimated to follow a path that achieves the 26 million housing units explicitly called for in the Housing and Urban Development Act of 1968.

7. *Inventory Investment and Net Exports.* Both are expected to rise slowly at about the same rate as total real GNP.

According to these estimates, present programs and tendencies would leave unallocated to any specified use 1 to 2 percent of the potential output in 1975–76. This does not mean that this proportion will find no demand and will therefore remain unproduced. Whether that happens or not will depend on factors such as fiscal and monetary policy discussed elsewhere in this report. What it does mean is that the simple relationships used here do not tell how that 1 to 2 percent of the potential output will be used. There are various possibilities for its use. If the economy is kept at its potential by monetary policy, for example, then an excess supply of savings implicit in the projected excess supply of output would depress interest rates; it would probably also reduce planned saving and raise investment, including residential construction. Another possibility is that taxes would be reduced, presumably with the effect of increasing private consumption and perhaps investment. A third possibility would be an increase of Federal expenditures; in that case the effects on the pattern of output would depend on the nature of the expenditure.

The estimates also reveal a Federal budget surplus in the national income accounts of about 2 to 3 percent of potential output in 1975–76. This surplus does not by itself explain the existence of unallocated resources. In fact, as Table 26 shows, there were substantial surpluses in 1955 and 1969, when obviously there was no unallocated output, and actual output was approximately at the potential. So in 1975–76 the unallocated resources could be used without reducing the surplus. Still, two of the three methods listed above for allocating the unallocated resources—increasing expenditures and reducing taxes—would also reduce the budget surplus. In the simplest case, if all the unallocated resources were devoted to Federal purchases, the annual surpluses would be reduced to about 1 percent of potential output—which would be about the same as in 1955 or 1969. These surpluses would be an addition to private saving to finance private investment and State and local deficits.

However, the lesson in the estimates is not that there are unallocated resources for the mid-1970's, but that they are already so small. There is a natural tendency in the political process to add commitments for continuing expenditures while clipping away—slowly and gradually, or occasionally with bigger strokes—at the revenues. The margin for these actions is already small. Adding $3 billion each year to the cost of existing programs, in 1969 dollars, would exhaust the unallocated economic resources that now appear for 1975–76. To insist on doing more, taking the expenditure and revenue sides of the budget together, would draw resources from other uses. If the lid were kept on the economy by tight money to prevent inflation, high interest rates would tend to draw these resources out of housing, State and local government outlays, and business fixed investment. If inflation were permitted, the share of the national income going to taxes would rise and cut real consumption. With higher prices there would be higher money incomes, but taxes would rise still more rapidly, since the Federal tax system is progressive. This is the simplest way in which excessive Government spending or a reduction of nominal tax rates restores the effective tax rate needed to equate aggregate supply with aggregate demand.

The estimates presented here reveal an increase in real consumption between 1969 and 1976 that is much faster than occurred from 1955 to 1969. In the earlier period real per capita consumption increased only 2.2 percent a year, while in the period ahead it is estimated to rise by 3.6 percent a year. Most of this difference is due to an expected faster rise in per capita output in the later period—3.1 percent against 2.1 percent. This estimated rise is in turn the result of the projected faster growth of the labor force relative to population in the years ahead. The remainder of the difference results from a faster increase in the share of consumption in the GNP, due mainly to reductions of tax rates and an increase of transfer payments. The reduction of taxes, the increase in transfer payments, and the consequent increase in the consumption share are made possible by a reduction in Federal purchases, a reduction that shows up absolutely and even more as a share of the potential output. It is mainly a consequence of the projected absolute and relative decline of defense spending in real terms.

The sum of the growth in available resources and the decline in Federal purchases between 1969 and 1976 may be viewed as a "peace and growth dividend." It amounts to $338 billion in 1969 dollars. About 66 percent of this would be absorbed by personal consumption according to the estimates presented here, almost 10 percent by State and local purchases, and the remainder, including 6 percent which still is unallocated, by the other categories.

The share of State and local purchases in the total remains almost unchanged despite the effect of revenue sharing, which is estimated to add about $5 billion in 1969 dollars to State and local purchases by 1975. This means that per capita State and local purchases would be rising at a slightly lower rate than per capita output, about 2.6 percent a year in real terms compared with 3.8 percent from 1955 to 1969. During the years ahead the school-age population will be increasing much less rapidly than in the earlier period; since education counts for a very large proportion of the cost of State and local governments, we should therefore expect a slower increase in per capita State and local services.

The present estimate of unallocated resources in 1975 is slightly smaller than was estimated in last year's *Economic Report of the President.* Many of the components have changed but tended to have offsetting effects on the level of unallocated resources. On the one hand, the Federal budget, especially in transfers, grew much more rapidly than was projected a year ago, a fact which has tended to increase private consumption and State and local spending and to reduce the unallocated portion. On the other hand, the higher inflation than was expected in the last year has increased "real" Federal personal tax receipts at full employment (because of the progressiveness of the tax system); as a consequence projected private consumption has been reduced because the relatively higher Federal personal taxes reduce disposable income. More succinctly, higher inflation rates act like a tax on real income, but the rapid growth of transfer payments has sustained real disposable income.

ALLOCATION OF THE NATIONAL OUTPUT AMONG FUNCTIONS

For many purposes the discussion above covering the past and prospective uses of the national output classified by the purchaser (Federal, State and local governments, consumers, businesses) is significant. We are interested in the buyers who will claim the output and the size of the different markets that will absorb it. But "priorities" are also reflected in the distribution of the national output by functions or uses, such as health and education, regardless of who is the purchaser. There is, for example, interest in how much of the national output is devoted to education, and whether it is paid for privately, by State and local governments, or by the Federal Government.

This section presents estimates of the allocation of the national output by certain broad functions and also the share that Government expenditures represent in the total for each function. It should be noted that the estimates are crude in many respects, the existing national accounts statistics not having been developed for the uses made of them here. The following discussion is offered as much to illustrate a fruitful approach that deserves more work as to suggest substantive conclusions.

The share of Government expenditures in a functional category is not an adequate measure of the amount of the total that is "due to" Government, with the implication that the total would be correspondingly lower if the Government's share were lower. Obviously, Government cannot be adding to the share of all functions. The output would be divided among all the functions somehow even if there were no Government. It cannot even be assumed that Government always enlarges those functions when it spends more than the average. Government expenditures on occasion may displace private or State and local expenditures—or it may attract them. Nevertheless, the figures provide an initial basis for thinking about how the national output is used and how the Federal Government may be influencing the process.

The allocation of the national output over the past 15 years is shown in Table 28. The appendix to this chapter gives a more exact definition of the different functions. The years that were chosen for Table 28 are years when the economy was at or near full employment; the comparisons between these years are therefore not affected by substantial differences in the economy's operating rate.

TABLE 28.—*Percentage distribution of GNP in current prices, by function, 1955, 1966, and 1969*

Function	Percent of total GNP, current prices		
	1955	1966	1969
Total GNP	100.0	100.0	100.0
Basic necessities	45.7	42.3	41.6
Education and manpower	3.7	5.7	6.3
Health	4.1	5.6	6.4
Transportation	10.6	9.9	10.0
General government	2.0	2.7	3.1
Defense	9.3	7.8	8.3
New housing	5.9	3.5	3.7
Business fixed investment	9.6	10.9	10.7
Net exports and inventory change	2.0	2.7	1.1
All other	7.1	9.0	8.8

Note.—Detail will not necessarily add to totals because of rounding.

Sources: Department of Commerce and Council of Economic Advisers.

Changes over the past 15 years have been substantial but are not unexpected. With the advance in per capita incomes, it is not surprising that spending for basic necessities, such as food, clothing, and rents (actual and imputed), has declined in relation to GNP. There has also been a general trend away from defense and housing investment.

The sectors where strong growth in demand has occurred are education, health, and general government. The general government category includes expenditures for fire and police departments and natural resource programs, including pollution abatement. Those sectors where expenditures are increasing are also the sectors where prices have risen very rapidly. If the GNP and its functional components were adjusted for these relative price increases, the distribution of the functional components would be different, and shifts in the distribution probably would not be as marked.

The role of the Federal Government in this shift in the character of output has been important. It is simple to measure the direct Federal and State and local purchases in each of the functional categories. But the direct share of national output that the Federal Government purchases does not fully represent its influence in determining the composition of national output. For example, the Federal Government influences the functional composition of GNP through its grants programs. Large grants have been made to State and local governments, and these grants, which are tied to particular uses, have accounted for an increasing portion of the Federal budget. Also, transfer programs, such as Medicare, have been increasing rapidly in recent years. These transfers are often tied to particular end uses of GNP, and so they are also important determinants of the final composition of GNP. Table 29 lists the functional composition of the Federal budget.

TABLE 29.—*Percentage distribution of total Federal Government expenditures, by function, 1955, 1966, and 1969*

[Percent]

Function	1955	1966	1969
Total Federal Government expenditures [1]	100.0	100.0	100.0
Basic necessities	23.2	27.2	29.5
Education and manpower	2.3	3.7	3.8
Health	1.7	4.3	8.0
Transportation	1.8	4.3	3.5
General government	3.4	3.8	3.6
Defense	60.0	45.9	44.2
New housing	−.3	.7	1.2
All other	7.8	10.0	6.2

[1] Include purchases of goods and services, grants-in-aid, and transfer payments; exclude net interest and subsidies less current surplus of Government enterprises.

Note.—Detail will not necessarily add to totals because of rounding.

Sources: Department of Commerce and Council of Economic Advisers.

The direct and indirect share of the national output for each function that can be traced back to total Federal expenditures is shown in Table 30. The general trends toward education and health care are evident in this table because the Federal contribution in these areas is made primarily through grants and transfers. It is assumed here that a transfer or a grant for a specific function is equivalent to a direct purchase by the Federal Government. This is a reasonable assumption because many of the grants and transfers for these purposes are directly tied to purchases by the private sector or by State and local government sectors.

TABLE 30.—*Total direct and indirect Federal Government expenditures as percent of output used, by function, 1955, 1966, and 1969*

Function	Percent of output used[1]		
	1955	1966	1969
Total Federal Government expenditures[2]	15.5	17.0	18.6
Basic necessities	7.9	11.0	13.2
Education and manpower	9.8	11.0	11.2
Health	6.4	13.2	23.4
Transportation	2.7	7.5	6.5
General government	25.5	24.3	21.2
Defense	99.9	99.9	99.8
New housing	—.7	3.6	6.1
All other	17.1	18.9	13.2

[1] Federal expenditures for each function as percent of GNP for that function. See footnote 2.
[2] Total Federal expenditures as percent of total GNP. Expenditures include purchases of goods and services, grants-in-aid, and transfer payments; exclude net interest and subsidies less current surplus of government enterprises.

Sources: Department of Commerce and Council of Economic Advisers.

Transfers and grants that are not tied to specific purchases in a sector are assigned to "basic necessities." For example, Federal welfare payments and Social Security payments are rarely tied to specific purchases, but it may be assumed that they are used by and large for food, clothing, and rents. On this assumption, it is evident that the Federal share in this sector has grown very rapidly in the past 15 years.

Finally, the total public share of these functions—both direct and indirect—is shown in Table 31. This table is similar to Table 30 except that it emphasizes the important traditional role of State and local governments in such functions as general government and education.

TABLE 31.—*Total direct and indirect Federal and State and local government expenditures as percent of output used, by function, 1955, 1966, and 1969*

Function	Percent of output used[1]		
	1955	1966	1969
Total Federal and State and local government expenditures[2]	23.2	26.7	29.6
Basic necessities	9.9	13.2	15.8
Education and manpower	89.3	86.7	87.0
Health	23.4	28.8	39.9
Transportation	16.3	20.4	20.2
General government	100.0	100.0	100.0
Defense	100.0	100.0	100.0
New housing	.1	4.7	6.3
All other	18.8	20.8	15.0

[1] Government expenditures for each function as percent of GNP for that function. See footnote 2.
[2] Total Federal and State and local government expenditures as percent of total GNP. Expenditures include purchases of goods and services and transfer payments; exclude grants-in-aid, net interest, and subsidies less current surplus of government enterprises.

Sources: Department of Commerce and Council of Economic Advisers.

What do these data suggest about the uses of the Nation's output? While the estimates are tentative and involve more than the usual quota of statistical uncertainties, several conclusions are at least suggested.

First, it is clear that since the mid-1950's the Nation has been increasing steadily the share of its economic resources devoted to education and manpower training, health, general government, and business investment. In effect we made room for their rising shares by reducing the proportion of our economic resources devoted to national defense, residential construction, and basic necessities. Since prices rose most rapidly in those markets where productivity growth was low and demand was strong, changes in the pattern of output would be more moderate if output were expressed in constant prices throughout, but the same pattern would be evident. This is a judgment that cannot be verified for the economy as a whole with existing price deflators; it can be verified, however, and is true for the private sector of the economy. Since the decline in resources absorbed by the provision of basic necessities was small, and would be expected in an economy with rising incomes, the significant shift was from national defense and residential construction to education, health, business capital formation, and general government.

Second, the data provide some indication of the extent to which public budgets have led the way in changing national priorities. The question itself is, however, a difficult one. Growing government outlays for a function which is itself growing in importance would suggest that this government activity was resulting in the allocation of more total economic resources to that function. Indeed, an increment of public outlays may attract private resources to the same use. Government's influence on the allocation of resources might, however, work the other way. If the Government assumes more direct responsibility for certain functions, private claims on resources may be increasingly devoted to other functions. Therefore we cannot be certain that more resources are being used in those areas where Government contributions have increased. Government inevitably provides all services for some functions such as general government or national defense through public budgets, and it therefore has direct control over the share of the national output devoted to these functions.

Nevertheless, in spite of the ambiguities in the interaction of public and private decisions, some things can be said about the impact of government fiscal activities on changes in the use of our economic resources. For one thing, public outlays, as indicated in Table 31, have been growing in importance relative to the size of the economy. They have risen from an amount equal to 23.2 percent of GNP in 1955 to 29.6 percent in 1969, the growth being about evenly divided between Federal outlays and outlays of State and local government units. The most dramatic and clear-cut effect of public budgets on uses of output seems to have occurred in health-related outlays. The share of our total economic output used for health care rose from 4.1 percent of GNP in 1955 to 6.4 percent in 1969. And the share of these outlays that was financed by public expenditures rose dramatically from 23.4 percent in 1955 to 39.9 percent 14 years later. Public outlays also increased as a share of the total economic resources devoted to basic necessities, housing, and transportation.

Within the public sector the Federal Government increased its share in financing most of the categories of uses of output, health expenditures being the most striking example, with housing expenditures next. State and local governments, however, are providing a larger share of total general government services than in 1955.

These data suggest that there are many different forces influencing the final composition of the national output. Most of these express themselves in the private sector of the economy, primarily because it is still the largest sector. There has been a marked shift in the composition of the Federal budget, but that shift is only weakly translated into a similar shift in the composition of national output. However, it is important to recognize that some Government programs are designed to change not the composition of final output but the distribution of income. For example, the growth in Federal expenditures associated with basic necessities is related to the large increases in income maintenance payments between 1955 and 1969. This type of program is designed primarily to redistribute income and not to change the functional allocation of the GNP. Consequently, expansion of programs to redistribute income could very well have substantial, little, or no effect on the functional allocation of GNP. This means that neither the breakdown of GNP by purchasers given in Table 26 nor the functional breakdown of GNP given in Table 28 is a completely appropriate framework for the analysis of government policies designed to change income distribution.

CONCLUSION

The illustrative projections of GNP and the claims on GNP establish a broad framework for the analysis of priority decisions.

Federal budget decisions influence many of the demand components of GNP, and this influence will be quite pervasive in the next 5 years. The magnitude of demands on resources according to this long-range outlook is very great when consideration is given to projections of existing tax and expenditure programs. The potential output left over after visible claims are met is small. If new claims are to be satisfied beyond that, some existing claims will have to be cut. This can be done by tax or expenditure changes. Such changes require explicit decisions which are difficult to make, but they are necessary if a significant shift in the composition of output is desired. One alternative to making hard choices is inflation, since inflation is a process by which competitive claims on output are finally arbitrated. But this is a capricious way to resolve these conflicting demands.

When the allocation of GNP among certain functional components is examined, it is clear that there have been substantial changes in the past 15 years. Most of these changes are attributable directly to private decisions, since many of the Federal budget changes were not closely related to changes in the allocation of GNP. This reflects the fact that the private sector is by far the largest sector in the economy, and there are probably some important substitutions between private decisions and Federal budget decisions.

APPENDIX

Definitions of Functional Components

The composition of each of the eight functional components of GNP (basic necessities, education and manpower, health, transportation, general government, defense, new housing, and all other) is described below. Each function is defined as the sum of private purchases and government purchases. The sum of the eight functions, together with business fixed investment, the change in inventories, and net exports, comprises GNP. Private expenditures were obtained from the *Survey of Current Business,* Table 2.5: Personal Consumption Expenditures by Type of Product. The source of the government expenditures was Table 3.10: Government Expenditures by Type of Function. Federal purchases and State and local purchases were added to obtain total government purchases.

The government sector contributes directly to the functions through purchases and indirectly through transfer payments. Within the government sector, the Federal Government contributes to the State and local expenditures through grants-in-aid. A more detailed description of the functional categories and the data used are available from the Council of Economic Advisers.

The descriptions below broadly identify the functional components that are used in the national income accounts and were arranged to form eight principal functional categories. The descriptions do not attempt to justify the inclusion or exclusion of different kinds of spending in different functional categories. It is often difficult to determine in any precise way how the categories should be defined, and in the classification process there are many serious problems that cannot be resolved without some judgment. But it is hoped that the composition of the final output and the trends in the relative shares of the categories are not seriously affected by the ambiguities of classification.

It is worth noting again that these GNP components do not measure intermediate products that often serve a useful purpose aside from their contribution to the real value of the final product. On-the-job training is a good example of an educational function that is not counted as real output. Furthermore, the functional categories are not wholly consistent since the functional categories for government spending are only partly consistent with those for private spending. There are other shortcomings of these data, but they are probably sufficiently accurate to present a broad view of the composition of output.

Education

Under education are included private expenditures on education and research, together with government expenditures on education, on the education and training of veterans, and on labor.

Health

In the private sector the health expenditures consist of medical care expenses, and in the government sector expenditures cover health and hospitals, veterans' hospitals and medical care, Medicare, and Medicaid.

Transportation

In the private sector the transportation category consists of expenditures on transportation, excluding the purchases of mobile homes, which come under basic necessities. The public sector includes outlays on highways, water and air transportation, and transit.

Basic Necessities

The function labeled basic necessities contains several different parts. The private sector includes expenditures on food and tobacco, clothing, accessories and jewelry, personal care, housing (rents and the purchase of mobile homes), household operation, and religious and welfare activities. The government sector purchases include purchases for public utilities (electricity, water and gas), for agriculture and agricultural resources, and for social security and special welfare. Most transfer payments not given for specific purposes are included as indirect government contributions to basic necessities, since they are assumed to support private purchases of food, clothing, and rents. These transfers are principally in the form of veterans' pensions, welfare payments, unemployment compensation, and Social Security payments.

New Housing

Expenditures on new housing included in this function are private investment in residential structures (National Income Accounts, Table 1.1) and government expenditures on public housing, urban renewal, and community development. The government sector has a negative value for housing in 1955 because some housing built in World War II was sold by the Federal Government to the private sector.

Defense

The defense function is defined as government defense purchases, excluding atomic energy expenditures. There are no private sector purchases associated with defense. The State and local functions in this sector pertain to the National Guard.

DEVELOPMENT OF LOW-COST ENERGY FOR THE FUTURE

Throughout the 1960's the United States employed quantitative restrictions on petroleum imports to limit dependence on foreign sources of supply. However, the availability of imported petroleum at a price below the domestic price led to a weakening of the import restrictions and in 1973 to abandonment of the quota system altogether. As a result, imports have provided a rapidly expanding share of the domestic market.

The energy crisis that occurred in late 1973 as a result of the embargo by some of the oil-exporting countries alerted the Nation to the risk of depending on imports for a commodity that is vital to our economic well-being, and the supply of which is largely controlled by a few countries. Reductions in oil shipments to the United States and a sharp rise in the price of imported oil have caused substantial economic disruption. Had these events occurred later, when the United States was projected to be even more dependent on imported petroleum, the loss of jobs and the effect on incomes might have been far greater.

Oil imports may become more readily available, and the price may decline. However, the possibility of a subsequent sharp price rise or supply curtailment makes it risky for the United States to remain heavily dependent on imports to supply domestic needs.

The Nation has the capability to become self-sufficient in energy production. This capability will, however, require substantial capital investment and large expenditure on research and development. The private sector will be willing to make the needed investment only if there is a reasonable assurance that returns will be adequate to justify the commitment of resources to long-term investments.

In response to this situation, the President has announced Project Independence, a program to develop the capability for self-sufficiency in energy production by 1980. The choice of policies to implement Project Independence should be made largely on economic grounds. Because energy can be expected to cost more in the 1980's than it did in 1972, important changes in production methods, in the composition of output, and in consumption will occur. These changes will develop most rapidly, and with the least cost to society, if relative prices are allowed to allocate resources and to influence production decisions. There are many uncertainties regarding which of the new energy technologies will prove to be economic. By relying on the market mechanism to guide production decisions, we can avoid becoming locked into production methods and energy sources that prove to be uneconomic.

A major component of Project Independence is a program of Government-funded research and development to accelerate the development of technologies that will ensure an adequate supply of low-cost energy for the future. Although the private sector will continue to undertake most of the energy research and development, there is a need for a more active Government role. In part this is because the returns from expenditure on research and development will be heavily influenced by Federal policies regarding environmental control, leasing of mineral rights, and import restrictions. In addition, the development of new energy technologies to some extent involves expanding our knowledge of fundamental processes. In such cases, although the research and development provides a large gain to the economy as a whole, there may be little opportunity for any one firm to derive a large enough part of this gain to warrant undertaking the research. Moreover, private research and development is usually oriented toward projects with a relatively quick payoff, whereas much of the needed expenditure must be devoted to the development of energy sources that may not be competitive for some time.

SAVING AND PRIVATE INVESTMENT

To keep output per worker rising rapidly, when the labor force is also rising rapidly, requires a high rate of investment in productive facilities. Our total investment requirements in the years ahead will be greatly increased by the need to invest in energy development and environmental improvements.

These energy and environmental investments do not raise productivity as conventionally measured, though the former may prevent a decline in productivity if energy shortages would otherwise continue, and the latter may also prevent an ultimate decline in productivity. Both types of investment thus represent part of the increased resource costs imposed on energy-using or environment-using industries, in one case by adverse supply developments and in the other by social choice. Environmental benefits enhance economic well-being, and increased reliance on domestic sources of energy adds to security of production. Still, one can probably say, the American people expect rapidly rising output of the ordinary, marketable kind; and this expectation will require rapidly rising total investment to accommodate rising energy and environmental investment along with increasing investments of other kinds.

Part of total investment is provided through the Federal budget, in the form of direct expenditures for capital purposes, loans to private businesses and individuals, or grants and loans to States and localities. The budget for fiscal 1975 includes $19 billion for such outlays, excluding defense and excluding expenditures for education, training, health, and research and development. The largest single item is expenditures for transportation, primarily highways, followed by expenditures for public works.

These direct investments in the Federal budget make a useful contribution to economic growth, if they are wisely selected and well managed. Such direct investments have numerous advocates in the Federal budget-making process. But attention needs to be called to another way in which the Federal budget could contribute to investment and growth, although it has few advocates: running a budget surplus, or at least avoiding a budget deficit except under appropriate conditions.

If the Federal Government runs a deficit and borrows under conditions of strong private investment demand, its borrowing absorbs funds which would otherwise have been invested in private projects. Unless all of that deficit is used to finance direct Government investment, which is unlikely, the deficit depresses total investment. On the other hand, if the Government runs a surplus in these circumstances, it will repay some of its debt and make more funds available for private investment, unless the surplus is generated by taxes all of which come out of private saving, an unlikely condition. When there is a great deal of slack in the economy, a budget deficit will help to support the level of economic activity needed to supply both the incentive to invest and the savings for investment. However, when productive resources are fully utilized, the smaller the Federal deficit is, or the larger the Federal surplus, the higher private investment is likely to be. This fact partly explains the principle adopted by the Administration that expenditures should not exceed, and at times may properly be less than, the receipts that would be collected at full employment.

Government policy affects incentives for private investment, in total and in particular sectors, in a number of ways, including policies relating to taxes, international trade, and international financial policy, as well as credit guarantees, subsidies, and so on. All of these involve well-known conflicts of objectives and difficulties of measuring costs and benefits. We may now be running into a problem which is new, at least in magnitude, and potentially very serious: the uncertainty created for private investment, and all private long-term commitments, by Government economic controls that are unprecedented in scope and unpredictable in operation. Taken together, the price and wage controls, the controls connected with the energy shortage, and the environmental regulations add up to a massive entry of Government into the affairs of almost every business in the country. The management of these controls involves a great many close or arbitrary decisions, to be made in many instances by a very few people. They could go either way, and the private businessman who must invest in the light of these controls cannot tell which way they will go.

These uncertainties could become a major obstacle to new private investment, even though we do not now see good evidence of its having already happened. Concern on this score is not a conclusive argument against any particular control, although it is a strong argument for avoiding controls. And it does argue for as much stability as can be achieved in the management of the controls that are inescapable.

THE FINANCIAL SYSTEM

In his 1970 Economic Report the President said:

> Because our expanding and dynamic economy must have strong and innovative financial institutions if our national savings are to be utilized effectively, I shall appoint a commission to study our financial structure and make recommendations to me for needed changes.

After studying the findings of this commission (the Hunt Commission), the President, on August 3, 1973, sent to Congress a series of recommendations. In them a more efficient financial system is envisioned, in which financial institutions can operate with greater freedom and less imposed specialization. By fostering more competition among financial institutions, the proposed measures would improve the efficiency of our financial system in channeling funds from savers to borrowers. Savings would earn the highest rate of return the competitive market structure could allow, and the savings would be put to the most productive use. Under such a system, interest rates would play a greater role in determining the volume and the distribution of funds. Social projects deserving priorities, such as low- and moderate-income housing, would be taken care of with subsidies instead of regulations.

Among the recommendations, interest rate ceilings on deposits would be phased out over a period of 5½ years. Federally chartered thrift institutions would be authorized to offer third party payment plans, including negotiable orders of withdrawal (NOW's) and credit cards to individuals and corporations; but they would also be given expanded lending powers in making consumer and real estate loans and in acquiring high-grade private debt securities. National banks would likewise be able to offer NOW accounts and make real estate loans with fewer restrictions. Interest ceilings on Government-backed mortgages would be removed, and a mortgage interest tax credit of up to 3½ percent to financial institutions and up to 1½ percent to individuals supplying mortgage funds would be made available.

The President's recommendations, if enacted by Congress, would strengthen the financial markets in general and mortgage markets in particular. The expanded lending and borrowing powers would increase the flow of funds into financial institutions. Further, the mortgage tax credit would reduce the dependence of the mortgage market on thrift institutions by encouraging other types of financial institutions, as well as individuals, to invest in mortgages. The resulting mortgage market would be less vulnerable to a credit squeeze than it has been, and the burden of monetary restraint would be more evenly distributed throughout the economy.

On another financial matter, the time may be at hand when a move in the direction of greater uniformity of reserve requirements among depository institutions is warranted. Varying reserve arrangements among State and federally supervised banks have resulted in removing an increasing proportion of the money supply from the direct influence of Federal Reserve requirements and have made short-term shifts of deposits among member and nonmember institutions a source of uncertainty in the implementation of monetary policy. Care must be taken that any change in the reserve structure of the Nation's banks should not work to the disadvantage of smaller institutions or change the balance among supervisory authorities; but within these constraints it now appears desirable that deposits which form the money supply should be subject to direct influence by the Federal Reserve, regardless of the source of supervision of the institutions that hold them. The Federal Reserve has recently submitted its own proposals in this field.

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TRANSPORTATION REFORM

Last year the Congress passed and on January 2, 1974, the President signed the Regional Rail Reorganization Act, which is a pragmatic attempt to deal with the pervasive insolvency of railroads in the heavily industrialized Midwest and Northeast. Several of the eight principal bankrupt railroads had threatened liquidation, and such a bill was needed because the risk of even a very short period of suspended service was too great to be tolerated. If the services of the Northeast's railroads are so vital to the rest of the economy, one must ask why so many of them were in such a weakened financial condition. Factors more general and basic than those that normally cause bankruptcy are responsible.

Poor management and unrealistically rigid labor contracts are popular explanations of the railroads' inability to adapt to changing technology and a changing economy. These proximate causes largely reflect, however, a more fundamental cause—inefficient and intransigent governmental regulation.

Governmental regulation of the railroads can be traced to two sources. The public wanted the Government to protect them from the industry in a time of near monopoly and the members of the industry wanted the Government to protect them from each other. This "protection" has been expensive for both the railroads and the public. The elaboration of regulations intended to provide this protection has created a complex set of specifications for the behavior of firms that has tended to ossify with time. As a result railroad companies have increasingly given up control of fundamental management decisions to the Interstate Commerce Commission (ICC) in return for the policing of industry competition by the agency. Moreover, railroad management's attention began to focus more on the rules that delimited its discretion than upon the underlying economic realities in the markets in which they operated. As these realities changed, railroad management found itself increasingly inept at adjusting—the result being an increasing incidence of bankruptcy.

The Transportation Improvement Act

The Transportation Improvement Act of 1974, proposed by the Administration, is an important first step toward solving some of the more general problems of the railroad industry. It is also an imperative step toward a long-term solution of the problem of the bankrupt railroad; because the viability of the rail system that will emerge from the wreck of the Penn Central will depend in an important way upon successful regulatory reform. Among the more important reforms facilitated by the bill would be liberalization and rationalization of procedures for the "abandonment" of unprofitable lines. In 1971 the railroads were required by the ICC to maintain service on 21,000 miles, about 10 percent of the total, of lightly traveled track for which revenues were less than operating costs.

To cover these losses, railroads must charge higher rates on profitable routes. This subsidization distorts resource use and interferes with the efficiency of the entire transportation system, and hence the entire economy, as well as increasing the financial problems of the rail industry. Requiring railroads to continue to operate short and uneconomic branch lines diverts traffic that could be carried more efficiently by truck; and conversely the higher rates on longer hauls result in a diversion to trucks of freight that could be moved more efficiently by rail. Since trucks use considerably more fuel (and emit more pollutants) than trains per ton-mile of freight carried, the magnitude of this inefficiency grows directly with the increasing relative scarcity of energy supplies.

The proposed act will also facilitate the substitution of truck transportation for rail services on abandoned lines, by more or less automatically authorizing truck service between any point on the abandoned line and connecting rail service points.

Need for Further Reform

Although enactment of this bill will add to the efficiency of the rail industry, several basic problems remain on the agenda for transportation reform in the coming year. The longer-term viability of the Nation's railroads will require substantial investments in improved technology, and in improvement and diversification of types of freight service, as well as investments to rehabilitate deteriorating physical facilities.

It is vital, however, that a comprehensive evaluation of the regulatory and institutional structure of both the railroads and the entire surface transportation industry be completed *before* such investments are made. Many aspects of modern railroad operation are not determined by either technological or profitability considerations. They are adaptations to obsolete regulatory policies and labor practices. Investment in conventional railroad technology as it exists today may inhibit productivity and actually reinforce the resistance to the institutional reforms that will be required for the development of a more rational and efficient surface transportation system in the future.

Changes in corporate structure may also be desirable. Costs of transferring freight from one railroad to another significantly reduce the savings that rails enjoy relative to trucks on long-haul shipments. This would imply that end-to-end mergers of railroads might be important mechanisms for reducing the real cost of rail transportation. Yet formidable administrative barriers must be surmounted by companies attempting end-to-end mergers under current regulatory practices.

The Administration's concern with the efficiency of the surface transportation system is not limited to stopping the spreading insolvency that infects the railroad industry. It will be difficult to exploit fully the opportunities for increasing productivity in the railroad industry unless major changes take place concurrently in the trucking industry.

The regulation of trucks in interstate common carriage that began in the midst of the Great Depression has also evolved into a web of regulatory constraints. Restrictions on entry into market areas, limitations on the type of goods carried, and mandated "gateways"—creating required routes which may be so circular as to be bizarre—have resulted in an industry burdened with regulatory inefficiency. Partially loaded trucks, often required to return empty even when alternative cargoes are available, are common. Such inefficiency is a result of regulatory policy. There are no technological reasons why the motor freight industry could not operate as an essentially competitive sector of the economy.

A comprehensive analysis of the trucking industry is now under way and will provide a basis for the design of a comprehensive set of regulatory reform proposals to be completed by the fall of 1974.

EFFICIENT INTERNATIONAL EXCHANGE

Economic growth is significantly enhanced by an openness to foreign economies which permits a relatively free international exchange of goods and capital based on economic incentive. International trade makes goods available that might otherwise be lacking, or only available at much higher costs. It can also make available to domestic producers ideas about new products, new product designs, or new methods of production. For producers it can be an added incentive to adopt more efficient methods of production.

We have been reminded in recent months that in some circumstances there can be a danger, both political and economic, in excessive dependence on foreign supplies. The United States must guard itself against this danger, by unilateral or multilateral action. However, if this objective is realistically defined it will be found not to limit greatly the scope for beneficial expansion of international trade.

Despite a fairly extensive removal of trade barriers in the past 25 years, substantial barriers to international trade and investment remain in effect. The inefficient location of productive facilities because of these barriers constitutes a loss of economic welfare to the country as a whole. Efforts to negotiate a reduction of the remaining trade barriers are therefore important toward improving the efficiency of the U.S. economy. The trade legislation now before Congress would give the President authority to negotiate a substantial reduction of such barriers.

Negotiations in the trade area also have to deal with the economic interdependence that results from trade. Abrupt economic shifts emanating from abroad can from time to time create a temporary economic dislocation at home which needs to be moderated or offset by government measures. Since such measures will have further repercussions abroad, governments need to agree on some basic rules and procedures that they can follow when their interests conflict. Multilateral negotiations are designed to improve some of the current rules and procedures, as well as to reduce existing trade barriers.

An international monetary system is a prerequisite for the efficient exchange of goods and capital. Without such a system, international exchange is confined to barter. To function efficiently, the international monetary system has to provide sufficient quantities of commonly accepted means of payment and a procedure for adjusting the relationship between one currency and another. It also has to provide a set of rules on such questions as the conversion of one currency into another, restrictions on the conversion of currencies, transfers of liquid funds from one country to another, as well as a set of procedures for resolving differences in national approaches to such problems. The current negotiations to reform the international monetary system are designed to improve the existing rules and procedures.

Chairman BENTSEN. Mr. Stein, let us talk about this economic growth factor for a few minutes.

Although it is difficult, we must try to develop a picture, it seems to me, of how the U.S. economy is going to grow in the next few years so that we can plan ahead. The subcommittee has already begun to hold hearings with some private experts on the long-range economic outlook for output, inflation, unemployment, and other major aspects of the economy.

Yesterday we discussed this matter in the context of OMB's October 1973 study on the "Long-Run Outlook." I believe this is the forecast used by the Troika.

I would like to question you as to several aspects of that outlook, asking you first, if you agreed with the various aspects of the outlook, and second, what new policies you are developing to meet up-coming problems.

I am well aware that new ideas are hard to come by, but some of the old ideas have not been sufficient to meet some of these problems that we are seeing today and I do not think we are at the end of creative thinking.

On economic growth, due primarily to demographic changes, the OMB analysis shows a decline in the rate of real economic growth in the late 1970's and early 1980's. The Labor Department's long-range projections also show real GNP dropping from about a 4-percent annual rate of increase for the period 1960 to 1980 to only a 3.2-percent increase after 1980.

Now, yesterday, the OMB study we looked at said that that kind of decline in real economic growth is apt to generate more social and political conflict.

Do you agree with the assessment that we can expect real economic growth to decline in future years unless present policies are changed, and if you think that, then what policies are being developed to meet the problems of declining economic growth?

Mr. STEIN. Well, Senator, you have asked me a lot of questions and have made a number of provocative remarks—at least I find them provocative. I am not sure I have them all down here.

I will say one thing about the OMB study which you said you understood was the Troika projection, using the Troika study. That is not correct.

The Troika projections generally extend for a period of 18 months to 2 years into the future. They are the basis of short-run policy-making mainly with respect to the stability of the economy and these studies and projections are worked out by the parties included in the Troika—Treasury, OMB, and CEA. They have a certain official standing and they do become the basis of the projections which we publish in the economic report each year and which underlay our revenue estimates and budget statements. The part of the OMB study which went out beyond this period into the future was an internal OMB exercise and it never had any blessing from the Trokia. I think some of our staff people may have contributed to it but it was essentially the same kind of mechanical thing, a computer printout that the BLS study is, and most of the studies that you all get if you invite econometricians up here.

Chairman BENTSEN. Do you have something better in long-range planning than that?

Mr. STEIN. I have tried to indicate that I do not think long-range planning is the subject. It is like economics, it is like do we have anything better in economics, especially when you have incomporated in the term "economic growth" not only growth but stability and balance. I think you have probably encompassed all economic questions. But I do think that this picture that you have before you, that because of demographic factors, unless other things intervene, we will have a slower rate of growth of per capita income in the early 1980's than we do in the 1970's or did in the 1960's is probably correct.

One thing we can project with some confidence is the size of the population 16 years of age—assuming that we will be here 16 years from now.

Chairman BENTSEN. Then you think it is probably correct that there will be lower real economic growth in the 1980's than there has been?

Mr. STEIN. I said during the period in which the rate of growth of the working age population is lower, that the rate of growth of total output is likely to be lower. That seems to be a perfectly natural thing to understand. That something like two-thirds of the productive inputs of the country consists of workers.

If the number of people is growing more slowly the working age population is growing more slowly and we are going to put in less labor and, therefore, the total will grow more slowly.

Chairman BENTSEN. Do you agree with OMB that it will generate far more social and political conflict?

Mr. STEIN. No, I do not.

Chairman BENTSEN. You do not?

Mr. STEIN. No. We had, I suppose, the maximum social and political tension in this country during the period of maximum economic growth in the early 1960's and up, to say, 1968. I do not think you can show in the history of the United States any close connection between the amount of social tension and rate of economic growth.

Chairman BENTSEN. I do not believe Mr. Ash specifically took a position on that. I think that was the OMB report that stated that.

Mr. STEIN. That is kind of amatuer sociology. I do not think there is any basis for that.

What is the next question?

Well, about new ideas, you said that you said that you realize it is very difficult to come up with new ideas. That is not true. It is easy to come up with new ideas, it is hard to come up with new good ideas.

Chairman BENTSEN. I think that is obviously what anybody means when they state that, Mr. Stein.

Mr. STEIN. Well, I think you invited me to give a kind of view of the administration's policy for dealing with economic problems before the country. If you would like me to do that?

Chairman BENTSEN. I would be delighted.

Mr. STEIN. As I indicated, we believe the primary economic problem before the country, before the world, is the rate of inflation which has accelerated over a considerable period. Although inflation is higher in most countries than here but, nevertheless, it is very serious here. Although we foresee that this rate of inflation will diminish in the remainder of this year or will be lower in the remainder of this year than it has been in the last 16 months, say, it will, nevertheless, be very high and a serious rate of inflation and our policies are primarily directed to that. It is for that reason that we are firmly opposed to the idea of a tax cut, we are trying to hold the line on the budget and looking for ways in which we can cut the budget, and we are encouraging the Federal Reserce in the pursuit of a moderately restrictive monetary policy.

We do not think that we are looking at the economy exclusively from the standpoint of inflation. We realize that there are other problems of the country that we must be concerned with.

We have been concerned, for example, with the decline in the rate of housing construction and we proposed some additional financial steps a month ago to assist housing finance. We have been concerned with the burden those people who are unemployed and for that reason we have proposed various improvements of the unemployment compensation system.

By and large we believe the main problem is inflation and the main solution to that problem is to restrain the rate of growth of demand by conventional fiscal and monetary means.

Again, on the inflation side, we do not confine our interest to these measures. But devising policies to deal with inflation for 200 or 300 years and I think that the idea that in June 1974, somebody on demand, is going to produce a new rabbit out of the hat that will solve the inflation problem in an unheard of way is not very likely. But, nevertheless, we are interested in supplementing these broad fiscal and monetary measures but we are particularly concerned that the yearning for novelty should not distract us from practicing the old time religion.

Chairman BENTSEN. That should not preclude us from looking and seeking and studying and trying for new sound ideas to try to assist, and surely with the economic problems that we have had in the last couple of years, you see some value in long-term planning in trying to avoid some of the problems?

Mr. STEIN. I do. But I kind of shy away from the word planning. Maybe this is just an emotional reaction. But I do think it is very important that we should look ahead further in making many economic policy decisions and you will find in our economic reports in the sections that I have submitted a considerable interest in that.

I will say, for example, that I think that Federal budgetary decisions should be identified in a much longer perspective than they have been in the past and I think that is one of the things that the OMB is after in the kind of long-run projections that they prepared for their internal use. That is, I think, one of our great needs, to to look at the budget as it will be 5 years from now, or that may be as far as we can go, anyway, some considerable distance out, to assure that we do not get ourselves committed to expenditure and tax regulations that will leave us no maneuverability that far out.

It is very easy for Congress and the administration both to commit themselves to expenditure programs which cost very little at the beginning and which in 3 or 4 years build up to be very expensive, and 3 or 4 years from now we find we have a lot of commitments we wish we did not have.

I think the leading case of that, since I have been here, since I have been in the Government, was the Revenue Act of 1969, which layed out a pattern of tax cuts going forward for about 5 years. In the first years the tax cuts were very little. In fact I believe that revenue gains may have been balanced with revenue losses in the first year but by the time you got out 5 years into the future the revenue loss was about $12 billion. It was not until that legislation was very near completion that anybody woke up to that fact. That is a very bad kind of thing.

I think we have to plan the Federal budget in a much more forward looking way.

Chairman BENTSEN. Surely long-range planning has to be adjusted along the way. I certainly agree it cannot be forecast with certainty over a long period of time. But it is something that has to be monitored. Surely you work toward some long-range objectives?

Mr. STEIN. Well——

Chairman BENTSEN. We do that in business, surely we do that in government, or should.

Mr. STEIN. Well, I do not know whether you do that in business in the sense in which it is commonly suggested. It may have some projections of what rates of increase of its output or investment or profits it would expect but——

Chairman BENTSEN. Before I came to the Senate, I sat on a number of boards of major corporations where we looked at least 20 years into the future in trying to decide the general direction of the corporation and long-term capital commitments.

Mr. STEIN. Well, I think there are decisions which need to incorporate a long view and what I am trying to say is that we have in the Federal Government hundreds or thousands of decisions affecting the long-range future, that each of those decisions must be made in terms of its long-run effect as well in other terms, and that we need to make sure that this long-run consideration filters down into all of the decisionmaking of government.

I give you one kind of example and that has to do with the discount rate that is used in evaluating the cost and benefits of Federal investment programs.

Now, to say to the various agencies that are making plans, budgeting, for investment, for long, for durable expenditures, that you must figure out the cost and benefits of this thing, and in figuring out the costs you must discount future benefits at a rate of x percent is the way of making sure that they take account of the long-run significance of this thing and I think that is a way a corporation would make decisions about its investment, but that does not require us to set such a target, that growth rate of the U.S. economy should be 5 percent. I do not think we can do that.

Chairman BENTSEN. Let me talk to you about unemployment. These figures we are looking at say that the labor force is projected to grow at a slower rate in future years, you are going to have men retiring earlier, you are going to have a lower birth rate, and yet with that the OMB long-run study shows that unemployment continues to stay higher than 5 percent during the 1970's.

Now, what is your assessment? Do you think it will stay higher than 5 percent during the 1970's? Do you think there are any additional manpower policies the Federal Government should be developing at this time to see that that is not the case?

Mr. STEIN. Well, I do not place any weight on that projection whatever. I think that reminds me of your statement earlier that we had accepted a new target for full employment, which is some number 5 percent or something else, which is not correct.

Chairman BENTSEN. Mr. Ash yesterday was suggesting that we had to reevaluate the formula and upgrade it and raise the percentage.

Mr. STEIN. Well——

Chairman BENTSEN. I do not attribute that to you, I attribute that to Mr. Ash in his statement yesterday.

Mr. STEIN. To say we need to reevaluate the formula is one thing.

Well, let me get back to this 5 percent.

It seems to me that, as we said in our recent report, we do not think that there is any number which permanently represents the optimum rate of unemployment in the United States given the demographic and other conditions that exist, we do think that we will have to go through a period in which there is considerable slack in the American economy in order to slow down the rate of inflation, that the effort to pump up the economy to some predetermined goal of unemployment reflecting conditions as they were 20 years ago would be high inflationary. As to what will be the level, the rate of unemployment which after we get by the present bulge would be consistent with the stability of the economy. I think we do not know that and we are still feeling our way to that. I think as long as we have a much larger proportion of women and young people in the labor force than we did in the 1950's, the unemployment rate that we will properly live with will be higher than it would have been in the 1950's simply because women and young people have a much higher propensity to enter and leave the labor force and every time they enter they go through a period of unemployment.

But, I would not at all want to say when we get to 1980 or in some other more distant period that the rate of unemployment with which we shall live will be 5 percent or any other particular number. This will relate to the character of the population, its skills, the nature of the demand in the society, and I think it would be a mistake to think that we now know what that will be in 1980.

I think what we want to do is create conditions, as we say, in which people who are seeking work and willing to accept it on terms that are resonably consistent, with their productivity can find jobs without undue delay, and that could be in sometimes, a rate of unemployment of four percent, it could be 5 percent, it could be 5½ percent.

Chairman BENTSEN. You say accept jobs reasonably related to their productivity? I agree with that. But it seems to me we ought to have some policy to try to help increase that productivity, and I strongly disagree with this administration's cutting off vocational eduation. I think there are a lot of people among the unemployed who are at the lower rung of the economic ladder that are capable of being more productive, of earning more, of doing a better job for their family and in turn for the Nation, if they had the vocational education. We are becoming more and more a service-orientated society. It is more difficult to increase productivity in that sector. Vocational education can help.

A few days ago I was visiting TSTI, Texas State Technological Institute. I was talking to the graduates down there; 93 percent of them came from families who were receiving some kind of welfare. These graduates were getting an average of six job offers apiece. They were hired before graduation. They were upgrading their productivity substantially.

Now I think that is the kind of planning that has to be done. It is a many faceted thing. There is no one answer to this, as you well know. But is not this one that can help?

Mr. STEIN. Yes, you use the word "planning" to describe any active policy. If that is what it means to you, that is okay with me and I am for it. I do not think we should identify the amount of vocational education in this country with the Federal expenditures for vocational education. Vocational education is primarily a State and local function which has a good deal of support from the Federal Government. The Federal Government is increasingly turning over the management of these programs to the States and localities. The Federal management has not been outstandingly successful. The States and localities are in increasingly good financial positions partly because the slower rate of growth of the population means slower rate of growth of the school-age children, number of school-age children, and the States and localities are left with more funds to use for education at higher levels. But I would certainly agree with you we are very interested in this proposition that we need more and I would say better vocational education. An awful lot of vocational education in the United States has really gone to waste because it was not directed to training people for the kinds of jobs that exist in this society.

Chairman BENTSEN. I think that is a question of management, how the funds are being utilized, and I do not think that in itself negates the program.

In the OMB long-range study we were looking at, they state that the composition of the Federal tax structure is expected to change from a progressive tax structure in future years to more of a proportional tax structure where all income levels pay the same percentage of their income for Federal taxes.

It seems to me that raises some questions on tax policy.

Do you believe that the tax system in this country is going to become more regressive? Does that not argue for a tax cut for low- and middle-income people?

Mr. STEIN. Well, as you know, I believe it is reported in the OMB study the dominant factor at work here is the rise in the role of payroll tax and total Federal tax system. I think it is misleading to look at that without also looking at what is happening to the benefit side of the social security program which is financed by the payroll tax system.

I really think it was a mistake to have raised the payroll tax as high as it has been raised. I think it was also a mistake to have raised the benefits as high as they have been raised. I think we have been putting too much of the Federal budget and Federal revenues into the social security system.

Chairman BENTSEN. What would you have done for the people who are on fixed incomes and retired who depend on social security with inflation affecting them the way it is?

Mr. STEIN. A large proportion of the recipients of social security benefits are not poor as we define poor in the United States. I think what we have been doing——

Chairman BENTSEN. What proportion would you judge that to be?

Mr. STEIN. I would say it is more than half.

Chairman BENTSEN. More than half?

Mr. STEIN. Yes. And what we have been doing is raising a proportional tax to finance benefits for a large number of people who are quite capable of making arrangements through their own employers, most of whom are employed most of their lives, and you are displacing the private provision of pension benefits for individuals and imposing this tax which seems to be regressive.

Now if you take the benefit and receipts side of the social security system it is not a regressive program. The social security system gives a larger proportion of what they have paid in as contributions to those people who have low incomes than to those people who have high incomes. The benefit schedule is in that sense, progressive.

Chairman BENTSEN. I do not know about this half figure of yours of Social Security recipients that are poor, but what else would we have done, if we accept that figure, for those people, without raising their social security benefits. They were and are having a very difficult time making ends meet with the inflation as it is today.

All you have to do is read my mail coming in or go out and talk to people and see what they are up against.

Mr. STEIN. I think we also get that mail. But I am saying that we would have been better off if we had concentrated the improvement of benefits on that part of the population that is really poor and not going through this process of using the tax system to churn money around and give it back to the same people when they retire, most of whom are not poor. Most of the American people are not poor. The social security system covers practically all of the American people. Practically all of the American people at some time will be the beneficiaries of this system and we certainly cannot say that most of the American people are poor. That just makes a joke of the word "poor."

Chairman BENTSEN. Do you not think we need some reforms of the tax structure where we have, for example, a number of people who pay no tax and yet have a very substantial gross income that is reported. Do you not think that hurts the credibility of the tax system?

Mr. STEIN. Yes.

Chairman BENTSEN. I can well understand the deductions, but we have to have a credible system that the people will accept?

Mr. STEIN. Well, I think that is quite a different question. But I agree with what I understand to be the drift of what you are saying. Congress did enact something, a minimum tax, which was suppose to have made some correction of this problem. The administration has proposed a further move having to do with the minimum tax but, as you know, this is not going to change.

If you draw a chart of the progressivity of the American tax system, it is going to be a fairly flat line until you get way up at the end of the income scale where you have one-tenth of 1 percent of the American people or something like that. We are always talking about the 148 heirs who do not pay any tax. Now that is a psychological problem.

Chairman BENTSEN. That is right, that is what I am referring to.

Mr. STEIN. I believe it should be corrected but it is not going to change the line we draw or the statistics.

Chairman BENTSEN. I am not arguing that. But if we are going to have a Federal tax system the people will accept and support they have to be convinced that everybody is paying their fair share. It seems to me, instead of a minimum tax as such you need a tax in the alternative to get to those people who are in a position where they can live off cash flow.

Mr. STEIN. Well, of course, that is a different question because you are talking about people who have no income. People pay no income tax if they have no income and people can live with no incomes if they have enough capital, and I do not see any objection to that.

Chairman BENTSEN. You say people pay no tax if they have no income. I quite agree with that. But I am talking about people taking things like accelerated depreciation, sum of the digits and interest during construction and appreciated value on stocks given to charity and using that to the extent where financially they pay no tax at all. I think that destroys credibility in the system.

Mr. STEIN. Yes, but it will destroy the credibility of a system and can destroy it fairly or unfairly or properly or improperly. The problem is, or at least part of the problem in the things that you mentioned, is to get an accurate definition and measurement of income. These various accelerations of depreciation, for example, were adopted at a time when there was a considerable dispute over whether the straight-line system accurately measured income depreciation in the economic sense. It is not all clear to me that we would get a more accurate measure of income, especially in a period of rapid inflation, if we were to eliminate some of these.

Chairman BENTSEN. I am not arguing that point. I understand the reason for some of these incentives for social objectives for the Nation at that particular time. I am talking about high-income individuals using them to such a degree that finally they pay no tax at all and live off cash flow. I think that is the sort of thing we are going to have to correct. I think that is a thing of the past, or should be.

Let me talk to you about some of the typical problems we are confronted with in this country. We have received considerable testimony that there is going to be enormous capital need in the next 5 years. Mr. Jones of General Electric testified before this subcommittee that he saw capital needs, private capital needs of about $4.5 trillion over the next 12 years. The Council of Economic Advisers is about to complete a study on private capital needs.

Let me ask you the following questions:

To what extent do capital needs vary from industry to industry?

Have you made any study in that regard?

Mr. STEIN. Well, you have just said that the Council is about to complete such a study. We are about to initiate the study. The President asked us 10 days ago to begin this study and we have begun work, but we certainly will not finish before the end of this year.

Well, the question is do capital requirements, say, per dollar of output vary from industry to industry? They certainly do.

Chairman BENTSEN. Have you come up with any thing yet in the way of suggestions as to how Government in any way can assist by its policies in helping come up with these capital needs?

Mr. STEIN. We are just beginning this study and I would not like to prejudge its conclusions. Many people have already jumped to the conclusion that the outcome of this study will necessarily be recommendations for tax relief of one kind or another. That may be the outcome of the study. I would not say that it will be the outcome of the study. We have suggested many times in our economic reports, that the basic problem, if we are going to get more investment, is that we have to have more savings, and all this—this remains to be analyzed further. Private savings seems to be a fairly stable proportion of total output when we are at high employment. So there are two questions. Can we change that proportion or can we supplement the private savings by public savings; that is, by running a budget surplus as distinguished from running a budget deficit. If we run a budget deficit the Federal Government will absorb some of the savings that might otherwise be available for private investment. If we run a budget surplus we add to the sum of savings that are available for private investment. That is one way in whcih you can approach the problem of making more funds available for investment, but this is going to be a long hard study.

Chairman BENTSEN. Well, Mr. Stein, I think this capital needs areas that we should have foreseen earlier. I know we held hearings on it last year. With the stock market way down, many of the basic industrial stocks are selling at five times earnings, and, industry cannot go for equity in that stock market. If they did they would have to make investments that pay 40 percent before taxes. You are not going to find those. A lot of them have their equity debt ratio, their leverage, so high now they cannot get additional bonds. If they did, the interest rate is such that they find it very difficult to live with it, and some of the institutions want in addition to the interest rate a piece of the action, or at least a bunch of warrants to go with it. So I think we are facing a very serious problem in the Nation. I look at the situation where the United States over the last decade has had the least capital commitment of almost all of the major nations with the possible exception of England, of capital investment into their manufacturing capacities. And I think that is one of the reasons that you are seeing some of the shortages you are seeing today in steel and paper.

Mr. STEIN. Well, that is a subject which is constantly foreseen, which is constantly argued about and about which decisions are continuously made. And, of course, in 1971, when we revised, when the Treasury revised the tax treatment of depreciation and when we proposed the restoration of the investment credit, we thought that we were foreseeing some part of this problem. At least we thought we were addressing this problem affirmatively. We were attacked in the most demagogic way as giving handouts to the business community.

I think you will see this problem is foreseen our economic report strating in 1970 which I have handed out, too, but I do not think we should jump to conclusions about it.

As far as the rather low rate of investment in manufacturing in the United States in the 1960's, I think this was to some extent, to a considerable extent influenced by the over valuation of the dollar which made it less attractive to invest in the United States than to invest elsewhere. Where that situation has been quite dramatically changed and we are seeing an increase of investment here.

But, I think it certainly appears to be correct that we are going to have a quite strong demand for capital in the next decade partly associated with the need to develop domestic sources of energy on a much larger scale than we have recently been doing, partly because of environmental requirements, and that is one of the reasons for a new look at the whole question.

Chairman BENTSEN. Well, these who have testified before us stated they projected the long-range inflation factor to be around 5 percent over the next 10 years. That is a lot better than current double-digit inflation rate. But that is certainly not price stability.

Now, what long-range strategy does the administration have to try to cut below 5 percent? If not that, what planning do you have to help people adjust to this inflation factor?

Mr. STEIN. Well, with respect to getting it down, I believe that we will get it down, if we do get it down, only by two things really. On the one hand, maintaining persistent restraint to avoid periods of excessive exuberant demand, and on the other hand by continuous attention to everything we can do to keep productivity and to keep supplies rising in the United States.

Therefore, it is for that reason, for example, that we are constantly involved in trying to maintain a policy of maximum food supply in the United States.

Chairman BENTSEN. Maximum food supply?

Mr. STEIN. Yes.

Chairman BENTSEN. One of the things that has concerned me about maximum food supply, I have noticed that in 1955 we had 10.7 percent of the agricultural budget committed to research and development. Now it is about 2.5 percent.

I have noticed that since 1970 they have cut the number of people in research and development in the Department of Agriculture by 10 percent, and yet some of the great breakthroughs in research and development have been on the production of food in the past.

It seems to me counterproductive to cut that R. & D. You take things like corn production, they doubled that in 15 years with new hybrid seeds. Take production of dairy cows, they increased production of milk by 50 percent in 15 years. So I think we differ strongly with the administration in curtailing the number of people in R. & D. for agriculture. I agree with you, we ought to have more food, we ought to have more production of it. That gives the best of both sides to the farmer and to the consumer.

Mr. STEIN. Well, I cannot quarrel with you about that. I do not know enough about or anything about the facts of that case. We have been interested in transferring some of the R. & D. funds into the animal part of the agricultural industry and away from the grains because we think the animal part is the part with the big cost problem in the future but, nevertheless, I would not contest what you say, I do not know enough about it. Our efforts to increase agricultural production have taken the form of releasing, removing, restraints on agricultural production in the United States which, of course, were very binding, and I am trying to keep the United States market open to imports of agricultural products from the rest of the world.

Chairman BENTSEN. I agree with that very much.

Let me ask you about the President's statement in his radio speech. He said that he was going to provide the Congress with legislation that would authorize a cost-of-living task force to monitor inflation and shortages. One of the things that concerned me about that, I cannot help remember Senator Muskie's amendment we had on the floor, which when it was finally stripped down to its final version was in effect just that—a cost of living monitoring council, and I supported it and voted for it and a number of others did, but we saw them on the other side of the aisle in general leading a very strong fight against it.

Was that not an administration position at that time?

Mr. STEIN. Well the administration's position was consistently what the President said it was in a number of speeches and messages, that we wanted the cost-of-living council to be continued without mandatory powers to control prices and wages except in one area, the health area, that was specifically mentioned, and we wanted the cost-of-living council to continue with authority to conduct this monitoring function. We never waivered from that. There were some Republicans who did not agree with that in the Congress. That is their privilege. I believe there were some Democrats who did not agree with that, and that is their privilege. But we did support consistently, I believe, of couse I do not handle the congressional liason relations, but we did repeatedly restate our desire for this particular action.

Chairman BENTSEN. Mr. Stein, if the administration was at that point in the debate, I never heard it quoted, and we were sure looking for something at the time, trying to get that particular amendment carried through, because we felt it was necessary.

Mr. Ash has stated so far nothing has been perfected in the way of legislation to send up to us and we would like to see the President's recommendation, and his statement that he would like it carried out by the Congress.

Mr. STEIN. Well, I can send you a lot of quotations.

Chairman BENTSEN. Do you know what the status of the legislation is?

Mr. STEIN. I do not know what the status of the legislation is.

Chairman BENTSEN. The administration has placed a lot of amphasis on the need for a tight budget policy to fight inflation. Now I am having a little difficulty in seperating the substance of that position from the rhetoric.

Yesterday, Mr. Kenneth Rush gave a speech saying that current inflation is a result of excessive Federal deficits and that the administration will fight the inflation on a monetary and fiscal line no matter how long it takes. Yet Mr. Roy Ash came before this subcommittee and told me that budget busting had not been the cause of recent inflation. He pointed out the Federal budget is in balance in fiscal 1974. In fact it has been in balance for the last 18 months.

It seems to me we have got some incorrect information on one side or the other.

Mr. STEIN. Well, we have gone through waves of this and I would say that we had a big wave of overexpansive budget policy from 1965 to 1968. We had another wave, somewhat smaller perhaps, justified by the fact that the economy was then starting from a rather low level—but from 1970 to 1972. I think it is true that beginning in the spring of 1972, Federal policy has turned in a much more restrictive direction. Certainly between 1972 and 1973 Federal budget policy turned in a much more restrictive direction.

I would describe the present situation as one in which we are trying to prevent a revival of expansion fiscal policy, particularly as we see it threatened by proposals for tax reduction. We would like to bring about somewhat more restrained fiscal policy in fiscal 1975 and as we look ahead to 1976 we would like to turn the screw a little further.

Chairman BENTSEN. Well, would it then be correct that budget busting has not been the cause of inflation in the last 18 months?

Mr. STEIN. I would say that the budget busting of a previous period has continued to have some inflationary effects but I think our fiscal policy——

Chairman BENTSEN. In the last 18 months has budget busting been a cause of inflation?

Mr. STEIN. I would say, No. It could have been tight. It could have been more anti-inflationary, but it was not going in an expansive direction at that time.

Chairman BENTSEN. What are some of the policy implications that you see in the major demographich changes that are coming over the next decade? What efforts should the Federal Government make to meet the challenge of these changes? We touched on this point earlier about social security and lessening birth rates and more people being retired and drawing social security.

Mr. STEIN. Well, I would say that we will be concerned with this. This will be an element in our study of the capital requirements. This is not entirely a negative development. If the labor force grows less rapidly we will have a better opportunity to increase capital per worker; that is, if we can maintain the rate of growth of the capital stock. If the labor force grows less rapidly, the capital per worker will grow more rapidly and we may on that account be able to get a more rapid growth of productivity than would otherwise be the case, although there are things operating in the other direction with the energy problem.

I would say that one aspect of the problem with which we have been concerned has been the high-unemployment rate of young people, which has been partly associated with the increase in the proportion of young people in the labor force. As we go out towards the end of the seventies and early eighties the proportion of young people will diminish again and this may tend to reduce their unemployment rates. But for the time being we are concerned with this. We have done a good deal of work on it and I must say without any very constructive conclusions, except for the desire to avoid an excessive rise in the minimum wage rate, but it is problem we have been addressing as well as we could.

Chairman BENTSEN. Mr. Stein, looking ahead and trying to avoid some of the problems of the future and, if you do not like the word "planning," working on contingencies.

Mr. STEIN. Ok, this goes back to the days when "planning" was a dirty word and I find it hard to swallow.

Chairman BENTSEN. Looking at contingencies of the future and trying to take advantage of them or forestall them, one of the concerns, of course, is the question of mineral supplies in this country.

Mr. STEIN. Yes, sir.

Chairman BENTSEN. As has been exemplified by the petroleum problem we have had, of the 13 basic raw materials that are needed industrialized societies such as ours, the United States in 1970 was dependent upon imports for more than half of its supplies in six of those materials. The Deparment of Interior now projects that by 1985 the United States will depend primarily on imports for supplies of 9 of the 13 imported raw materials, including important ones such as iron, bauxite, and tin.

How serious do you think that problem is and what strategy should we develop to try to assist on that problem?

Mr. STEIN. Well, it is not just in those terms a problem; that is, I do not think we should expect to run the American economy without reliance on supplies from the outside world. I think what has to be studied very carefully and what is being studied very carefully is whether we are going to be in a position where some foreign monopolist or cartel would be able to exploit us, and that is a political as well as economic matter. We have two committees at work on this, one led by the OMB, one led by the CIEP.

It is ironic to note that this whole current furor about this problem was stimulated by the oil question which was studied with great care by very thoughtful people and who came to the conclusion that it was very unlikely that an oil producers cartel could be made to work over any significant period.

Chairman BENTSEN. Some also thought we could be subject to an oil producer cartel and 4 or 5 years ago we were making speeches on that possibility.

Mr. STEIN. But, it is an illustration of the fact that looking ahead does not always give you the right answer, not that I am against looking ahead, but is a warning that you have to be careful. But we are concerned with this problem. We are studying the specific situation in these various minerals but I do not think we should get in the position of saying anything we buy from abroad is a threat to us. But we are trying to see whether some of this is a threat.

Chairman BENTSEN. Well, I do not think we can become self-sufficient in every mineral and I do not know anyone that is trying to bring that about. But in trying to be sure that we are not in a position where they can turn off the valves or cut off the supply and bring us to our economic knees and dictate foreign policy, we do need self-sufficiency and ought to be working toward it.

Mr. STEIN. We need to avoid that situation. It may be avoided by self-sufficiency, it may be avoided by development of relations with countries that have this potentiality and it could be handled in a variety of ways.

Chairman BENTSEN. It seems to me the failure to anticipate economic problems, and we have failed to anticipate a number of them, is in part due to our gathering of information, and our ability to accurately evaluate that information. You were just talking about the difference of opinion on whether or not the OPEC nations could develop a cartel, where some of us felt they could and were making speeches to that effect, and others to the contrary.

You have been with the Council now for some time and you have had a chance to study our economic policymaking apparatus. In view of this, can you comment as to what you think the adequacy or inadequacy of the information and institutional apparatus for monitoring and directing the Nation's economic growth is?

Mr. STEIN. Well, I am constantly impressed by the fact that we do not know a large proportion of the things that we ought to know. I am not quite clear whether they are knowledgeable. I do feel that we depend on an inadequate statistical base, that we ought to consider whether we can make a leap forward with respect to economic statistics if we are going to place the demands on economic policymaking machinery that we now make.

I think we could probably make some improvements there.

For the rest, I do not know that our deficiencies are matters of organization or procedure. We have at times been better organized than at other times, but Senator Bentsen. Let me ask you this. I do observe that countries that have much more elaborate planning structures than ours, and much more centralization of economic policymaking than we seem to have, although I think I should return to that, have not performed better in planning this. The economic planning agencies of Japan or the French Commissaire or whatever anybody else had did not foresee the oil problem. The world is very uncertain and there are going to be a lot of things that are not foreseen. I think one of the most important things to remember, to note, is that we run an economic system of enormous complexity and interdependence and it very rarely happens that anything that is scarce or not available when you want to get it, you can go to much more highly planned societies than ours and not meet that simple test. So I think we do need better statistics. I have come reluctantly to the conclusion that the Council of Economic Advisers ought to be a little bigger than it is but I say that because I am leaving and would not have to manage it.

Chairman BENTSEN. Mr. Stein, in light of your comments about long-range planning, how you feel about it, has the Council of Economic Advisers developed a long-range 5-year or 10-year plan as to how this economy might be developed or will likely develop within certain parameters or options?

Mr. STEIN. Well, we have from time to time made projections of the U.S. eonomy in greater or less detail over periods of 10 years into the future, but that is not the way I look at the problem and not the way we organize the conduct of our work.

It seems to me, the problem is to look at the kinds of policy questions that come before the Government and to try to answer them in terms of all of their implications, long and short run, so that we have a continuous problem of the nature of the Federal tax system and in making and thinking about what are the effects of alternative tax structures on the efficiency, growth of the American economy. I think the problem of international trade is a problem of developing a system which will maximize the efficiency of the American economy, that means maximize its output given the resources that we have. But, if you are asking me are we developing a plan which will say that the United States should grow by 5 percent in the next 10 years, and 12 percent of that should be investment and 64 percent should be consumption, no, I do not think that is the useful thing to do.

Chairman BENTSEN. Mr. Stein, you said a moment ago, if I am quoting you correctly, that you had reluctantly come to the decision to increase the size of the Council of Economic Advisers. In what way are you going to increase it, and why did you say you have come to that decision?

Mr. STEIN. Well, I did not say that we are going to increase it because that will be a matter to be included in the Federal budget, and we have not recommended an increase yet. But I would think now that the range of economic activities, the range of economic policies, that the Federal Government is concerned with and that require and deserve the attention of some central body and the executive office has expanded so, it has become very difficult for us to keep up with the flow of policy decisions that have to be made. So I think we need some more people.

Chairman BENTSEN. Has the Council initiated a major new study of inflation with any sound new way to approach it?

Mr. STEIN. Inflation is our continuing study. We look at it in the morning and we look at it in the night. So there will be no way for us to initiate a new study. We are always studying it. I suppose that the result of our study has been to confirm us in our belief we double the strength of our confidence in the old time religion.

Chairman BENTSEN. Mr. Stein, I appreciate your comments and they will certainly add to the hearing record and be helpful to us in our considerations.

We are going to hear from Treasury Secretary Bill Simon on June 26, in room 1318 of this building. We will continue the hearings at that time and we appreciate your coming this morning.

Mr. STEIN. Thank you very much.

[Whereupon, at 11:20 a.m., the subcommittee recessed, to reconvene at 10 a.m., Wednesday, June 26, 1974.]

LONG-TERM ECONOMIC GROWTH

WEDNESDAY, JUNE 26, 1974

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ECONOMIC GROWTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:15 a.m., in room 1224, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. (chairman of the subcommittee), presiding.

Present: Senators Bentsen and Percy; and Representative Widnall.

Also present: John R. Stark, executive director; Loughlin F. McHugh, senior economist; Jerry J. Jasinowski, L. Douglas Lee, and Larry Yuspeh, professional staff members; Michael J. Runde, administrative assistant; Leslie J. Bander, minority economist; George D. Krumbhaar, Jr., minority counsel; and Walter B. Laessig, minority counsel.

OPENING STATEMENT OF CHAIRMAN BENTSEN

Chairman BENTSEN. The hearing will come to order. This morning the Subcommittee on Economic Growth is pleased to have as a witness Mr. William Simon, the Secretary of the Treasury. Secretary Simon's reputation for hard work and diligence in the energy field is already well known, and we wish him well in extending that reputation in the broad field of economic affairs.

Let me say personally I appreciate the cooperation I received from the Secretary in his response and attention to communications from the Congress.

Secretary Simon, I believe that the current deterioration of the American economy has occurred in large measure because of the Federal Government and its failure to try to anticipate how the economy would develop and what difficulties this Nation could expect. As far as I can see, the economic actions of both the executive and the Congress have been reactions to the latest economic crises.

I don't believe that the American economy or its people can continue to withstand that kind of lack of planning. Now is the time for us to develop a more detailed picture of how the U.S. economy may grow in the next several years and determine how best to stimulate steady and balanced economic growth.

While the long range outlook for inflation, unemployment, output, real per capita income and other major aspects of the economy cannot be an exact map for the future, it can provide an early warning of approaching problems and thus enable us to coordinate and apply our energies more efficiently and more effectively.

Mr. Secretary, one of the witnesses before our committee felt that there was no need for long-range planning. I want to talk about that a little as we go along.

Obviously long-range planning has its limitations, but it seems to me we can develop contingency plans for opportunities and problems that might face the Nation. Certainly in business, where you are talking about long-term capital commitments, you make long-range studies as to what you can anticipate in the way of opportunities and problems to that kind of business.

Now by the end of this year, we may not have double-digit inflation, as we are seeing today, but the consensus of most of the experts that we have had before this committee is that we probably will have something close to 8 percent that for the next decade we could look at a compounded 5 percent inflation factor.

If we accept a higher unemployment rate, a higher inflation rate, what does that imply for real growth and our standard of living over the next decade? Can we count on higher productivity as we see more of this economy move into the service sector? And without higher productivity do we face a significant slow down in the rate of real economic growh in the late 1970's and early 1980's?

We have been accustomed in this country to a growing of the economic pie. So everyone, in effect, year after year with a few aberrations, got a bigger slice. But if growth in that economic pie slows down, if the GNP slows or it contracts, what does that mean for our economy?

These are signposts of long-term trends in our economy which are not the consequence of unforeseen chance events. And we must deal with them as policy issues now. They represent major challenges to steady economic growth in the years ahead.

In testimony before our committee so far there has been little to reassure that the Government is planning for our country's long-term economic problems and opportunities. I look forward to your positive contribution today.

Mr. Secretary, you may proceed.

STATEMENT OF HON. WILLIAM E. SIMON, SECRETARY OF THE TREASURY, ACCOMPANIED BY EDGAR R. FIEDLER, ASSISTANT SECRETARY FOR ECONOMIC POLICY

Secretary SIMON. Thank you, Mr. Chairman and gentlemen. I am delighted to be here today to discuss the long-term economic growth in the United States. Issues and policies that focus on the long term are rarely given sufficient attention in the Government—preoccupied as we so often are with the 2- or 4- or even 6-year election cycle—so I am especially glad to have this opportunity to share with you some of my views on the development of our economy over the next decade or so.

I do not believe it would be useful to present to you a detailed set of numbers on our expectations for the distant future. We do not believe that projections of long-term growth can be made with pinpoint precision. And to attempt to do so in detail by industry would only be an exercise in futility because growth occurs through innovations that give us the new products and new methods that make for better use of economic resources. The specific direction of these rapid and pervasive changes that take place continually in the technology and structure of our basically private-decision economy can never be predicted in detail. As to the broad path of future growth, however, we think the economic projections for 1985 prepared recently by the Bureau of Labor Statistics—and which have been presented to you earlier in these hearings—seem reasonable.

The critical factor in these projections is the assumption about future productivity growth. The processes by which we use our economic resources more and more efficiently are complex. It is clear, however, that investment is a factor of major importance. It is no accident that economies, such as Japan or Germany, that devote a large proportion of their output to capital formation have also experienced rapid gains in output per man-hour. By contrast, the United States has put a rather small share of its output into new plant and equipment—among industrialized nations the smallest share—and has had a much slower rate of productivity advance. The close relationship between investment and productivity growth is clearly illustrated in the table attached to my statement.

[The attached table follows:]

INTERNATIONAL COMPARISONS OF INVESTMENT AND PRODUCTIVITY, 1960 THROUGH 1973, BY PERCENT

	Average private investment as percent of GNP (excluding defense expenditures)	Average annual growth in productivity (output per man-hour)
United States	18.0	3.3
Canada	22.4	4.3
Japan	33.4	10.7
France	24.9	5.9
Germany	26.2	5.8
Italy	21.4	6.2
United Kingdom	18.9	4.2
OECD less United States [1]	24.2	6.3
All OECD [1]	20.5	4.8

[1] Figures in the first column for the OECD country groups represent private investment as a percent of GNP including defense expenditures and cover the 1960–71 period only. Broader and more current data are not available for some OECD countries other than those listed above. Similarly, productivity data for some OECD countries other than those listed above are available only through 1972.

Sources: OECD and national sources; Bureau of Labor Statistics.

Secretary SIMON. Not all investment is in machines and mortar. We also invest in a more productive work force through the accumulation of more "human capital"—more education and better health. Indeed, the economic value of this "intangible" capital formation may approach the value of our stock of capital more conventionally defined.

At present, both these forms of investment are on the rise. Plant and equipment spending has been increasing since 1971, though not with as much vigor in real terms as the economy needs. Similarly, each year's new entrants into the labor force have more education and are generally better equipped than their predecessors for the technological challenges of the future. On the assumption that these trends can be extended and strengthened, I believe it is reasonable to anticipte that productivity will continue to grow at a rate comparable to the historical pattern—which may not be enough, however, given the pervasive demands of our society for additional economic output.

THE MASSIVE CHALLENGE OF THE FUTURE

In recent years, however, there have been several developments in our economy that call for an increase in capital formation at a considerably higher rate than previously. What I have in mind are the enormous capital requirements to improve our housing stock, to provide new systems of urban transportation, to rebuild some of our basic industries, to clean up the environment and especially to achieve the goals of project independence. These programs will require an immense volume of new investment capital, far above and beyond the normal requirements to replace aging schools, industrial plants, and all of the other conventional needs.

The President has directed the Council of Economic Advisers to undertake a study of future requirements for capital. Without trying to anticipate the outcome of that study, I would like to discuss briefly my own view, which is that the economy will need to allocate a larger proportion of its output to capital formation than the historical average.

If this capital formation is to occur, it must be financed. And on the saving side of this issue, there are two crucial problems. One is inflation, to which I shall return in a moment. The other is profits, which perform a crucial function in this economic system of ours and which are a major source of invested capital. Thus profits provide both the incentive and the wherewithal for new investment.

Unfortunately, however, profits are frequently not seen for what they are, either in size or in function. Many Americans look upon profits as an unnecessary evil, and most Americans see profits as being of much greater size than they actually are. Surveys show that the typical American thinks profits account for about 28 percent of the sales dollar. If that were so, our capital needs could be taken care of quite easily. The fact is, however, that profits take less than 5 cents out of each dollar of sales. In some key industries, like food retaining, profit margins are as low as 1 percent of sales. Thus profits alone do not begin to cover all of the capital requirements of industry, although they are the source of a substantial portion of it. And profits will have to grow substantially to make their contribution to the investment needs of future years.

The important link between profits and capital formation is clearly illustrated by the critical problems of electric utilities. Because the ratemaking authorities have been slow to react to skyrocketing fuel, capital and construction costs, the after-tax earnings and cash flow of the industry have been squeezed at a time when its capital requirements are growing rapidly. From 1964 to 1973, the industry's cash flow increased from $3.3 to $5.9 billion, while capital outlays climbed from $5.5 to $18.7 billion. As these figures strongly suggest, the low rates of profitability allowed by the ratemaking authorities are threatening to destroy the industry's ability to raise the enormous volume of capital it needs to do its job. The electric utilities require higher earnings to assure that adequate electric power is available for all of us in the future.

In 1973, after-tax profits of all corporations increased some $15 billion, or 27 percent. On the surface, that would appear to be a sparkling performance. However, a significant part of that increase in profits represented gains in inventory valuation attributable only to inflation. That important element of profits did not represent an increased flow of cash available for new investment. In fact, undistributed corporate profits—after taking account of the inventory valuation factor—increased only $3 billion last year. Furthermore, at $25.4 billion for 1973, they were still below the 1966 level of $27.4 billion. Moreover, if the inflation of the intervening period is taken into account, the 1973 total is only two-thirds of the 1966 level.

My concern about profits, then, has two aspects. One is the critical importance, in terms of the ability of this country to meet its future investment needs, that profits grow at a much more healthy pace over the coming years than they have in the past 7 years. My other worry here is that the negative attitudes about profits held by many Americans might become a part of public policy. We must avoid legislation and regulation that is punitive of reasonable profits honestly earned. The result could only be that capital formation would be inhibited, and that real purchasing power of wage earners would rise more slowly.

The second part of my concern about the ability of the economy to meet the savings and investments demands of the future is the enormity of the capital requirements we face. Estimates of the needs of the energy industry alone for new capital over the next decade range from $750 million to $1 trillion. Pollution control might require another $100 billion. The cost of rebuilding basic industries such as steel, paper, cement, fertilizer, zinc and others, where investment has languished over the past decade, could add up to another $50 billion or more. Urban transportation, housing, and other major programs could take scores of billions of additional capital. And all of these needs come on top of conventional requirements. There can be no doubt that in total our future capital needs represent an enormous challenge.

MEETING THE CHALLENGE

To meet this challenge, we have two major alternatives. The first is that our increased investment requirements for energy and other new programs could take place at the expense of conventional capital formation. We could, in other words, divert some of our present investment to these new requirements. This would have serious consequences. Some of our cherished present goals, such as rebuilding the housing stock, would then suffer. And generally this would also result in a slower rate of overall economic growth, at least as conventionally measured.

The second alternative is to increase the share of total economic output going into investment. That is, we could displace some of our present private consumption or Government expenditure in favor of the added investment. Although it is always uncomfortable to suggest that growth in consumer spending and worthwhile Government programs must be held in check, we feel very strongly that this is the preferred alternative.

Our major task, then, is how we can achieve this shift from consumer and Government expenditures into investment. How can we assure that our predominantly private-decision economy will have the necessary incentives to increase the volume of savings and investment?

By far the most important thing that Government can do to encourage saving and investment is to bring inflation under control. This is one of the major reasons why I have stated so many times that inflation is our number one economic problem.

Inflation is the bitter enemy of the saving-investment process. What reason is there for any worker to put aside part of his paycheck every week if his return on that saving is no higher—or perhaps even less—than the rate of inflation? And inflation distorts investment incentives with funds going into speculative ventures rather than basic capital formation.

If, however, we can demonstrate convincingly to the private sector that the Government means business about inflation, that we are pursuing the policies that will permit a gradual subsidence of the pace at which prices and wages are rising, then the incentives will be restored for orderly and vigorous saving and investment. Under those circumstances, we will be able to effect the substantial shift from consumption and Government spending to investment that will be needed to provide for the massive capital requirements of the coming decade.

There is another important Government policy that we should consider, one that would make more savings available for private investment, and at the same time reduce inflation, and that is to alter our budget policy. Our general goal is to achieve a balanced budget when the economy is prosperous. If, however, we shift that goal to a significant surplus—and assuming also that we don't offset that move by expanding the volume of loan guarantees or other off-budget gimmicks—it would do two important things. It would enlarge the flow of savings available to the private sector, because the Government would reduce its claims on the capital markets. It would no longer preempt a large share of the funds needed by homebuilders and other users of financial capital who are now elbowed out of the market by the Government's superior credit rating. At the same time, a budget surplus would provide the necessary fiscal restraint that is so critical to control inflation.

Another idea that deserves study is the proposal to provide new investment incentives for industry through the tax system. As you know, this approach always raises difficult questions, especially if the proposal is limited to specific industries. I do not have any recommendations for you at this time, but I did want to inform you that we are currently taking a careful look at this idea.

SUMMING UP

I am convinced that the American economic system is capable of making this major shift in output from consumption and government to investment. I think it can be done and that it is important that we do so. We should reverse our long-held policies that penalize saving and encourage consumption. Our tax system should be re-examined to this end. Federal Reserve regulation Q, which limits interest paid on savings accounts, should be revised at the earliest opportunity. Control of inflation is of crucial importance. Another basic requirement is that we permit the normal incentives of the price system to operate freely. We must not impose artificial Government constraints, as for example we have done for so many years, and are still doing, in regulating natural gas at the wellhead.

It is instructive to recall what took place after August 1971, when we removed the artificial constrait of fixed exchange rates that had produced an overvalued dollar for so many years. In the free market, the dollar moved to new, more competitive levels and our trade balance, which had been in a nose dive for many years, returned to surplus. Similarly, when we changed agricultural policy 180 degrees to permit maximum production, American farmers responded to the incentives of the marketplace by planting large amounts of additional acreage, which are now producing record harvests, the prospect of which has brought grain prices down. These are just two examples of what the marketplace, given reasonable freedom and time, can achieve in overcoming serious economic problems. Let us make sure that we remember this lesson in meeting the challenges of the future.

I have with me Mr. Edgar Fiedler, who is the Assistant Secretary for Economic Policy in the Treasury Department. We would be delighted to answer any questions that you may have, Mr. Chairman and members of the subcommittee.

Chairman BENTSEN. Thank you very much, Mr. Secretary. Because I know other members will also want to ask you some question, I will ask that all members limit themselves to 10 minutes and then we will make the round again if we have time.

Mr. Secretary, you say that inflation is our number one problem in this country and I couldn't agree with you more. It is a little like carrying coals to Newcastle in this situation because we share that concern with you, but what we need is more information on what causes inflation and how its impact on individuals and sectors of our economy and what we ought to do about it.

I am thinking about what the cause of inflation has been for the last 18 months and mow much of it has been due to budget busting. Now let me say in that regard that we had Mr. Roy Ash before us and we had Mr. Stein before us and both of them agreed that budget busting had not been the cause of inflation in the last 18 months. Would you care to comment on that?

Secretary SIMON. I think that the figures clearly indicate that the major portion—meaning over 60 percent, Mr. Chairman—of the inflation has been in the special problems areas of food and fuel. And we are addressing that and have addressed that in removing the set-aside acreage requirements in agricultural policy so we could plant all the available acreage in this country to provide not only the needed food in this country for our own consumers but also for export purposes to offset the energy and oil imports that we must make.

Chairman BENTSEN. Well, would you say that budget busting was one of the major causes of inflation in the last 18 months or not?

Secretary SIMON. As I said, 60 percent of the inflation problem in this period has been due to food and fuel price increases. But I would hasten to add that we must go back to the fundamentals and just to say, well, it was this particular problem at this particular time that caused the inflation when the fundamentals remain that the U.S. Government in 14 of the last 15 years has indeed had a budget deficit and much of this was unnecessary and contributed to the inflation problem, is not enough.

Chairman BENTSEN. But during much of that period of time we had a relatively minor inflation rate as compared to the rest of the world. That would also be true, correct?

Secretary SIMON. Our problem——

Chairman BENTSEN. But let me ask you how much has been due to dollar devaluation or excessive monetary supply?

Secretary SIMON. In recent periods a fair portion of it has, Mr. Chairman.

Chairman BENTSEN. How much of inflation do you think is due now to shortages in supply such as steel and paper?

Secretary SIMON. Do we have the correct figures on steel and paper?

Mr. FIEDLER. No.

Secretary SIMON. We don't have the exact figures broken down by industry, Mr. Chairman.

Chairman BENTSEN. How do you think inflation has affected savings?

Secretary SIMON. Well, obviously when interest rates—whether they be in the debt securities market or the dividends on equities—are at or below the rate of inflation, there is no inducement for people to save. And we can go back to where I believe the real crunch in our inflation problem began, which is the guns and butter policy starting in 1964–65, and the inflationary period in 1965 to 1969 where we had massive buget deficits and refused to raise taxes to meet the war needs.

And I mentioned in my statement of how the Federal Government has re-empted our capital markets in the off-budget financing which has grown so traumatically since 1964 in all the Federal Government and Federal Government sponsored agencies that have been put outside the budget. And one looks at that and it is a very large figure.

Here we are today. And the last time we ran these number 62 percent of our capital markets are preempted by the U.S. Government and its federally-sponsored agencies. Well, who becomes the disadvantaged in this process?

We have to move that, you know. And it is very difficult because we can't turn the clock back.

Chairman BENTSEN. I share your concern on the problem of capital formation and as you know I believe a great deal of England's problems today are the result of their not putting up capital to back industry in building maximum capacity and we find ourselves in the same kind of position. We are becoming more and more a service oriented society and almost half our GNP can be attributed to that. Yet, I firmly believe we can't keep our balance of trade and can't keep up our national defense just taking in other people's washing. We have to increase our productivity.

If budget busting has not been the cause of inflation over the last 18 months, it seems to me we should get to some of the other sources of inflation such as shortages and wage push. And if you are trying to do something about capital formation, what specifics do you have in that regard?

Secretary SIMON. Mr. Fiedler wanted to make an additional comment on the last question.

Chairman BENTSEN. All right.

Mr. FIEDLER. I think we should distinguish, Mr. Chairman, between the effects of inflation on saving in the short-run and the long-run. For a very brief period, when higher rates of inflation produce a sense of uncertainty and caution in the spending of consumers, they may tend to raise their savings rather briefly. But when we have a long period, as we have had these past 8 years, inflation certainly has a negative effect on savings.

Chairman BENTSEN. In his recent radio address the President said that he was going to provide Congress legislation that would authorize a cost-of-living task force to monitor inflation and shortages. I recall voting for one of those on the floor of the Senate not long ago and finding considerable opposition to it on the other side of the aisle. When I asked Mr. Ash and Mr. Stein for the details of this proposal, I received the impression that nothing had been done yet to fulfill the President's commitment in the way of sending up legislation.

Can you advise me on that as to when we can anticipate that?

Secretary SIMON. We, as you know, Mr. Chairman, wanted to have before June 30 the Cost of Living Council's authority statutorily extended to monitor prices and wages in this economy with specific controls in the health care and construction area. And the new legislation is being worked on right now, but I do not know what the exact timetable is.

Chairman BENTSEN. We are having a problem with the exportation of some of our supplies in this country where we are critically short here. I can think of things like fertilizer, tubular steel. What is the administration doing in developing means to manage or to limit or to moderate the export of U.S. commodities in short supply?

Secretary SIMON. We monitor that, Mr. Chairman, very closely in the area of steel rigs, which you well know are in short supply. And as long a time ago as December and January, when it appeared we were going to get an explosion in drilling domestically and demand for tubular steel in drilling in this country, we met with the steel companies and the makers of tubular steel products and steel rigs to ascertain what they were doing to meet this anticipated demand and to attempt to assess what the short-fall might be. We have been satisfied that we are not at this point exporting at the expense of our domestic consumers. It is a matter of a true shortage in this country based on the fact that exploration had declined since 1956. And if exploration and production declines to the level that it did the steelmakers and rigmakers aren't going to make the rigs because there was no demand.

The explosion came in the fourth quarter of last year and now drilling in 1974 is up 40 percent over 1973. They have retooled and they are producing these rigs now, but there is still a waiting period of 6 to 12 months. But whether it is tubular steel or steel rigs or fertilizer, we monitor the exportation of all of these products that are in short supply in this country in an effort to determine whether they are attempting to take advantage of higher prices overseas rather than taking care of traditional customers to maintain our trading relationships in the world.

Chairman BENTSEN. Do you put our reports in this regard so that the businessmen in this country and so that Congress and the consumers are informed?

Secretary SIMON. The Commerce Department does. Whether they put every report that is written on specific commodities I don't know, but I know I have worked with the Commerce Department very closely on this.

We have put, of course, export limitations on petroleum and petroleum products, which requires licensing and these are the producers that we go to when we deem this is a concern as far as our American consumer is concerned.

Chairman BENTSEN. When you talked about capital formation for manufacturing capacity in this country, you referred to tax incentives which would be coming up in that regard. Now what do you think of Mr. Brimmer's proposal that we use the reserve credits for the Fed or banks where you give special consideration to loans made to manufacturing capacity. I think he was talking about the housing market but the same thing could be applied elsewhere. Now what do you think of that as an idea?

Secretary SIMON. If you are going to change our Federal Reserve central bank into one that exercises its powers in the creation of money for social purposes rather than monetary reasons, I think that this is a serious concern and one that would have to and has been, I remember, debated long and hard. And fine, you can say it is housing and manufacturing that needs it this year, but what is going to be the priority that is established by Congress to direct the Federal Reserve to correct its monetary creation through reserve requirements or otherwise on certain assets?

I know this is a very emotional issue and I believe Mr. Brimmer is in a minority in the Federal Reserve on this issue. But I think——

Chairman BENTSEN. Do you have a personal opinion on it?

Secretary SIMON. I have a personal opinion. I am opposed to that personally, and I think that there is a better way to provide the incentive than using our central bank as a mechanism for this.

Chairman BENTSEN. My time is up. Congressman Widnall.

Representative WIDNALL. Thank you, Mr. Chairman. Welcome before the committee, Mr. Secretary. We certainly appreciate your testimony here today. I enjoyed very much hearing your initial views with respect to this most important subject matter. I have a few questions I would like to as kyou. Ithink most everybody here in this Nation woul dagree that we should expand production because it is much easier and bette rto divide a large pie than a small pie, but will we have the raw materials needed to keep production in pace with the growing needs and demands that you cited?

Secretary SIMON. Yes, I believe we will, Congressman Widnall. Definitely. We have an abundance of natural resources in this country and it all depends what area you are talking about. The major area that seems to be in focus today is the energy area. And I could speak at some length about our superabundance of the fossil fuels, coal and natural gas and oil on the Outer Continental Shelf and the North Slope and all the rest. But if the Government stops putting artificial restraints on the marketplace and allows our system to go out and produce these reserves, that is all we need. We have had a series of Government actions and inactions. For instance, for the last 20 years of our Continental Shelf leasing program we leased 3 percent of the acreage. It seems that we always wake up in time to react to problems instead of acting to avoid them. And from what the chairman said at the outset, I must admit I agree with that. While there certainly can be no real, accurate signed map of the future, we can be aware of what are many of the obvious pitfalls. Natural resources is one such area, and Federal spending and the preemption of the capital markets in this country by the Federal Government are certainly right at the top of my list.

Representative WIDNALL. What you are saying is we can almost be independent when it comes to the development of energy sources? Is that correct?

Secretary SIMON. Yes, sir, I most sincerely believe this.

Representative WIDNALL. What do you do in this interim period while you are developing all these things?

Secretary SIMON. Well, to develop these things you do two things:

One is occurring right now and that is a reduction in demand. Because we are terrific wasters. As I have said 2 million times, with 6 percent of the world's population using 30 percent of the world's energy, we are wasters. We have cut down dramatically on our imports. Imports were scheduled to be 7½ million to 8 million barrels a day. That was our projection last year. They are running 6.4 million or 6.5 million, which is significant but is quite a reduction in demand.

In the interim, we have to do something on strip mining and we are out full blast on the Outer Continental Shelf with our shelf leasing. And, fortunately, the embargo helped pass the Trans-Alaskan Pipeline bill, so in 3 or 4 years years that will carry 2 million barrels a day.

There is something more important. Exploration ceased on the North Slope while the Trans-Alaskan Pipeline bill was being delayed and now exploration continues. Secondary and tertiary recovery in this country continues.

I just don't buy all of these comments people make that in no way can we achieve self-sufficiency.

But in the interim, Congressman Widnall, to answer the second portion of your question, our only alternative is to import what we need in excess of what we produce. And that is currently what we are doing.

Mr. FIEDLER. And to conserve.

Secretary SIMON. I said that first.

Representative WIDNALL. The fact that in the interim we have to import, is that responsible for the dramatic change in the balance of payments?

Secretary SIMON. It is going to have an impact on our balance of payments, on our trade balance.

Our trade balance, the figures came out yesterday and were $777 million in deficit last month, which is the first major turnaround of this year. But we are somewhat optimistic on the overall balance of payments, because we believe that we are going to get a significant portion of the investment funds, which will offset the trade deficit. Nonetheless, the answer to your question is, yes, we are going to have a trade deficit because our oil bill is going to be in the area of $15 billion larger than it was last year and that cannot be offset by our agricultural production.

Representative WIDNALL. Talking of that. There is talk that we will even be subjected to a further increase in price for the imported fuel.

Secretary SIMON. Congressman Widnall, I read that in the newspapers, but I do believe in markets and right at the present time the world demand in response to these new prices is about 1½ million barrels per day below world production. And I don't believe that a price increase is imminent, no, sir. I feel exactly the opposite. I think you can see a decline in the world price of oil in the months ahead.

Representative WIDNALL. See a decline in the world price of oil?

Secretary SIMON. That's my opinion, yes, sir.

Representative WIDNALL. In your statement you talked about the concept of human capital. Do we receive a higher return in terms of human capital. Do we receive a higher return in terms of production from investment in tangible capital or intangible, such as human capital?

Secretary SIMON. That is judgmental Congressman Widnall. I would say that it could be close to 50–50. It is debatable.

Representative WIDNALL. Well, the President has called for the establishment of a national health insurance program saying that that has one of the highest priorities of the administration. Would national health insurance be a wise investment in human capital, or would the expansion in demand engendered by such a proposal destroy the prospects of demand for medical care reaching equilibrium with the supply?

Secretary SIMON. Oh, obviously I think the health program of the President has a very high priority. It is quite simplistic but obvious that with a nation of healthy people, of people who will live longer and be more productive during their working lives, we are going to increase productivity, yes.

Representative WIDNALL. In your statement, Secretary Simon, you refer to profits and you relate profits to sales. How helpful is it, however, to discuss profits in terms of sales? Isn't it much more crucial to think of profits as a return on investment, principally in percentage terms, in deciding about the adequacy of profits to attract further investment capital?

Secretary SIMON. Yes, sir.

Representative WIDNALL. For example, you stated that in many industries, such as food retailing, profit margins are as low as 1 percent of sales. I do not find that too surprising in such a high-volue industry. Additionally, knowing the profit margin really tells one nothing about return on total assets or stockholders' equity, which would seem to be the crucial information. Would you care to comment?

Secretary SIMON. If we were doing a detailed study industry by industry on investment, savings, et cetera, I would use return on equity, as I did in our study on the petroleum industry.

Mr. FIEDLER. If I might add to that, the reason we talked about return on sales here is because the surveys that were taken of the American people's attitudes about profits were done in terms of return on sales. We were contrasting the actual facts of return on sales with what the typical American thinks is the case.

Secretary SIMON. And this is the critical part, because if indeed we here in Government decide that we need additional investment and that it should be stimulated in one way or another, obviously our actions are certainly influenced by the feelings of the American people. And if there is this feeling that profit is a dirty word in certain areas, then rate of return has not reasonably been explained to the American people, as I attempt to do during the oil crisis with the explosion in the oil industry's profits. When one looks back over the past 15 years and measures the oil industry's return on investment, vis-a-vis the other 30 manufacturing industries, the oil industry is not out of line. This is an attitude that must be changed or what I am saying just cannot occur.

Representative WIDNALL. Well, evidently your study has been one of food retailing. What about the middleman in food? Has any real study been done on that, because God knows the prices have gone up astronomically and are not related particularly to what the cost is wholesale or at the beginning of the entire process.

Secretary SIMON. There was a meeting in the White House, Congressman Widnall, 2 weeks ago on this subject that suggested that the middleman's profits—with what has occurred recently in the food industry—were a little bit too large and they were asked to bring them more into line.

Representative WIDNALL. As one who does some shopping I would say they were more than a little bit too large.

Secretary SIMON. I think it would vary by component. We are talking not about long term, but we are talking about the present problem.

Representative WIDNALL. Do you have any recommendations as to how that might be modified or controlled so that we would be able to pass on to the consumer a better price than he is getting today?

Secretary SIMON. Here again, we feel this meeting will bring the result and the prices will be reduced or the profitability will be reduced where it is possible, Congressman Widnall.

Representative WIDNALL. You say "this meeting" at the White House will produce the results. Who was present at the meeting? Who could affect the ultimate price as far as the consumer is concerned?

Secretary SIMON. I can get you a list for the record of the food people that attended that meeting.

Representative WIDNALL. I would appreciate it being placed in the record.

Secretary SIMON. Yes, sir.

Representative WIDNALL. Could that be done, Mr. Chairman?

Chairman BENTSEN. Yes, of course.

[The following information was subsequently supplied for the record:]

Office of the White House Press Secretary

NOTICE TO THE PRESS

Meeting with Representatives of the Meat Industry, 10:00 A.M., June 17, 1974, The Roosevelt Room.

PARTICIPANTS

Administration

Secretary of Agriculture Earl Butz.
Counselor to the President Kenneth Rush.
Herbert Stein, Chairman, Council of Economic Advisers.
Gary Seevers, Council of Economic Advisers.
Howard Worthington, Treasury Department.
Frank Zarb, Office of Management and Budget.
Assistant Secretary of Agriculture Clayton Yeutter.
Don Paarlberg, Director of Agricultural Economics, Department of Agriculture.
John Byington, Office of Consumer Affairs.
Tom Kay, Department of Agriculture.
William Baroody, Special Consultant to the President.
Mike Samuels, Executive Assistant to Counsellor Rush.

Livestock producers

Gordon Van Vleck, President, American National Cattlemen's Association.
R. M. Carter, Regional Vice President, American National Cattlemen's Association.
C. W. McMillan, Executive V.P., American National Cattlemen's Asso.
Don F. Magdanz, Executive Secretary, National Livestock Feeders Asso.
Melvin Kuska, Feeder, Nebraska, V.P. National Livestock Feeders Asso.
Tom Monier, Feeder, Illinois, V.P. National Livestock Feeders Asso.
J. Marvin Garner, Executive V.P., National Pork Producers Council.
Gerald Beattie, Producer, Nebraska.
William J. Kuhfuss, President, American Farm Bureau Federation.

Meat packers

Erving Pricemen, President, National Independent Meat Packers Asso., (President, Kansas Beef Industries, Inc.).
Edwin R. O'Neill, President, Western States Meat Packers Asso.
Richard Lyng, American Meat Institute.
R. D. Arney, Executive Vice President, Esmark, Inc.

Retail chain food stores

Henry Bison, Jr., Washington Representative, National Asso. of Retail Grocers.
Thomas F. Wenning, National Association of Retail Grocers.
Robert Braunschweig, Vice President, Kroger Company.
Clarence G. Adams, President, National Association of Food Chains.
A. D. Davis, Vice Chairman of the Board, Winn-Dixie Stores.
L. N. Hoopes, Director and Vice President, Supply, Safeway Stores, Inc.

Farm credit finance

Robert L. Walton, President, Farmers & Merchants State Bank, Illinois.
Gene Swackhamer, Farm Credit Administration.

Consumer representative

James Turner, Consumer Food Specialist.

Representative WIDNALL. My time is up.
Chairman BENTSEN. Senator Percy.
Senator PERCY. Secretary Simon, I can't recall when any other Cabinet official for years has come up and talked about a surplus in the budget, not since Senator Williams left the Senate have I ever heard that word even used and it is a refreshing change. I worked with Senator Williams in 1968 to put through the first bill that Congress has ever put through directing the President to cut the budget $6 billion and put a ceiling on hiring. And I think that resulted in $1.3 billion surplus in 1969 and we haven't had one since. We were told at the time that we should think in terms of a full-employment balanced budget. Are you now saying that that was a disservice really to our thinking and that it is a concept, an idea, that you certainly yourself discourage?
Secretary SIMON. Well the full-employment budget is a useful guide to some economists. As you know, Senator Percy, I am not an economist, but it is a useful guide for economic policy and its impact on the economy. But when I refer to a balanced budget on traditional unified basis.
Senator PERCY. By your smile I presume that is a way of saying that the full-employment budget is an idea that has stayed its time and is certainly will not be any longer a serious proposal of this administration and certainly not a means of combating inflation?
Secretary SIMON. Well, it will still on occasion be used by certain economists, who like to use that as their guide in gaging the economic impact of a budget, but many economists have different definitions of the full-employment budget and, indeed, what is full employment.
Senator PERCY. But it is not going to be your guide as far as the Federal budget is concerned?
Secretary SIMON. No, sir.
Senator PERCY. What impact do you think potentially the budget reform bill, that the Senate and the House have passed and will be sent to the President for signature in a week or so, what impact psychologically can that have if we truly do reform our procedure and establish a ceiling commensurate with the needs of the economy and adhere to that?
Secretary SIMON. Well, its psychological impact, I would answer that none. When it actually begins to function, it will have an impact when it is deemed we are absolutely serious. You know, when you talk about controlling spending and that it has got to be done and kept within balance or with a slight surplus or slight deficit, depending on what the economic outlook is, I think you will find the people in America and the financial markets on this subject are from Missouri and they don't believe. And I don't blame them for not believing nobody any more in Government, because you can go back to the problems, as I said before, of the Vietnam war. And let's start with 1964–65 and look at our fiscal policies of budget financing, starting with the certificates and the economic crunches of 1966 and the gold crisis in 1968 and the stop and go of the economy. Now these people will want to see it happen first, and I don't blame them and so do I, because I am a skeptic that the political will exists in this, Senator Percy, over a long period of time. It is very popular

this year. The American people are—and well they should be—scared about double-digit inflation. It will be a big issue back home and everybody will go back home saying, "Yes, sir, we are going to balance the budget" and all of that. But maybe in December I will be the only one saying it.

Senator PERCY. I hope not. Do we have assurance the President will sign the budget reform bill?

Secretary SIMON. No, sir. I haven't talked about this with the President.

Senator PERCY. Would you just assume that in view of the fact there have been no discussions of this—and since I think the assurances at a lower level that I had received have been adequate to assume me that we will have a bill signed and since we are starting to work to implement it right now, assuming it will be signed, would you just assume it will be? You have no understanding, is that what you say?

Secretary SIMON. That would have been my personal assumption, but I have had no conversation with the President on this subject at all.

Senator PERCY. As you know, Senator Dewey Bartlett and we, feel that we should start to implement the spirit of this bill right away even though we are not required to take action for another 10 months when we send a concurrent resolution on the fiscal 1975 budget to the floor but we still feel that something should be and can be done in the meantime. A letter was drafted by Senator Dewey Bartlett to his great credit and it was addressed to you requesting that a balanced budget now be submitted, be resubmitted for fiscal 1975. I urge that the letter be redirected to the President. It had 52 signatures on that letter requesting that the fiscal 1975 budget be resubmitted to us on a balanced basis.

I understand from news reports that this is being taken very seriously and that the President now is thinking in terms of at least dropping it to a $300 billion figure. Is there a chance that with the gap narrowing considerably that we actually can have for our consideration—and you know it will be very hard for the Senate to backtrack if 52 members have signed the letter requesting it so I think psychologically we have some momentum here—but can we get a budget that would be reasonably balanced or in balance?

Secretary SIMON. To overuse my favorite word, I thought your letter was super. Basically, the President in his last meeting with us this week has ordered a complete budget review with the excellent statement that there are no sacred cows in the budget in the so-called uncontrollable area. And I would hope—and understandably your letter did not state what areas would be cut——

Senator PERCY. No, it was very general.

Secretary SIMON [continuing]. But I would hope we could get together and find broad areas where we could achieve significant reduction, if not total balance, in 1975. But then, on the other hand, while I understand and believe the sincerity of the purpose of your letter, Senator Percy, I am confused. Because 2 days later 87 Senators voted for $3 billion for the cattle industry. My first reaction in reading that was maybe I should bring down all my friends from Wall Street who have gone broke in the last few years and maybe they ought to get a subsidy too.

Senator PERCY. Well, I don't blame your cynicism. I happened to be absent that day. Could it be expected though that the administration will not be selecting and sending down a balanced budget, will not do as Lyndon Johnson did, and then cut out school milk programs and things that are sacred cows pretty much here and that have been in being and in law for 40 years and which literally speaking would be almost impossible for us to legislate out without a revolution on the floor probably? Can this be a good balanced judgment on the items that are selected so that there could be a reasonable chance that an accord between the Congress and the executive branch on this will occur?

Secretary SIMON. Yes, Senator Percy, I believe there can be and I think that you can participate and cooperate in this exercise along with us. We can work together to find the areas that are not the particular motherhood type issues, if you will, that really wouldn't have a chance of being restricted. In $305 billion, we should certainly be able to find a sufficiency to move toward balance.

Senator PERCY. Thank you. I certainly commend the Chairman on the purpose of these hearings. We so frequently deal with the immediately urgent and pressing problems that the ultimately important never gets attention. But are you convinced Mr. Secretary that we probably had enough of wage and price controls now to convince ourselves that that mechanism should not be a part of our economic planning for the future and that it was disastrous and it cannot be looked to over a period of time? Maybe a short time, 30- or 60- or 90-day period, you can control or freeze without growth inequities, but over a period of time would you disregard this as an economic tool that we reasonably can use with any kind of results to be expected?

Secretary SIMON. Let me go back to 1971, when as an investment banker I personally applauded the imposition of wage and price controls through phase I, when our economy was operating obviously poorly and through phase II, when it was operating with a certain amount of slack and there was no pressure under the cooker at that time to create the terrible inflation problems that we have indeed right now. Let me go into my early days in this administration, through the early months of 1973. And I must admit that I still looked favorably then upon a control mechanism for this economy. But thank God I had the experience that I did in attempting to manage this complex economy through wage and price controls. I don't even agree with your last statement of 30- or 60- or 90-day freezes. And as George Shultz used to say, he used to thank that farmer or chicken person who drowned all of those baby chicks because that shows what freezes do in these areas. So I don't think in this complex economy controls do anything but distort and bring scarcities that ultimately compound our inflation and demand problems in this country. So I really have found a very useful education in that to put it mildly. That is a bit of a mea culpa on my part.

Senator PERCY. Well as you know I even fought the administration's proposal for standbys so I am as much a purist as you can get. Referring to the 60-day period, I took from Mr. Grayson's statement that possibly you can do something in a relatively few days but over any period you can't do anything.

Secretary SIMON. Senator, I have found how government persuasion in many areas can work to everyone's benefit in practicing restraint and in buying time when we have the proper economic policies in place. I have watched John Dunlop work some miricles in this area and it could have been and should have been continued.

Senator PERCY. Thank you very much. Thank you, Mr. Chairman.

Chairman BENTSEN. Mr. Secretary, we also all know about the causes of inflation. What does the administration have in mind in trying to curb inflation besides the traditional monetary and fiscal restraints? Does it have anything in mind in addition to that?

Secretary SIMON. It is a matter of productivity and increased capacity in many of our industries where we are attempting to look ahead, just as you said in your opening statement, at areas where there are going to be shortages in the future and which will inhibit our growth or make us more dependent upon imports of these critical commodities, such as the oil experience that we are going through right now.

Chairman BENTSEN. Well that is interesting but what is the administration doing about trying to take care of these shortages specifically?

Secretary SIMON. The President appointed Herb Stein, Chairman of the Council of Economic Advisers, to commence immediately a study of the long-term investment and capacity.

We in the Treasury Department are taking a look at the fiscal side, at the tax side of it.

Chairman BENTSEN. Mr. Stein didn't seem to have much confidence in long-term planning in testimony before us. In fact, he had little or none at all in the statements he was making. Is he charged with the responsibility of the long-term planning?

Secretary SIMON. I think he said—and I think you would probably agree with this—that one cannot say in 1985 with pinpoint accuracy that this and that will happen—

Chairman BENTSEN. No, that is what you said, Mr. Secretary. That isn't what he said. He was much stronger in his disregard or lack of faith in long-range planning. And I agree with you that you can't do it with pinpoint accuracy but he showed little confidence at all in that type of looking ahead.

Secretary SIMON. Oh, I didn't read his particular comments in this area, Mr. Chairman.

Chairman BENTSEN. I think you would find it quite interesting.

Mr. Secretary, these witnesses that we have had before us, a number of them have testified they think we are going to have compounded inflation at the rate of 5 percent for the next decade. Do you think that is a ballpark figure and that it is probably accurate?

Secretary SIMON. We had a meeting yesterday with what you might call a blue ribbon group of economists. They are consultants to the Treasury Department that we bring in periodically to get exactly this type of study work done. And it goes back to what you and I were just saying that nobody can pinpoint with any accuracy what is going to occur in 5 years or 10 years vis-a-vis the technological changes and all of the changes that will be occurring in all of the world economies in the interim.

So, no, I would not accept the prognosis that 5 percent inflation will be here 5 years or even 3 years from now. Because you take a look at it and if fuel and food have contributed—which they did, 60 percent—toward our present inflation and if one could see the price of world oil decline somewhat and the price of food perhaps even decline somewhat and a reduced demand worldwide as the countries of the world are implementing their demand restraint policies, one could say you could bring this inflation rate down pretty good right now to that 5-percent level.

I am not saying that is going to occur, but I am just saying that these are the uncertainties that exist when saying that we are going to have inflation at a compounded rate of 5 percent.

Chairman BENTSEN. Mr. Secretary, you said we are going full blast on offshore leasing and approximately 3 percent of our offshore lands have been leased thus far. My deep concern is the manner of offshore leasing where the Federal Government, when oil and gas is found, only gets about 16 2/3 percent of the production and yet I see the major companies of this country giving much more favorable leasing contracts to foreign countries where they are drilling on the public lands for private profit as they are doing here.

I have proposed a piece of legislation that would materially increase the percentage of the production going to the Federal Government. The problem you run into with the present program of leasing and all of these possible shortages of capital that you and I are agreeing on is that only the very big companies can get out there and truly compete. And I think they like this present form of leasing. In fact I know they do and they are opposed to the proposal I have. But the proposal I am talking about would allow a lot more competition, would allow a much faster leasing of these lands to try to develop energy self-sufficiency. Do you have any thoughts in that regard?

Secretary SIMON. The Interior Department has already announced an experimental leasing program based on this royalty system. There has been a concern in Government—also expressed by independents and oil companies alike—that if the royalties are set too high for the Federal Government, it encourages the producer to shut down the production much earlier than he would if it were that the majority was still owned by himself. I have been concerned, Mr. Chairman, since I became involved in the oil area and still am with the front-end money that all of these people have to put up, so I continue to argue for a system that will not require the front-end investment that enabled the independents to compete as equally as the majors, yes.

Chairman BENTSEN. Mr. Secretary, my proposal provides for secondary recoveries, for more expensive recoveries, and depleting reserves and lets the Secretary have discretion in that regard to make adjustments as they lease so that you will see that you recover the ultimate reserves that can be economically recovered.

Mr. Secretary, I would like to talk to you just a minute about Federal surpluses, which is a very great idea and I enjoy seeing them as few and far between as they come. But are you speaking of continuous Federal surpluses or are you speaking of a surplus from time to time? And if you are talking about continuously then what do you do in times or recession?

Secretary SIMON. No, I am not. That was an illustration and not a recommendation.

It was an illustration that with a Federal surplus, indeed it would provide more ways for increasing savings and investment. Obviously one cannot say we are going to run a deficit every year or we are going to run a balance every year or we're going to run a surplus every year. It depends on our economic projections for the economy as we look at the year ahead. If the economy is functioning below capacity and we are in a period where growth is not adequate, then a budget deficit is called for. At the same time when the economy is operating at full capacity or demand is exceeding this capacity, then it is a compelling argument for a surplus—certainly a balance, but a surplus would be useful. The problem has been that even when we have been in boom times in some of these 14 of the last 15 years of budget deficits it hadn't been recognized and we haven't achieved balance but continued to compound the deficit and compound the financing side with the budget gimmicks and that is still continuing.

Chairman BENTSEN. We're debating now the problem of tax reform on the floor of the Senate and I know you and I share the desire to see tax cuts for lower and middle income people, that are particularly feeling the burdens of inflation today. But in also trying to curb inflation and keep a balanced budget or even a surplus budget, where are we going to increase the taxes? Where would you suggest they be increased, Mr. Secretary? And then we come back to the problem of capital formation these days. Would you increase the taxes to business? Would you take off some of the tax incentives? Do you have any suggestions?

Secretary SIMON. We have put a balanced proposal ahead because our President felt that our people pay enough in income taxes now. When one looks and we hear these statements made "we must help the really poor people who are suffering so from this terrible rate of inflation," well, taken literally, the really poor people don't pay any taxes so I am not sure who we are helping by reducing taxes. It isn't certainly the poor people. Now on an ad hoc basis I have no suggestions for raising taxes. It is judgmental as to whether a declining scale in capital gains might raise additional revenues at the Treasury Department. That has been debated as to the pros and cons by economists for a long time, and I notice you have a bill that would put a deescalated scale of capital gains taxation, which I myself favor because I think it would create unlocks; that is, it would remove the lock-in from so many long-term investments not only in equity but——

Chairman BENTSEN. But you agree you have hundreds of billions of dollars of locked up capital and this would encourage mobility?

Secretary SIMON. That is judgmental, but that is my belief, Mr. Chairman.

Chairman BENTSEN. Of course it is judgmental.

Mr. FIEDLER. Mr. Chairman, one further point. We would like to see the balance in the budget and, perhaps, even surplus developed out of control of Federal spending, rather than out of increased taxes.

Chairman BENTSEN. Are you suggesting, Mr. Secretary, then in effect that you have no proposals or would not cut the taxes to the consumer at this time?

Secretary SIMON. No, sir; that is correct. We have been opposed to a tax reduction for the reasons that you stated before. If indeed it were to be balanced with reasonable reductions on the other side that would be one thing.

I testified before the Senate Finance Committee a couple of weeks ago on a tax measure that would have hit at the very things that we shouldn't be hitting. Indeed, perhaps we should even be increasing the ADR and the investment tax credit, and haven't we learned a lesson? We've got the second economic illustrations going back through the Johnson administration and, indeed, through the Nixon administration of putting on and taking off the investment tax credit. We ought to leave it alone.

Chairman BENTSEN. Mr. Secretary, you share my concern about the troubled equities markets in this country and the difficulties faced by small- and medium-sized businesses in raising capital in this market. Some of them are selling at five and six times earnings. If they go to the equity market at five times earnings they are going to have to find a return of 40 percent before taxes and they just don't uncover those investments often. I have a proposal that would raise the capital loss provision from $1,000 to $4,000 charged against ordinary income. That hasn't been changed since 1942. And disposable income has gone up almost 400 percent since that time.

Do you think that would be encouraging to the marketplace?

Secretary SIMON. Yes, I do, but that is just one of many things. Basically, the ills of the marketplace come from a confidence factor in the ingrained inflation psychology that is in this country. So I would like to start at the beginning and attack the causes rather than the results.

Chairman BENTSEN. Mr. Secretary, I am not trying to solve all of the problems with one piece of legislation.

Secretary SIMON. I think that removes an inequity, so I am in complete agreement with that.

Chairman BENTSEN. Senator Percy.

Senator PERCY. Thank you.

I would like to just follow up on the tax question in two areas—well, no, three areas really. I fully concur that a personal tax reduction now would be disastrous. There are some 40 million people in this country that are living at or below a subsistence level and it would be disastrous for them. They are not paying taxes and the tax credit, the tax benefit would go certainly to the highest income people and would be very little for even the lower income people who are paying taxes.

I used to think it was politically wise to support a tax reduction but I just tend to think that American people are so well educated on this point now that I see no enthusiasm for this at all as I speak against it across the country now.

And I hope we will decisively defeat that effort today and tomorrow and as many times as we have a vote on it. I would like to ask you about taxes in the oil industry though. My personal feeling is that they are going to have to pay, going to have to find a way to pay $3 billion to $4 billion more in taxes and I would like to see that industry do it in such a way that there is not a disincentive for investment, exploration, and development.

Do you concur that the industry will have to start paying taxes? Their current level is between 1 and 7 percent in U.S. taxes and billions being paid abroad.

Now do you concur that whatever can be done, be done reasonably soon and that those revenues can be used to reduce the deficit or actually to start to accrue a surplus if we are fortunate in other areas?

Secretary SIMON. I don't have the figures in front of me Senator Percy but yes, we have made recommendations, including the windfall profit tax proposal and the treatment of tax and royalty payments to the foreign countries, as well as the removal of the foreign depletion allowance. So, yes, there are reasonable things that can be done that will not be punitive in nature and ultimately end up penalizing us, the consumers, in energy because it just discourages investment.

Senator PERCY. How much can we increase taxation on the oil industry without being punitive and without providing disincentives for the very task we want them to undertake; namely, exploration and development?

Secretary SIMON. I would like to submit those numbers for the record when I go back and get some of the revenue estimates on the proposals that we have made.

[The following information was subsequently supplied for the record:]

Treasury Recommendations for Tax Changes Affecting the Petroleum Industry and Estimated Revenues

CALENDAR YEAR TAX LIABILITY EFFECTS OF WINDFALL PROFITS TAX AND 3-YEAR DEPLETION PHASEOUT OIL AND NATURAL GAS

[In millions of dollars]

	Calendar year liability					
	1974 (July–December)	1975	1976	1977	1978	1979
Windfall profits tax:						
Gross liability	1,820	3,317	2,436	757	15	
Less: plowback [1]	860	2,380	2,436	757	15	
Gross windfall profits tax after plowback	960	940	(2)	(2)	(2)	
Net windfall profits tax after Federal income tax offset	500	490	(2)	(2)	(2)	
Revenue gain from depletion reduction disallowed on amount equal to gross windfall profits tax, including minimum tax effect	130	240	180	50		
Net gain from windfall profits tax	630	730	180	50		
Percentage depletion phaseout (including minimum tax effect):						
Oil		560	1,350	2,360	2,740	2,880
Natural gas		60	140	240	270	300
Oil and natural gas		620	1,490	2,600	3,010	3,180
Revenue loss from:						
Stripper well exemption and 3,000 bbl/day exemption			−200	−500	−600	
North Slope production exemption					−200	
Deduction of geological and geophysical expenses						−200
Net revenue gain from depletion phaseout		620	1,290	2,100	2,210	2,980
Total net revenue gain from windfall profits tax and depletion phaseout [3]	630	1,350	1,470	2,150	2,210	2,980

[1] The plowback is available only for tax on "small" production in 1974, and for tax on "small" production and one-half of the remainder in 1975. The plowback is available for the tax on all production beginning in 1976.
[2] Less than $10,000,000.
[3] The effect of the elimination or reduction of the license fees is estimated to range from $30,000,000 in 1974 to $440,000,000 in 1979 for a total of −$1,270,000,000 for the period 1974–79. Does not include revenue gain from foreign items which range from +$360,000,000 in 1974 to +$520,000,000 in 1979.

Note.—Figures may not necessarily add to totals due to rounding.

Source: Office of the Secretary of the Treasury, Office of Tax Analysis, Apr. 30, 1974.

Senator Percy. Do you propose any change in the investment tax credit from the standpoint of having it escalate upwards? And I agree that it ought not to be a spigot turned on or off but ought to be a part of our thinking now to encourage capital investment.

But if we get into periods where we would even like to stimulate more do you feel Arthur Burns' concept of an escalating tax credit that could go up even higher, an investment tax credit, would be worthy of consideration now?

Secretary Simon. The trouble with Arthur Burns' comments on the investment tax credit, in my judgment, is that anything that goes up can also go down. And if we are going to have a moving investment tax credit that will give uncertainty to business, you know that acts as a constraint for business involvement. Whether it is done through a larger investment tax credit for specific industries or through the ADR or whether it is to be done overall, you know there is an equity argument on this subject. How do we name the specific industries? Do we have the wisdom to say, as I said in my statement, that it is paper and steel and aluminum and zinc and chemicals or what have you, and we will just have a long line of people therefore in Washington saying "No, you should put me in."

So, perhaps, we should do it for everyone and have the market allocate the capital.

Senator PERCY. Is it possible they might hold off investments that they might normally make hoping to get a special higher investment tax credit under some pleading?

Secretary SIMON. I think that is a possibility.

Senator PERCY. Yes, that is a possibility.

Do you serve as a member on the National Commission on Productivity as Secretary of the Treasury?

Secretary SIMON. When we had one. I wasn't Secretary then.

Senator PERCY. We still do have a National Commission on Productivity. Congress has recently extended the authorization for it. It has been a terrible struggle getting it funded but I wonder if you could give us your viewpoint as to what roles a government can play in being a catalyst at least in this area to bring labor and management together, as they do on the Commission?

I think what I. W. Able has done in the steel industry with management is commendable. They have a productivity council in every single steel plant in this country now.

Do you think it would be desirable to try to stimulate that kind of thinking so that we are thinking in terms of what can we do to increase productivity, to have wage increases that are earned through output increases so that you are not just always paying those wage increases in the form of higher prices which are self defeating because they come right out of the wages?

Secretary SIMON. Well, I agree, Senator Percy, with just everything you say. And we worked, as you well know, terribly hard on getting the extension of the productivity commission.

Secretary Shultz and I can go back to two things. One, my comments I made about John Dunlop in this area and two, having sat in on all the labor-management committee meetings that were held in the Treasury Department during our controls period. I saw how the cooperative spirit of government and industry and labor can work together in one room to remove impediments to productivity and to preach reasonableness when we have problems and educate each other on each others' problems, real and imaginary.

Mr. FIEDLER. May I add a point, Senator? I don't think we want to expect the National Commission on Productivity to work any magic in terms of the national rate of productivity growth. Productivity, the process of increasing the efficiency with which we use our resources, is extremely complex. And I think it is almost as much cultural as it is economic. But in terms of these individual situations—you mentioned steel and you are familiar with the unit train story and the movement of foodstuffs from California to the east coast—a productivity commission can really make a vital contribution in a variety of individual ways.

Finally, I think I would like to emphasize the point you made bringing labor and management and public members together. It is very useful as a general process, a general function.

Senator PERCY. Well, if we can just get Mondays and Fridays during the hunting season with employees in automobile plants rather than out hunting it would help. Because when they are laying off that way—and you don't even want to buy a car made on a Monday or Friday and it is a national joke—then I think that is tending to reduce our effective ability to compete abroad because that phenomenon does not exist in Germany, Japan, Switzerland, or Sweden, which make automobiles.

I hope you can assert and use your tremendous influence in this administration to stimulate this activity. I see it that we have such a great difficulty funding it because there just didn't seem to be the spark behind it. Pete Petersen headed the Commission for a while but then he has moved on and we have had such a turnover there that it is really a mismanagement of the productivity Commission itself in getting enough attention focused on it. So I hope you work on that.

Many of us deeply believe in it. Senator Javits has been an outstanding exponent of it.

I would like to ask about one thing related to your past activity and yet it is long-term growth in a sense. Statistically we can save 73 million barrels of oil and save 12,000 lives a year or up to 12,000 if we reduce our speed limit to 55 miles per hour indefinitely.

Do you support the indefinite extension of that national speed limit?

Secretary SIMON. I most certainly do and I would go even a little farther than that, Senator Percy. I think that if the highway trust funds were used as a bit of coercion in making sure that the States legislated this, this would be helpful. I just feel from the point of view of saving petroleum that is fine, but I think equally if not more important it is the saving of lives. We have seen a 25-percent reduction in auto deaths and I think that is great.

Senator PERCY. That is not very popular with some trucking lobbies. I put the bill in and Senators Randolph and Stafford, the chairman of the Public Works Committee and the ranking member of the Roads Subcommittee of the Public Works Committee are cosponsors of the bill and I have high hopes for it but with your support I think it will move along faster.

Secretary SIMON. Also, what we have to direct ourselves to as far as the truckers are concerned are the critical problems of rate increases in certain areas and more importantly the load factor. We also must direct ourselves to intra- and inter-state trucking, where the States control a lot of those laws, and some of them are going to have to be changed. You can carry, say 16,000 pounds through Ohio and it drops when you go into Kentucky and so on.

Senator PERCY. Is there any basis in having Federal legislation in this area?

Certainly on interstate highways, it must be a terrible inconvenience to have to try to know the laws of every State they go through and have the laws different. And these are Federal highways, they the essentially moving on, with 90 percent of the funds, Federal funds, to build those highways.

Do we have jurisdiction?

Chairman BENTSEN. Oh, yes, sir, we do. We have Federal legislation on the amount of——

Senator PERCY. On the loading and widths of trucks and so forth?

Chairman BENTSEN. That is correct.

Secretary SIMON. I am certainly not an expert, but I would suggest this would be a very emotional issue.

Chairman BENTSEN. I think it really is.

Senator PERCY. Mr. Secretary, you mentioned the high level of education and the tremendous investment we made in education.

From your knowledge of industry and business and government, is the quality of work being upgraded fast enough to command the attention and challenge and the level of educational experience of our workers necessary or is there such a thing as the quality of work being upgraded or do we get an increasing number of workers somewhat disenchanted with the challenge and finding that they don't have a challenge?

And is this a great responsibility of business, management, and labor to constantly upgrade the quality of work along with the educational capabilities of our workers?

Secretary SIMON. It most certainly is, Senator Percy, and I would say this in response to your question. That generally, yes, as I said in my testimony, each year we are finding better trained and more highly educated people graduating from our institutions and then being brought into business. So I am encouraged by this.

Senator PERCY. I want to thank you very much indeed for your appearance this morning and the Chair for his having these hearings.

Chairman BENTSEN. Thank you very much, Senator Percy.

Mr. Secretary, I share your concern with increasing productivity. Yet I believe that the administration has cut the amount of money for vocational education. And I think that within the unemployed ranks you have a great number of people who are capable of holding a job and helping their families and contributing to the economy and going off the unemployment rolls and going on the taxpayer rolls with proper education and particularly vocational education.

As we become more a service oriented society we will need more vocational education. I went down to a technological school in Texas where I visited with the graduates—93 percent of them came from families that had been receiving welfare. They were averaging six job offers apiece and they were getting their job offers before they ever left school. It is a great program and I think a wonderful investment of the taxpayers' money.

This, of course, is one of the basics in fighting inflation by increasing the productivity of workers.

Would you care to comment on why the administration appears to have curtailed the amount of money expended on vocational education?

Secretary SIMON. I don't have the numbers that historically were spent, but it struck in my mind that we were spending either $4 or $6 billion on this educational area. If I recollect correctly, it is a matter of shifting of priorities much more than it is curbing the actual program.

Chairman BENTSEN. I believe the actual program and the numbers have been curtailed over the last 3 years.

Secretary SIMON. I will supply that for the record because I would be interested in that myself, Mr. Chairman.

Chairman BENTSEN. Fine.

[The following information was subsequently supplied for the record:]

VOCATIONAL EDUCATION EXPENDITURES

The President's January, 1974, Budget proposals for fiscal year 1975 originally requested a $262 million cutback in direct aid to vocational education programs (as was also proposed for many other specific education programs) and recommended a new $1.9 billion consolidated education grant that could provide State and local education authorities with greater flexibility in their use of Federal education aid.

Chairman BENTSEN. Let me ask you what you think of a proposal in trying to get the major oil companies to pay a greater share of the tax load and particularly on foreign operations, I have introduced a proposal that does away with the depletion outside of the North American Continent. And as you say, that is not a major item, but what about repealing the per-country limitation to the foreign tax credit and requiring all oil companies to use the overall limitation.

Now that would probably raise another $120 million. Have you studied that proposal at all?

Secretary SIMON. Not your specific proposal, no, but that is going through the process of the Ways and Means Committee right now, in which our tax people have been very much involved. We also have recommended the removal of foreign depletion, as well as different treatment of the tax and royalty payments, which would amount to a significant increase. It would not allow them a credit anymore but allow them just a normal deduction for doing business.

Chairman BENTSEN. It doesn't give them a country-by-country option?

They would have to take their overall foreign operations to be charged against the domestic income rather than selecting amongst the various countries.

Secretary SIMON. I believe that is correct, Senator.

Chairman BENTSEN. Mr. Secretary, we have heard a lot of predictions that we are facing another wage and price spiral inflation increase.

Would you care to comment on that?

Secretary SIMON. Yes, sir. It is our judgment that while wage settlements this year certainly are not going to be in the area of 5½ percent that we had during our guidelines during the past 2 years, when we look back on 1974 one can say that wages will have gone up in the area of 9 to 10 percent. We do not believe in some of the forecasts of the overall 15 to 20 percent that I have read about in the newspapers.

This seems to be not only a consensus here in the Government among the experts but also among the private economists that we talk to, because this subject was brought up yesterday and discussed at some great length in our consultants meeting. That is obviously a critical factor in our inflation outlook for this year.

Chairman BENTSEN. With all of the information that you have received, what do you think it will go up to this year?

Secretary SIMON. Nine to 10 percent.

Chairman BENTSEN. We will watch that very closely.

Mr. Secretary, your testimony has been very helpful to us and we are appreciative of your appearance. Thank you very much.

The subcommittee stands adjourned.

[Whereupon, at 11:45 a.m., the subcommittee adjourned, subject to the call of the Chair.]

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