

THE QUALITY OF FEDERAL STATISTICS

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

MARCH 1 AND 29, 1990

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

31-812

WASHINGTON : 1990

JOINT ECONOMIC COMMITTEE

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

HOUSE OF REPRESENTATIVES

LEE H. HAMILTON, Indiana,
Chairman
AUGUSTUS F. HAWKINS, California
DAVID R. OBEY, Wisconsin
JAMES H. SCHEUER, New York
FORTNEY PETE STARK, California
STEPHEN J. SOLARZ, New York
CHALMERS P. WYLIE, Ohio
OLYMPIA J. SNOWE, Maine
HAMILTON FISH, Jr., New York
FREDERICK S. UPTON, Michigan

SENATE

PAUL S. SARBANES, Maryland,
Vice Chairman
LLOYD BENTSEN, Texas
EDWARD M. KENNEDY, Massachusetts
JEFF BINGAMAN, New Mexico
ALBERT GORE, Jr., Tennessee
RICHARD H. BRYAN, Nevada
WILLIAM V. ROTH, Jr., Delaware
STEVE SYMMS, Idaho
PETE WILSON, California
CONNIE MACK, Florida

JOSEPH J. MINARIK, *Executive Director*
RICHARD F KAUFMAN, *General Counsel*
STEPHEN QUICK, *Chief Economist*
DAVID R. MALPASS, *Minority Staff Director*

CONTENTS

WITNESSES AND STATEMENTS

THURSDAY, MARCH 1, 1990

	Page
Sarbanes, Hon. Paul S., vice chairman of the Joint Economic Committee: Opening statement.....	1
Roth, Hon. William V., Jr., member of the Joint Economic Committee: Opening statement.....	7
Boskin, Hon. Michael J., Chairman, Council of Economic Advisers.....	7
Darby, Michael R., Under Secretary for Economic Affairs, U.S. Department of Commerce.....	16
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, U.S. Department of Labor.....	26

THURSDAY, MARCH 29, 1990

Hamilton, Hon. Lee H., chairman of the Joint Economic Committee: Opening statement.....	45
Levitan, Sar A., director, Center for Social Policy Studies, George Washington University.....	46
Popkin, Joel, president, Joel Popkin & Co.....	52
Smith, James F., professor of finance, University of North Carolina Business School, and president, National Association of Business Economists.....	59

SUBMISSIONS FOR THE RECORD

THURSDAY, MARCH 1, 1990

Bingaman, Hon. Jeff, member of the Joint Economic Committee: Written opening statement.....	5
Boskin, Hon. Michael J.: Prepared statement.....	11
Membership of Economic Policy Council's working group on economic statistical quality.....	28
Economic Policy Council membership.....	29
Darby, Michael R.: Prepared statement.....	19

THURSDAY, MARCH 29, 1990

Levitan, Sar A.: Prepared statement.....	48
Popkin, Joel: Prepared statement.....	54
Smith, James F.: Prepared statement.....	62
Report of the Statistics Committee of the National Association of Business Economists.....	68

THE QUALITY OF FEDERAL STATISTICS

THURSDAY, MARCH 1, 1990

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

The committee met, pursuant to notice, at 10 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Paul S. Sarbanes (vice chairman of the committee) presiding.

Present: Senators Sarbanes and Roth.

Also present: Jim Klumpner and Pat Ruggles, professional staff members.

OPENING STATEMENT OF SENATOR SARBANES, VICE CHAIRMAN

Senator SARBANES. The committee will come to order.

This morning the Joint Economic Committee meets to assess the current state of the Federal statistical infrastructure and to review the recommendations of the administration's working group on the quality of economic statistics, of which Michael Boskin, the Chairman of the Council of Economic Advisers, has been the head.

We face the challenge not only of seeing that the traditional high standards of the Nation's statistical programs are maintained, but of assuring the adaptation and innovation that is essential if the programs are to keep abreast of the complex and rapid changes taking place in the Nation's economy.

More than ever, in both the public and private sectors, wise policy decisions rest upon a timely access to pertinent and accurate data.

Mr. Boskin, I'm sure you will recall that when you testified at the committee's annual hearings just over a year ago I expressed to you my serious concerns about what Robert Samuelson writing in the Washington Post sometime earlier, a few years earlier, had described as the "nibbling away at the statistics we collect to show our social and economic condition."

He had said, and I quote him:

To be sure, these are austere times and some information is available from private sources, but mostly these cutbacks are shortsighted and abandon government's legitimate functions. Good political decisions are hardly guaranteed by good information, but they are even less likely with bad information.

You probably recall your response. You expressed your own concern about the "severe resources constraints" limiting the work of the statistical agencies, and said:

I personally believe a major effort must be made to improve, update, augment, and append our Federal Government's statistical base on economical statistics.

I went back and looked at that transcript and I quote:

We need someone somewhere in the administration who shares the view that we need accurate, timely, comprehensive and accessible Federal statistical data.

And you responded:

You have and will have so long as I am in my job such a person.

So we are particularly pleased to welcome you today because the major effort discussed a year ago has, in my view, been initiated.

Over most of the last decade, Federal statistical policy was marked by neglect and worse, inadequate budgets, lagging programs, even arbitrary interference with the best professional judgment of the agencies.

Unfortunately, the previous administration remained indifferent to the rising drumbeat of concern in the press, among data users and certainly in this committee about the adverse consequences to our Federal statistical information.

In fact, only last fall there was an article in the New York Times saying:

The Government's system of gathering economic statistics, much like the nation's highway network, is badly in disrepair.

Statisticians and economists, both in and out of government, say that a combination of budget cuts and deregulation—much of it a legacy of the Reagan era—is eroding important yardsticks and undermining policymakers striving to guide the economy.

And lest anyone think this is a dusty debate for economists and bureaucrats, the truth is that these numbers affect the lives of all Americans. Social Security payments and some wages are tied to the official inflation rate, and the Government uses statistics to help evaluate welfare and other social programs. On a broader scale, bad numbers can mean bad policy and perhaps a recession instead of a recovery.

In my view, the commitment you undertook a year ago and the leadership you have since exercised have been singularly important in bringing about a change in policy direction which recognizes the critical role which statistical programs play in policymaking.

We have before us not only the current recommendations of the working group, which I assume we will be reviewing this morning on the quality of economic statistics, but assurances of continuing efforts to improve the statistical infrastructure.

At the same time, the budget requests for the coming fiscal year for the statistical agencies represent an improvement over the counterproductive budget policies of the past.

We do, I think, as we all recognize, face major challenges. We are at the beginning and not the end of an initiative, and we need to repair the degradation caused by the budget policies of the last decade.

In fiscal year 1980 the combined budgets of the major statistical programs totaled some \$608 million, representing 0.06 percent of the total Federal budget. I mean it's just a minuscule part of the total Federal budget.

In the fiscal year 1991 request now pending, they total an estimated \$597 million in real terms, representing just 0.04 percent of the budget. In other words, the portion of the budget dedicated to the statistical agencies, minuscule to begin with, will have declined even if the Congress accepts these increases. The increases have brought us back at the beginning of this decade in real terms to where we were at the beginning of the last decade. So the agencies

have been running hard not to move forward, but simply to avoid falling behind.

The second challenge is to assure the resources necessary to adapt our statistical programs to rapid changes in the economy. Over the past decade these changes have been of a breadth and depth that few could have anticipated, and such matters as education, health and the environment, for example, now bear heavily on economic policymaking.

More than ever, we need data that correspond to the new realities, and we are concerned that there not simply be a transfer of resources from existing programs to new ones in order to meet this challenge unless that shift of its own accord can withstand scrutiny in terms of the merits of its substance and not simply as a budgetary response.

The entry of the United States into the world economy has underscored the importance of international comparisons. In addition, I regret to say, it has brought home the fact that in the production and dissemination of data, as in other economic matters, the United States can no longer take superiority for granted. In part this may be because other nations now seem to attach a greater importance to their statistical programs.

I have alluded on past occasions to the Japanese who have a national statistics law. I'm not advocating this here, but it's just as an example. They hold a month-long national celebration each year in honor of statistics. The theme of that month-long celebration only a few years ago was, and I quote: "Statistics are the beacon for our happy life."

We look forward to hearing your appraisal of the current state of the Federal statistical infrastructure, and to discussing with you both the recommendations of the working group and the many questions these recommendations raise.

We are very pleased that you are accompanied today by the Commerce Department Under Secretary for Economic Affairs, Michael Darby, who has the agencies in the Commerce Department working in the statistical area under his jurisdiction, and we know that Commissioner Janet Norwood, really one of our outstanding professionals, will be joining you as soon as she completes testimony which she is giving over on the House side.

So we are very pleased to have you here this morning, and we are looking forward to hearing from you.

Senator Bingaman hopes to join us. He is at the Pentagon at a meeting. He has a written opening statement that I will put in the record. Let me just quote from it very briefly. This is from Senator Bingaman's written opening statement:

The quality of economic statistics is an area of concern to me, not only as a member of this committee, but also as chairman of the Government Information and Regulation Subcommittee of the Governmental Affairs Committee. . . . I strongly believe in the need to improve our statistic system. Last year, I introduced the Federal Information Resources Management Act, which reauthorizes the Paperwork Reduction Act. The bill attempts to strengthen the Federal statistical system in a number of ways. It points out the benefits of information as well as the burden imposed. It improves the process for making statistical policy in the Federal Government.

Last year, the Government Information and Regulation Subcommittee had the pleasure of having Mr. Boskin before us to describe the Economic Policy Council's

initiative on economic statistics. I am pleased that he is here today to explain the recommendations of the working group.

Based on what I have seen of those recommendations, I support them. My staff and I will be looking carefully at the budget submissions of the various statistics agencies and will urge the Appropriations Committee to fully fund the recommendations.

He goes on to say:

I am, however, concerned over the short-term focus of the recommendations.

He then makes reference to the Office of Technology Assessment's report entitled "Statistical Needs for a Changing U.S. Economy," and the elements in that report requiring an updating and improvement in order to address our dynamic economy.

He expresses a concern that the Economic Policy Council recommendations do not seem to address this long-term structural need, and I assume that's something we will be covering here this morning as well.

I personally want to commend Senator Bingaman for the interest he has taken. He has jurisdiction in the Governmental Affairs Committee of the Paperwork Act. Some of the difficulty we had in this area was OMB's use of that act we think to impinge on the professional gathering of statistics, not in this administration, but previously.

Senator Bingaman has taken a very strong interest and a very constructive lead in this area. I'm pleased we have his written opening statement. I hope he will be able to join us shortly, and I will include his written opening statement in the record at this point.

[The written opening statement of Senator Bingaman follows.]

WRITTEN OPENING STATEMENT OF SENATOR BINGAMAN

I would like to commend Senator Sarbanes for holding this hearing. He has provided excellent leadership on the issue of the quality of economic statistics.

The quality of economic statistics is an area of concern to me, not only as a member of this Committee, but also as Chairman of the Government Information and Regulation Subcommittee of the Governmental Affairs Committee. Information is the key to our democracy and to our economy. Decision makers in both the public and private sector rely heavily on information, much of it collected by the Federal government. In this increasingly complex world economy, we can ill afford to be "flying blind".

I strongly believe in the need to improve our statistic system. Last year, I introduced the Federal Information Resources Management Act, which reauthorizes the Paperwork Reduction Act. This bill attempts to strengthen the Federal statistical system in a number of ways. It points out the benefits of information as well as the burden imposed. It improves the process for making statistical policy in the Federal government. And it creates a Commission on Federal Information to study our long-term information needs and make recommendations as to how to best meet those needs.

Last year, the Government Information and Regulation Subcommittee had the pleasure of having Dr. Boskin before us to describe the Economic Policy Council's initiative on economic statistics. I am pleased that he is here today to explain the recommendations of the working group.

Based on what I have seen of those recommendations, I support them. My staff and I will be looking carefully at the budget submissions of the various statistical agencies and will urge the Appropriations Committee to fully fund the recommendations.

I am, however, concerned over the short-term focus of the recommendations. Last year, the Office of Technology Assessment issued a report entitled "Statistical Needs for a Changing U.S. Economy."

The OTA report demonstrates how staggering defects in the existing statistical system can hinder the understanding of key economic issues. It also highlights the ways in which better management and coordination of existing statistical agencies can lead to improvements in the quality of the data.

The report points out that the problem with data stems from the dynamic nature of our economy. Although U.S. statistics are very good, the domestic economy is changing so rapidly and in so many different directions that keeping track of our statistical needs is becoming more and more difficult. I believe that our witnesses today would agree with the findings of this report.

My concern is that the recommendations of the Economic Policy Council do not seem to address this long-term, structural issues. I have asked OTA to comment on the recommendations that have been made public to date. I hope to be able to release the OTA staff paper shortly.

I hope the work by the EPC will continue and direct itself at these structural questions. And I again commend Senator Sarbanes for his leadership on this issue.

Senator **SARBANES**. I will now turn to our ranking Republican member, Senator **Roth**, for any statement he might have.

Senator **Roth**.

OPENING STATEMENT OF SENATOR ROTH

Senator **ROTH**. Thank you, Mr. Chairman.

It gives me great pleasure to join in welcoming the distinguished witnesses before us today. The subject of today's hearing, "Quality of Federal Statistics," is clearly important to the economy.

Government statistics on the economy are widely distributed and reported. The information they convey influences the decisions of policymakers, business, and consumers. Inaccurate information could mislead them and distort decisionmaking.

In addition, government data often moves the financial markets, sometimes to a degree that seems excessive. Every blip in monthly data is closely scrutinized for hints about current and future economic trends.

The financial markets are obviously sensitive, if not overly sensitive, to the release of government data. Millions of dollars can be lost or gained on the basis of one statistical release, even if subsequent revision renders it meaningless.

The U.S. economic data are currently among the best in the world. However, as we enter the 1990's amidst significant economic change, our database must keep up. The President's initiative to improve our economic data is clearly necessary and deserves the support of Congress.

Thank you.

Senator **SARBANES**. Thank you very much.

We are prepared to hear from you, Mr. **Boskin**.

STATEMENT OF HON. MICHAEL J. BOSKIN, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. **BOSKIN**. Thank you, Senator **Sarbanes**, Senator **Roth**, and, in absentia by virtue of his written opening statement, Senator **Bingaman**.

Let me first say, Senator **Sarbanes**, that we greatly appreciate the interest and support and leadership that you and this committee have shown in the concern over the state of and the evolution of the quality of Federal Government economic statistics.

I am privileged today to be accompanied by Michael **Darby**, as you mentioned, Under Secretary for Economic Affairs at the Commerce Department who, among other responsibilities, has the Census Bureau and the Bureau of Economic Analysis under his jurisdiction, and by Janet **Norwood**, our Commissioner of Labor Statistics, who will hopefully be here soon.

They, as well as many other professionals representing all of the agencies that produce and several that use the statistics, participated in the working group that you referred to and it is their recommendations we are going to be discussing shortly.

So while it was very kind of you to refer to my leadership in what we have accomplished thus far, and I certainly agree with you that it is only an important turn around and first step, and

could not have been accomplished without the hard work and dedication of all of these other people.

Our statistical system is among the finest in the world and it is staffed by able and dedicated professionals, but serious problems, as you indicated, remain in the quality of the economic statistics, and these are especially so in rapidly changing areas of the economy where accurate information is most urgently needed.

You indicated the concern that you and other members of this committee have expressed in the past and currently. This is also true of numerous professional organizations. The American Economic Association, the National Association of Business Economists, and the National Academy of Sciences, to name a few, have been concerned over the quality, timeliness, accuracy, methodological soundness, comparability, and usefulness of the economic statistics.

Obviously, some of these issues and concerns conflict with one another. Timeliness and accuracy often must be traded off against each other in some sensible balancing, and priorities must be developed to deal with these inevitable tradeoffs.

But to address these concerns, the President has approved a multi-year initiative to improve the economic statistics.

This initiative will build on the data improvement efforts already underway at the statistical agencies with a set of interim recommendations developed by the working group of the Economic Policy Council, to which you referred, Senator Sarbanes.

These recommendations include both short- and long-term improvements, and focus on the most important steps required to maintain and begin to improve the quality of the economic statistics.

The statistical agencies have reprogrammed some resources during the current fiscal year to address the priorities identified by the working group, and the relevant agencies are currently developing specific plans to implement the working group's recommendations. Some of them have already implemented them and others are in the process.

The fiscal year 1991 budgets for the relevant statistical agencies include additional funds to begin to implement some of the recommendations. The total increase in budget authority over the fiscal year 1990 level proposed in the fiscal year 1991 budget is \$51.8 million and in outlays is \$48.4 million. I will come back perhaps in the question period to some of the issues involved in how we came up with those proposals and where we propose to go from here.

It may be necessary, as we look at longer term issues over the next several months and develop additional recommendations to the President, for those amounts to be augmented in subsequent years, but we are studying a variety of alternatives.

Over the next 2 months the statistical agencies will finalize their detailed plans to implement the working group's recommendations and, as I said, the working group will develop a comprehensive, long-term program to improve the economic statistics.

In addition to developing options to fully implement the interim recommendations, the program will consider organizational, methodological, and other improvements as well as any resources re-

quired to implement them. It will then present those options for consideration later this year.

In its work thus far, the group has started by surveying the statistical agencies to assess existing plans and priorities; gather suggestions for further improvements from the agencies and from the community of users inside the administration, in Congress, and outside the Government, and developed this recommended package that we saw as the highest priority improvements in economic statistics.

In preparing its recommendations the working group found that there are indeed problems with some of our most important economic statistics and we have made about two dozen specific recommendations to address these deficiencies.

You indicated how important the statistics are. Your statement about the Japanese statistical celebration of a month, that statistics are the beacon of our happy life, we would like to make our economic statistics a sharper beacon, and we certainly hope that our life will be happy. [Laughter.]

I suppose that both reflects the statistics and the state of the economy that we hope they will more accurately portray.

As Senator Roth has said, and as you have said, sir, private orders and contracts, cost-of-living adjustments, budget and monetary policy are all based on information produced by the Federal statistical system.

Just to give a little bit of perspective, I think the working group concluded that among the most serious problems was the measurement of output and prices in our rapidly evolving economy, for example, due to quality change or other intangible items that are more difficult to measure.

When we as a nation had a less complex economy and had a larger fraction of output, things like bushels of wheat and tons of steel, output was very easy to count, tons of steel and bushels of wheat. Today a larger share of our important output is concentrated in sectors where better performance means quality and improved convenience, from 24-hour automatic teller machines to changes in desk-top to lap-top computers.

Measurement problems in output and prices and perhaps most severe in such industries, and it's likely that output in these industries may be somewhat underestimated. A very good example came in the most important area when the Commerce Department introduced a new computer price index that adjusted for quality change rather than presuming the quality change in computing had not occurred, and it raised the average real GNP growth by three-tenths of a percentage point over the 7-year period from 1982 to 1988 and it lowered the implicit inflator by three-tenths of a percentage point. That obviously is an extreme case because computers are so important, and actually the price of computing was falling.

But in other industries, such as education and health care, which you alluded to, Senator Sarbanes, even defining the unit of output is difficult. We all are deeply concerned, and the President especially, in trying to reverse the performance of our K through 12 elementary students and schools, and as test scores of American students have declined, measures of educational output based on num-

bers of high school graduates have become less comparable over time. Rapid changes in technology and care mean that the product of a doctor visit or hospital stay has also changed dramatically over time.

Given these problems and even defining the unit of output, developing measures of inflation and adjusted output is extremely difficult, and we are going to have to redouble our efforts to make conceptual and methodological improvements as well as just improvements in the ordinary types of things that we try to do in our data collection in accuracy and timeliness.

In setting its priorities, the working group focused on proposals that addressed well-known measurement errors—areas that were important to the economy and to public policy and where we believed the solutions were cost effective. That is, we focused on areas where there was a problem we believed with some sensible reallocation of resources we could solve rather than an area in which there was a problem where it would take so much resources that it wouldn't be worth the effort or it would take such a long time.

Many of these recommendations, let me say, complement ongoing plans for improvement which the agencies were developing and implementing. You mentioned the resource constraints that many of them were under, and some of the proposed increases are to fund these improvements and new programs. We have also suggested at times reprioritization of improvements, alternative methods of rearrangement of the timetable for improvements.

My prepared statement has a more detailed discussion of the working group's suggested improvements, about two dozen, and I will ask that that be submitted for the record, sir.

As we proceed with this initiative, which I must reiterate is going to be a multiyear effort. We proceed this year in developing longer-run priorities after we receive back in the next couple of months the full information from the agencies on their plans to implement these recommendations. We hope to work in cooperation with the Joint Economic Committee and the rest of Congress, as well as the private sector, international organizations, such as the OECD and others, and the community of data users.

Thank you for your time and attention.

I will ask Mrs. Norwood, when she is able to transit from her previous testimony, if she would like to make some brief statement. I know Mr. Darby has a statement he would like to make.

[The prepared statement of Mr. Boskin follows:]

PREPARED STATEMENT OF HON. MICHAEL J. BOSKIN

Senator Sarbanes and other distinguished members of the Committee, it is a pleasure to appear before you today to discuss an issue of mutual interest: improving U.S. economic statistics. I am privileged to be accompanied by Michael Darby, Undersecretary for Economic Affairs, U.S. Department of Commerce, and Janet Norwood, Commissioner of the Bureau of Labor Statistics, U.S. Department of Labor.

As you are well aware, Senator Sarbanes, the United States' statistical system is among the finest in the world. It is staffed by able and dedicated professionals. However, serious problems remain in the quality of the economic statistics, especially in those rapidly changing areas of the economy where accurate information is most urgently needed. In addition to yourself, Senator Bingaman and other members of this committee, numerous professional organizations--including the American Economic Association and the National Association of Business Economists, and the National Academy of Sciences-- have become concerned over the quality, timeliness, accuracy, methodological soundness, comparability, and usefulness of economic statistics. Many of these concerns conflict with one another, and priorities must be developed to deal with inevitable tradeoffs, such as those between accuracy and timeliness.

To address these concerns, the President has approved a multi-year initiative to improve the economic statistics.

- o This initiative will build on the data improvement efforts already underway at the statistical agencies.
- o The President has approved a set of interim recommendations developed by a working group of the Economic Policy Council. These recommendations include both short- and long-term improvements, and focus on the most important steps required to maintain and improve the quality of the economic statistics.
- o The statistical agencies have reprogrammed funds during the current fiscal year to address the priorities identified by the working group, and the relevant agencies are currently developing specific plans to implement the Working Group's recommendations.

- o The FY 1991 budgets for the relevant statistical agencies include additional funds to begin to implement some of the recommendations.
- o Over the next couple of months the statistical agencies will report back with their detailed plans to implement the working group's recommendations.
- o The Working Group will develop a comprehensive long-term program to improve the economic statistics. In addition to developing options to fully implement the interim recommendations, the program will consider organizational, methodological, and other global improvements, as well as the resources required to implement them. It will present options to the Economic Policy Council later this year for possible recommendations to the President.

The Working Group, which I chair, includes in addition to Dr. Darby and Dr. Norwood representatives of the other major producers and users of economic statistics in the Federal Government. In its work thus far, the group has surveyed the statistical agencies to assess existing plans and priorities; gathered suggestions for further improvements from the agencies and from the community of users inside the Administration, in Congress, and outside government, and; developed a recommended package of the highest priority improvements in economic statistics.

In preparing its recommendations, the Working Group found that there are problems with some of our most important economic statistics. The Working Group has made specific recommendations to address these deficiencies.

The economic statistics are important because of their large impact on the economy. Private orders and contracts, cost of living adjustments, the Federal budget, and monetary policy are all based on the economic information produced by the Federal statistical system.

The most serious problem in measuring output in our rapidly evolving economy is estimating quality change in many important sectors. When we as a nation produced mostly things like steel and wheat, output was easy to count, tons of steel and bushels of wheat. Today a larger share of output is in sectors where better performance means quality and improved convenience: consider the impact of twenty-four hour automatic teller machines, and the changes in desktop and laptop computers. Measurement problems are most severe in rapidly growing industries like services and microelectronics, and it is likely that output in these industries is underestimated.

- o Use of price indexes that appropriately adjust for quality change can be quite important. When the Commerce Department recently introduced a new computer price index that adjusted for quality change, it raised real GNP growth from 3.8 to 4.1 percent (a difference reaching \$70 billion by 1988) and lowered the rate of inflation (as measured by the GNP price deflator) from 3.6 to 3.3 percent between 1982 and 1988.

In some industries such as education and health care, even defining the unit of output is difficult. As test scores of American students have declined, measures of educational output based on numbers of high school graduates have become less comparable over time. With rapid changes in technology and care, the "product" of a doctor visit or a hospital stay has also changed dramatically over time. Given these problems in even defining the unit of output, developing measures of "real" inflation-adjusted output is extremely difficult.

In addressing such problems and in setting its priorities, the Working Group focused on proposals that addressed well-known measurement errors, that were in areas important to the economy and public policy, that were cost-effective, and that could be completed in a reasonable period of time. Many of the recommendations complement ongoing plans for improvement, sometimes suggesting a reprioritization of improvements, alternative methods, or a rearrangement of the timetable for improvements. The suggested improvements include the following:

- o Productivity, Output, and Prices
 - Service Sector: Explore alternative methods for estimating constant dollar output; accelerate and rearrange timetable for service sector improvements; expedite the compilation of input/output data; increase cooperation between the statistical establishment and academic researchers; and consider the efficacy of mandatory versus voluntary surveys.
 - International Trade: Accelerate improvements in estimates of trade in services; extend efforts to reconcile import and export data to Mexico, the European Community, South Korea and Japan; continue work to increase automation of export and import data collection; and increase the ease of access to trade data.
 - Construction: Complete ongoing methodological and data collection improvements and incorporate these in the 1990 GNP revisions.
 - Prices: Expand and seasonally adjust the employment cost index; and accelerate the BLS programs to expand

and improve producer, consumer, and international price indexes to measure service prices more accurately.

o Investment, Saving, and National Wealth

- The System of National Accounts (SNA): Revise the U.S. national income and product accounts to be consistent with the major components of the United Nations system of national accounts, which are used by most of the major industrialized nations of the world.
- International Investment: Estimate direct investment using market values or replacement cost rather than historical cost and address problems with the measurement of international portfolio investment and other capital flows.
- Domestic Investment and Saving: Accelerate work to improve measures of investment and saving and to the extent possible reconcile differences between the various measures of saving; improve the collection, coverage, and processing procedures for the financial flow data used in the Federal Reserve Board flow of funds accounts; and undertake the proposed annual investment survey at the Census Bureau.
- Inflation Adjustments: Add supplementary series to the national income and product accounts that separate the real and inflation components of the return to capital. Currently this is done only with the corporate profits series.

o Employment, Income, and Poverty

- Family Income and Poverty: Begin research on developing a new benchmark estimate of poverty appropriate to prices, consumption patterns and family composition in the 1990s; and continue publication of the experimental estimates of real family income and poverty.
- Business Establishments: Continue work toward the goal of eliminating unnecessary duplication, but avoid the loss of unique and important alternative data; and explore ways for Census to share its establishment data with the BEA, for use in improving the national accounts.
- The Survey on Income and Program Participation: Explore the possibility of carefully linking the data from the Survey on Income and Program Participation

(SIPP) to administrative records, while taking great care to safeguard confidentiality.

- Labor Force: Continue BLS and Census efforts to improve and modernize the current population survey and the current employment statistics program; and continue BLS efforts to reconcile and reduce discrepancies between the employment series arising from the household and the establishment surveys.

As the Administration proceeds with this initiative, I hope that we can work in close cooperation with the Joint Economic Committee and the rest of the Congress, as well as the private sector, international organizations, and the community of data users. Thank you for your time and attention I will now ask Dr. Darby and Dr. Norwood to give you their perspective on improving economic statistics.

Senator SARBANES. Mr. Darby, we would be happy to hear from you.

STATEMENT OF MICHAEL R. DARBY, UNDER SECRETARY FOR ECONOMIC AFFAIRS, U.S. DEPARTMENT OF COMMERCE

Mr. DARBY. Thank you, Mr. Vice Chairman.

I was particularly encouraged by your remarks and that of Senator Roth and Senator Bingaman.

It's very encouraging for those of us who are working in these vineyards to hear such distinguished Members committed to this educational process we have today in conversations with their colleagues in both Houses.

This is my first opportunity to appear before this committee. So it's a particular pleasure to do so on such an excellent basis.

I am here to discuss Economic Affairs' support for the President's plan to improve the quality of statistics, and I would like to begin with a look backward, although I think I agree with the thrust of your remarks, that the important thing is going forward.

In years past, my predecessors said the Economic Affairs' No. 1 priority was to maintain the quality of economic and demographic statistics. It is not clear to me that Economic Affairs was successful across the board. We did gain ground in some areas, but lost ground in others.

On balance I think we experienced the erosion in the quality of our statistics, if for no other reason than that our statistics could not keep pace with an increasingly complex world.

I am not alone in this view. After a thorough review of the Federal statistical system, we had the Economic Policy Council report, which Chairman Boskin has reported on. These conclusions echoed those reached by the Office of Technology Assessment in the September 1989 background paper on "Statistical Needs for a Changing U.S. Economy."

At the Bureau of Economic Analysis, or BEA, we have already taken one step to shift current resources from less essential activities to the Bureau's highest priority programs. We have put together a reprogramming proposal, which is now before our Appropriations Committees, that will free up resources for work on the national economic accounts and foreign direct investment surveys.

The reprogramming proposes that the Bureau's econometric model program be eliminated and that data previously published in Business Conditions Digest be simplified and consolidated into the Survey of Current Business. Staff will be reassigned to work on the national economic accounts and on the foreign direct investment surveys. This is a modest step, but one that we can take immediately to put resources where we need them most in BEA.

For fiscal year 1991 we have a four-point program to remedy our current weaknesses at BEA and to introduce much needed improvements.

First, as regards remedying our current weakness in the national economic accounts, we plan to, provided our budget is approved, develop improved measures of consumer expenditures on services and of output of service industries, develop measures of prices of high-tech goods, develop better measures of goods and services produced

by State and local governments, develop measures of the activities of the nonprofit sector and research ways to measure nonresidential construction prices.

The reprogramming that I mentioned will permit us to wind up our work on the overhaul of estimation of GNP by industry and to speed up the preparation of the input/output tables. All of these steps are necessary if we are to bring to a halt the deterioration in the quality of the national economic accounts.

Second, we want to go a step further with the national economic accounts. In fiscal year 1991, we hope to start a program to modernize and extend the accounts with the aim of bringing them into line with the United Nations' system of national accounts by 1995. Doing so will give us economic information we have never had before and make our accounts much more comparable with the accounts of many other countries.

Initially, we will concentrate on identifying the conceptual and measurement problems associated with a move toward the SNA system.

In addition, we will expand the current set of economic accounts to include saving and investment accounts, capital finance accounts, revaluation or price change adjustment accounts, and end-of-the-year balance sheets. Also, we will start work on constructing satellite accounts, those that cut across major sectors of the economy with our first effort in the area of research and development.

Third, our balance-of-payments estimates also require work. Here BEA will concentrate on developing measures of the net international investment position of the United States in current values, developing measures of additional types of international service transactions and improving its methods for preparing short-term projections of services and capital flows.

Finally, given the very high level of interest in foreign direct investment, we know that the Bureau needs to do additional work in this area. The reprogramming that I mentioned at the opening of my testimony should permit BEA to maintain its current processing schedules for international investment surveys and extend its survey work to include more small firms.

Looking ahead, BEA plans to develop more detailed State and industry information on foreign direct investment, improve compliance with the reporting requirements of its investment surveys, and strengthen its ability to process and analyze the data collected.

Mr. Vice Chairman, let me turn now to the Bureau of the Census. At the moment, the Bureau is, of course, deeply involved in the conduct of the 1990 decennial census. Notwithstanding the demands of the decennial, the Bureau has also given careful attention to its role in supporting the President's program for improving statistics.

For fiscal year 1991, the Bureau is proposing new initiatives that would improve the quality of data in a number of critical areas of the economy, including retail sales, the service sector, emerging growth industries, new and projected business investments, manufacturers' shipments, inventories and orders, and foreign trade statistics. Work would also start on improving the standard industrial classification, coding of new businesses and on research into the SIC system itself.

In fiscal year 1991, the Bureau also plans to move forward with its project for modernizing the Current Population Survey processing system. I should add that this is one of the highest priorities of the joint Census Bureau's and Bureau of Labor Statistics' long-range redesign program for the CPS, which is the source of the unemployment data.

This year Census is starting a process to restore the sample for the Survey of Income and Program Participation, or SIPP. In fiscal year 1991, we plan to take the restoration process a step further with the introduction of a new panel of 14,000 households. Our goal is to get the SIPP sample back to its originally designed size of three overlapping panels of 20,000 households by 1994.

SIPP represents one of our best opportunities for improving our understanding of the economic behavior of individuals and households and how that behavior is affected by government assistance programs for the disadvantaged.

Mr. Vice Chairman, I have on purpose described our plans for improving our statistical programs at BEA and Census in some detail. I have done so to make the point that a great deal of careful examination has gone into the design of the President's program. We know where our pockets of weakness and targets of opportunities are with a good degree of specificity. We know exactly what we want to fix or make better. Better understanding of how our economy and society function should be the consequence. Better decisions, private and public, should be the payoff.

Thank you very much, Mr. Vice Chairman.

Senator **SARBANES**. Thank you very much, Mr. Darby.

[The prepared statement of Mr. Darby follows.]

PREPARED STATEMENT OF MICHAEL R. DARBY

Mr. Chairman and Members of the Committee, this is my first opportunity to appear before the Committee and I am quite pleased to do so. I am here today to discuss Economic Affairs' support for the President's plan to improve the quality of statistics.

I would like to begin with a look backward. In years past my predecessors said that Economic Affairs' number one priority was to maintain the quality of economic and demographic statistics. It is not clear to me that Economic Affairs was successful in doing so across the board. We gained ground in some areas but lost ground in others. On balance, I think we experienced erosion in the quality of our statistics, if for no other reason than that our statistics could not keep pace with an increasingly complex world.

I am not alone in this view. After a thorough review of the

Federal Statistical System, the Economic Policy Council concluded that the system needed repair in some areas and strengthening in others. These conclusions echo those reached by the Office of Technology Assessment in its September 1989 background paper on Statistical Needs for a Changing U.S. Economy. On January 25, Michael Boskin, Chairman of the Council of Economic Advisers, with the President's endorsement, announced the Administration's Program for Improving the Quality of Economic Statistics.

Chairman Boskin will be providing an overview of the program today. I would like to describe my view of Economic Affairs' Involvement in the program over the next several years.

At the Bureau of Economic Analysis (BEA) we have already taken one step to shift current resources from less essential activities to the Bureau's highest priority programs. We have put together a reprogramming proposal, which is now before our appropriations committees, that will free up resources for work on the national economic accounts and foreign direct investment surveys. The reprogramming

proposes that the Bureau's econometric model program be eliminated and that the data previously published in the Business Conditions Digest be simplified and consolidated into the Survey of Current Business. Staff will be reassigned to work on the national economic accounts and on the foreign direct investment surveys. This is a modest step but one that we can take immediately to put resources where we need them most in BEA.

For FY 1991 we have a four point program to remedy our current weaknesses at BEA and introduce much needed improvements. First, as regards remedying our current weaknesses in the national economic accounts, we plan to, providing our budget is approved: develop improved measures of consumer expenditures on services and of output of service industries; develop measures of prices of "high tech" goods; develop better measures of the goods and services purchased by State and local governments; develop measures of the activities of the nonprofit sector; and research ways to measure nonresidential construction prices. The reprogramming that I mentioned will permit us wind up our work on the overhaul of the estimation of GNP by industry and to speed up the preparation of the input-output tables. All of these

steps are necessary if we are to bring to a halt the deterioration in the quality of the national economic accounts.

Second, we want to go a step further with the national economic accounts. In FY 1991 we hope to start a program to modernize and extend the accounts, with the aim of bringing them into line with the United Nation's System of National Accounts by 1995. Doing so will give us economic information we have never had before and make our accounts much more comparable with the accounts of many other countries.

Initially, we will concentrate on identifying the conceptual and measurement problems associated with the move toward the SNA system. In addition, we will expand the current set of economic accounts to include saving-investment accounts, capital finance accounts, revaluation accounts (price change adjustments) and end-of-year balance sheets. Also, we will start work on constructing satellite accounts, those that cut across the major sectors of the economy, with our first effort in the area of R&D.

Third, our balance of payment estimates also require work. Here, BEA will concentrate on: (1) developing measures of the net International Investment position of the United States in current values, (2) developing measures of additional types of international services transactions, and (3) improving its methods for preparing short-term projections of services and capital flows.

Finally, given the very high level of interest in foreign direct investment, we know that the Bureau needs to do additional work in this area. The reprogramming that I mentioned at the opening of my testimony should permit BEA to maintain its current processing schedules for International investment surveys and extend its survey work to include more small firms. Looking ahead, BEA plans to develop more detailed State and industry information on foreign direct investment, improve compliance with the reporting requirements of its investment surveys, and strengthen its ability to process and analyze the data collected.

Mr. Chairman, let me turn now to the Bureau of the Census. At the moment, the Bureau is, of course, deeply involved in the conduct of the

1990 decennial census. Notwithstanding the demands of the decennial, the Bureau has also given careful attention to its role in supporting the President's program for improving statistics.

For FY 1991 the Bureau is proposing new initiatives that would improve the quality of data in a number of critical areas of the economy, including retail sales, the service sector, emerging growth industries, new and projected business investments, manufacturers' shipments, inventories and orders, and foreign trade statistics. Work would also start on improving Standard Industrial Classification (SIC) coding of new businesses and on research into the SIC system itself.

In FY 1991 the Bureau also plans to move forward with its project for modernizing the Current Population Survey (CPS) processing system. I should add that this is one of the highest priorities of the joint Census Bureau and Bureau of Labor Statistics long-range redesign program for the CPS.

This year Census is starting a process to restore the sample for the

Survey of Income and Program Participation (SIPP). In FY 1991 we plan to take the restoration process a step further with the introduction of a new panel of 14,000 households. Our goal is to get the SIPP sample back to its originally designed size of three overlapping panels of 20,000 households by 1994. SIPP represents one of our best opportunities for improving our understanding of the economic behavior of individuals and households and how that behavior is affected by government assistance programs.

Mr. Chairman, I have, on purpose, described our plans for improving our statistical programs at BEA and Census in some detail. I have done so to make the point that a great deal of careful examination has gone into the design of the President's program. We know where our pockets of weakness and targets of opportunity are with a good degree of specificity. We know exactly what we want to fix or make better. Better understanding of how our economy and society function should be the consequence. Better decisions -- private and public -- should be the payoff.

Senator SARBANES. Mrs. Norwood, do you have any comments you might wish to make?

**STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER,
BUREAU OF LABOR STATISTICS, U.S. DEPARTMENT OF LABOR**

Mrs. NORWOOD. Yes, Mr. Vice Chairman. I don't have a prepared statement, but I would like to make a few comments.

But, first, let me apologize for being here late. The House Immigration Subcommittee had more questions than I had thought.

As you know from the many discussions that you and I have had over the past decade since I have been Commissioner, I have become increasingly concerned about our ability to keep up with the demand for data of high quality to use in decisionmaking. That's why I welcome the effort that Mr. Boskin has sponsored within the Bush administration to improve the quality of economic statistics.

The U.S. statistical system has been operating within serious budget constraints for a number of years now. Many important data series have been eliminated, and I regret their loss. But I am much more concerned about the new areas and the technical problems that we have not yet been able to address. The Boskin working group has made a very real effort to identify some of those important issues.

The administration's program for improving the quality of economic statistics has resulted in the addition of \$2 million in the BLS budget for fiscal year 1991 that would not otherwise have been there. The major share of that increase will be used to improve the first estimates of the employment data from the business survey that we present to this committee every month, as well as to start work in prices, in hospital prices in particular, and in wages in nursing care facilities.

I would like to mention also that our budget includes funds actually in the Occupational Safety and Health Administration's budget for the BLS to do work on the improvement of the occupational safety and health statistics that we have discussed here together, as well as the BLS portion of the continued work on the Current Population Survey.

As we have already discussed in another hearing, those improvements will be balanced in part only by elimination of one program, that is the measurement of mass layoffs.

So, Mr. Vice Chairman, I am very pleased to be here to have this opportunity to discuss the President's initiative for improving economic statistics. We in the statistical system are serving in a very difficult time. We must recognize the need for budget constraint, while at the same time fill the ever-escalating need for data of high quality. That's very difficult to do, and I am very pleased at the continuing interest of this committee and at the help that we're getting from Mr. Boskin.

Thank you.

Senator SARBANES. Thank you very much, Mrs. Norwood, we are very pleased as always to have the benefit of your observations and comments.

Mr. Boskin, Mr. Darby, and Mrs. Norwood, first, I'm going to spend perhaps what might appear to be a disproportionate amount of time this morning on the process, the framework you've put into place as opposed to the actual substance perhaps of a particular statistical series and so forth because I feel that if we have the right process in place and it's working the right way, that the chances of getting a good substantive product are significantly improved.

One of the reasons we see some good news is this area at the moment is because I think you did undertake the working group, and the working group took its responsibilities very seriously, as did you. So out of all of that has begun to come a program that makes sense.

I have not actually seen a full list of the membership of the working group. Is that public?

Mr. BOSKIN. There is no secret to it. I don't think we have ever published it, but I would be happy to provide it to you.

Senator SARBANES. Why don't you submit one to us for the record.

Mr. BOSKIN. Sure, we'll submit one.

Senator SARBANES. I gather there are about 25 members of the working group?

Mr. BOSKIN. Yes, there is a core group of perhaps about 15 that attended all of the discussions representing the major agencies that are involved, including Mr. Darby and Mrs. Norwood, and then there was a floating group of others that came for discussions in specific areas, but these range from the Agriculture Department to, oh, I don't know, I don't think we have a department with a "Z." [Laughter.]

But we have the Council of Economic Advisers, well, Treasury, OMB, CEA, Commerce, including on occasion several people from different parts of Commerce, Labor, USTR, and I could go on and on through virtually every part of the Government involved in either producing or having to use and interpret economic statistics. The Federal Reserve participated. But we'll get you the complete list.

Senator SARBANES. If you could submit that for the record, we would appreciate it.

[The following information was subsequently supplied for the record:]

EPC Working Group on Economic Statistical Quality

USTR:

David Walters

OMB:

Ed Dale

Ahmad Al-Samarrie

Hermann Habermann

OPD:

Larry Lindsey

Treasury Department:

Sidney L. Jones

James Russell

Commerce Department:

Michael Darby

Suzanne Howard

Harry Scarr

Mark Plant

Carol Carson

Labor Department:

Janet Norwood

Federal Reserve:

Joyze Zickler

Department of Housing & Urban Development:

John Weicher

Agriculture Department:

Bruce Gardner

Dan Summers

Council of Economic Advisers:

Michael Boskin, Chairman

John Taylor

Steve Landefeld

Marc Robinson

Senator SARBANES. Now the working group is a working group under the Economic Policy Council; is that correct?

Mr. BOSKIN. That's correct.

Senator SARBANES. And who makes up the Economic Policy Council?

Mr. BOSKIN. The senior Cabinet level officials on the economic side of the administration. It's chaired by the President, and when he is not chairing it, Secretary Brady, Secretary of the Treasury Brady is the chairman pro tem. It includes the Secretary of Transportation, Secretary of Agriculture, Secretary of Labor, Secretary of Commerce, and so on, Director of OMB and Chairman of the CEA. We'll get you a complete list.

Senator SARBANES. Why don't you give us that list, too, so we can get this structure.

[The following information was subsequently supplied for the record:]

Economic Policy Council Membership

The President, Chairman
 Secretary of State
 Secretary of Treasury (Chairman Pro Tempore)
 Secretary of Agriculture
 Secretary of Commerce
 Secretary of Labor
 Director of the Office of Management and Budget
 U.S. Trade Representative
 Chairman of the Council of Economic Advisers
 The Vice President & the Chief of Staff are ex-officio members

* and other such members as the President may designate

Senator SARBANES. So you have the Economic Policy Council and they established the working group?

Mr. BOSKIN. That's correct.

Senator SARBANES. I take it that you in effect as a member of the Council raised the question of establishing a working group to deal on the statistical?

Mr. BOSKIN. That's correct.

Senator SARBANES. And they thought it was a good idea and the working group was established. Its membership I guess essentially was determined at your invitation?

Mr. BOSKIN. Well, that is correct, although all of the agencies represented in the Economic Policy Council were asked about their interest and concern and participation. Of course, all those that had any important statistical operations did participate, and several which were more consumers and producers of statistics did.

There are, as I understand it, about 70 statistical agencies in the Federal Government and many of them do not produce economic statistics or statistics that only impact economic statistics as a joint

product of their primary focus. We cast the net broadly and we invited everybody in the Federal Government who was interested and we defined the Federal Government broadly, not just the executive branch, but the independent agencies and so on, and particularly the Federal Reserve, which is, as you indicated about economic policy, a primary user in terms of making monetary policy decisions, but also a producer, for example, of the industrial production, capacity utilization and other data, the national balance sheets.

Senator SARBANES. How often does the working group meet?

Mr. BOSKIN. There were times it met every 2 or 3 weeks for a period, and then there was a period where we met a couple of days ago for the first time in about 2 months. As normal in this thing, we defined what our objectives were, we had tasks assigned, we met as those were completed, we prepared a set of recommendations and then we pushed forward with those recommendations.

The Economic Policy Council unanimously and enthusiastically endorsed them. They were taken to the President for his approval and he enthusiastically endorsed them. We then met again, once those were approved, to convey to the agencies what the decisions had been. We got some additional funding into the fiscal year 1991 budget proposals to begin to implement some of these.

We now have begun the work of taking the responses of especially the agencies that produce statistics to the recommendations and are working out a program. We are now considering what ought to be the longrun structural organizational and financial needs to implement fully these programs. There was basically some seed money, as Mrs. Norwood and Mr. Darby indicated, and we will be examining what will be necessary on a multiyear basis for these programs and we will examine opportunities to make improvements. There may be some places where there is some duplication, but we are going to take a full look at all of those issues and we expect to have sometime this summer a second report to the Economic Policy Council with a long-range set of recommendations which may well involve additional resources as well.

Senator SARBANES. What input did the working group receive from data users and analysts outside the Federal statistical establishment?

Mr. BOSKIN. We had a substantial input in a variety of ways, but based on the professional interaction of the membership of the organization, we did not, for example, have open hearings or anything of that sort.

But because we had people like Mrs. Norwood and Mr. Darby and others who have had a long interest in this area, I spoke at a variety of organizations that were interested in these things. We had people in for discussion in my office and elsewhere to try to understand what their concerns and what their needs were.

The American Economics Association and NABE, there are some people sitting in the audience who gave us some advice and there are a variety of these things.

At the very beginning we had also a very substantial detailed review of prior work that had been done and prior critiques, including those from Congress and the OTA study as it became available

last year, the NABE, the American Economic Association, and the National Academy of Sciences.

We basically first took a look at all the critiques and analyses that had been done. Then we discussed, sometimes informally, that range, from over the phone to people coming in and talking to one or more of us. We didn't think it was necessary to have a big, elaborate set of public hearings because the expertise was already available on the working group.

Senator SARBANES. Now that you're moving in to the stage where you're trying to develop a comprehensive, long-term strategy, and I don't know how formal we need to make it, but to make sure that there is an interaction with the private sector.

Mr. BOSKIN. We intend to do that. I agree with you.

Senator SARBANES. My understanding at least of what we hear is that from their perspective the bona fides of the working group have in a sense been established by the recommendations they've made. In other words, they see what is going on as a positive, constructive endeavor to try to deal with the statistical arena, and I think the working group would obviously benefit from their input. You might want to do it in a somewhat more structured way. I just throw that out as an idea.

Mr. BOSKIN. Thank you.

Senator SARBANES. You've not issued a report or anything of the working group, or at least the only thing I've seen is about the five- or six-page release with the recommendations and so forth. There is not something more detailed behind that, is there?

Mr. BOSKIN. No. We put an appendix in the Economic Report to the President describing it. When the President had made his decisions and we had made the additional budgetary decisions, we issued a general statement. We then wrote the appendix in the Economic Report of the President highlighting the need to improve the economic statistics and what the working group had done thus far, and an invitation to the outside community to give us advice and suggestions. But there is no more detailed document or anything of that sort.

Senator SARBANES. Do you think we need something more complete out in the public arena for people to look at and to think about?

Mr. BOSKIN. I think as we move forward over the next several months we are going to be dealing with issues of enough importance in following up on your statement about more formal or at least additional interaction with the private sector, and that may well be useful.

Senator SARBANES. As you move toward this comprehensive, long-term program to improve the economic statistics you said you will consider organizational, methodological, and other global improvement, and I wonder if you could put on the table for us this morning sort of at least some of the things that are encompassed within that description.

Mr. BOSKIN. While this is at the stage of brainstorming and thinking, and there is a long way to go before we come up with what we think would be the wisest set of options to present, there are some people who believe that there are some programs or agencies it may make sense to combine. Some countries go to the ex-

treme of that and have one large national statistical agency. Perhaps that may help. You indicated some of the concerns on the budgetary side, and perhaps it's easier for one large agency to deal with its budget than for many splintered ones.

On the other hand, as an economist, I'm a believer in the advantages of specialization and I also like competition to spur innovation and creation.

We are going to be discussing those sorts of things. I do not believe that we are even close to coming to any preliminary ideas of a set of options, but we feel that if we are going to be laying out what we think is the basic course, the statistical agencies' research and implementation programs and budgets ought to be following, and there may well be some increase in requested funds, that it is incumbent upon us to see if there is any duplication and if there is anything that can be done to provide for a more efficient collection and dissemination of data. And it's only for the sake of completeness that we say these sorts of things. We'll see what the individuals involved decide.

One of the things we are trying to do right now is trying to get a better idea about how other countries organize their data and what advantages and disadvantages they have experienced with different types of organizations of their statistical enterprises. Some of that may be useful information to us. I wouldn't suggest that if something works in another country it would necessarily work here, but that's one of the tasks we're looking at over the next 2 or 3 months to try to get a better feel for that.

Senator SARBANES. I take it your timeframe is to clear through the Economic Policy Council by summer, the end of summer I guess the next step. Do you envision that you can determine where you're going to go for an extended period of time by then or that represents the next step in this process, but that there will have to be subsequent steps thereafter and the working group will have to continue to function?

Mr. BOSKIN. There may well have to be subsequent steps thereafter but, first of all, we want to make sure that all the relevant people are fully informed of what we have been doing, and we will be providing reports on what tentative conclusions or options we've come up with. But also it's important in the event that additional resources are sought that by the time the fall budget season begins that this be bedded and approved prior to that so that we wouldn't miss the normal budget cycle.

Now, we wouldn't want to do something just for the sake of that that would steer us on the wrong course for many, many years, but that is one of the reasons we have this timing involved now.

Senator SARBANES. Well, I mean I think that makes a great deal of sense. I take it from that though that you would probably expect the working group to continue beyond this next decision and continue to look at the matter and develop further proposals?

Mr. BOSKIN. Yes. I don't know if we will be a standing committee forever, but I do believe that the issue is a multiyear set of issues, and then even as the agencies make improvements they are going to be soliciting advice from their colleagues in and out of the administration and it will have to be monitored. So, I do believe that

there will be a continuing process, and I wouldn't expect it to go out of existence this year.

Senator SARBANES. You may want to defer this question to your colleagues. What sense do you have of the level of the technology in our statistical agencies. We get reports, for instance, that computer systems and some of the Federal statistical agencies are lagging well behind the data processing technology that is available in the private sector.

I'm going to turn to personnel in a minute, but for the moment I'm looking at technology and there is this lag and that we need to make some investment simply in getting our technology up to a quality level.

Mr. BOSKIN. Let me just make a general statement about that and then ask Mrs. Norwood and Mr. Darby if they would like to comment with respect to their own agencies. I think that because technology has evolved rapidly and because the statistical agencies and the statistical enterprise interacts heavily with the private sector and relies on the private sector for input, and because timeliness and accuracy are very important products of a quality statistical system or attributes of, that having the appropriate human, and I would emphasize human, and physical capital stock necessary to do the job is important.

While my own detailed knowledge of individual agencies is insufficient to answer the question fully, I think that probably there is a wide range among the statistical agencies. There are probably some that are in very good shape and others that are in need of improvement, and that probably reflects everything from the vagaries of their cycle of improvements to how they fared in the budget process.

I will just stop there and ask Mr. Darby and Mrs. Norwood if they would like to comment.

Mr. DARBY. I think that there are real reasons for concern there. It seems to me that it is indeed variable not only across agencies, but within agencies. In the Census Bureau, for example, the processing procedures for the Current Population Survey, which we do, and of which then Mrs. Norwood's office does the analysis, is inadequate. It's a 1960's technology and we've proposed to try and bring it up to modern standards so that the BLS can do their job. I mean it's a fully inadequate system as it stands.

Other areas are more encouraging. When the decennial is complete, there will be some equipment there that can be transferred into other uses and will move us forward. Some of the data analysis is a problem.

BEA has generally made more progress, I think is more up to date, but still has some spotty area in which technology is in fact a constraint.

Senator SARBANES. But you think that BEA is more up to date than Census?

Mr. DARBY. I think in terms of the ongoing programs as it stands now, I think if we get this funding and then next year when the decennial equipment moves out of the decennial offices and into use Census will come a long way toward catching up with BEA.

Senator SARBANES. Well, I think that's important because it's Census that observers have particularly pinpointed to us as lagging

in having outdated computer systems which impact its ability really to produce timely and reliable data.

Mr. BOSKIN. I have to concur, and I think it's important that we remember that while the BEA primarily is in the business of analyzing raw data, the Census Bureau is the one that actually goes out and collects the numbers. So to the extent that they are hampered by inadequate technology, we are limited in how good the analysis can convert them into useful overall data.

Senator SARBANES. Mrs. Norwood.

Mrs. NORWOOD. I guess I would go a little further than Mr. Darby has and say that the lack of adequate systems may well provide data that are not what we think they are.

At the Bureau of Labor Statistics I think we've fared somewhat better for several reasons, one of which is that nearly 20 years ago we decided to try a very risky experiment which has worked out very well, and that was that we did away with our own computer center. We went to what I consider to be the best within the Federal Government, the National Institutes of Health, worked out special arrangements for the protection of confidentiality and other procedures, and then we let a contract with the private sector which we have not renewed. It has gone from two different places.

But we've had now more than 10 years of experience with what I call our dual computer center policy, which has introduced competition into this area. What that has done is, most importantly, since we have backup systems in both places so we can move things back and forth, it has made each of the centers try very hard to please us and to provide us with a lot of interactive systems which we've moved into quite rapidly, and it has also allowed us to keep our mainframe computing capabilities current without having to go through normally long procurement cycles.

As we move into the microcomputer age the situation changes somewhat, and there the problem is largely one of the difficulties of the Government procurement process. Some of that may be the particular agency involved, I don't know, but it takes a very long time from beginning to end, and sometimes by the time the end comes you are in a new generation of equipment and that becomes something of a problem.

Another challenge is the difficulty in getting new systems. It doesn't have a lot of appeal, and yet it is quite basic to the quality of statistics. We have tried to build modernized systems into our redesigns, and we have a state-of-the-art system for the CPI. We are working with the Census Bureau to have a state-of-the-art system for the CPS and I hope by the middle of the decade that we will be in that position.

Another problem, of course, is computer personnel. By contracting out so much of this in the mainframe area, we haven't had a problem there, but the basic systems work needs to be done in-house, and we are finding it more and more difficult to get and keep good people. So we bring them in and we train them, they stay with us a few years and then they move on and double or triple their salaries.

Senator SARBANES. We have material that indicates that the number of professionals employed by the statistical agencies has fallen steadily over the past decade. In addition to the funding

problems, which obviously would contribute to that; have hiring freezes been an important part of that development?

Well, let me put the question this way to you. To what extent have the statistical agencies been impeded in doing their job even with limited resources by hiring freezes which in effect compel you to make personnel decisions that you might make differently even with lesser resources so that maybe one thing the working group needs to work to and we need to work out with you is just simply to get the hiring freezes off of the managers in the statistical agencies.

Mrs. NORWOOD. We have from time to time had problems of that kind, but they have been quite short lived. When the Department of Labor has, for example, had problems, there was a freeze on the whole Department, and we're part of the Department and we would have expected that.

I think the bigger problem is the budget process which takes an inordinately long time to get through so that you can go out to hire. We have, as you know, for a variety of reasons had years when we didn't have a budget at all and we were on continuing resolutions which were not quite what the budget proposal was. So it's very hard to go out and hire until the Congress has acted on those programs. So that has impeded us.

But I think the big problem that we have had is turnover. I looked yesterday at our turnover rates, and for most of the groups we hire, they are now up to 15 or 16 percent. So we keep hiring people and we lose them, and we can't compete at the really young Ph.D. level any more.

Mr. DARBY. I can't speak with the perspective of having been with the agency as long Mrs. Norwood certainly, but at the BEA it seems that ultimately the greatest constraint is the budget level. Basically over the last decade, total employment has gone from 470 to 370, and that has been a major limiting factor in the ability of the Bureau to deal with its responsibilities.

I think the other point that Mrs. Norwood made is the turnover, and that's related obviously to the salary scales. When my Ph.D. students, some of whom are still finishing up, are receiving offers of \$55,000 to go teach at a university for 11 months, it's very hard for us to compete. It's very hard to retain people when they've acquired some experience and can make certainly more than I can make in Federal service, and I think that's a continuing problem.

Senator SARBANES. I don't know the answer to that. I think the pay scales, given the recent developments, are going to ease a bit in the Federal Government because what was acting as a ceiling has now been taken up and then things can follow along behind that. But even so, you're not going to get a situation where you can compete with those kinds of salaries in the private sector.

I guess the question is: Is the easing enough do you think to strengthen your competitive ability to get and retain these people?

Mrs. NORWOOD. Well, it will help, but we don't know yet what the easing is going to be at the middle-grade level, which is one of the things that concerns me. But the other problem really is the attitude toward government service which has changed considerably.

We find that we can attract people if we work very hard at it because we can provide training and experience that they can't get anywhere else, and they work for a while and learn a lot and then they go off. Some of that we like to have because it's good for an agency to have some turnover.

What we have done, however, is to invest a tremendous amount of our resources in recruitment. We are sending peers out, the people whom they will work with, the substantive people out to do recruitment, and we have all kinds of ties with universities and other sources of people which means a large drain on these people who normally and in prior years would have been doing the work that we're here to do. So it's a continuing problem for all of us.

Mr. BOSKIN. I would just echo that general point, that CEA obviously is not a producer of data and we have a very small staff of people who come in for a year or two on leave of absence from a university.

I think probably the most important thing beyond this easing would be a cumulative general public change in the perception of government service. I think that that is something we all need to work very hard on.

Senator SARBANES. Well, I couldn't agree more with that. Paul Volcker, who is heading up this Commission, in fact was quoted as saying, "Show me a nation with a mediocre public service, and I'll show you a mediocre nation," and I know from the work they have done how deeply concerned he is about attracting and retaining quality people in the Federal service.

Mr. BOSKIN. If I could, and hopefully not embarrassing my colleague, just say that what we need to be able to do is have another generation of Janet Norwoods coming along. That's a problem and we need to turn that around.

Senator SARBANES. Let me ask Mr. Darby, I'm going to put a question to you and I think the import of it will be understood. You said in your statement that you've put together a reprogramming proposal that will free up resources to work on the national economic accounts and foreign direct investment surveys. This reprogramming proposes that the Bureau's econometric model program be eliminated and that the data previously published in the Business Conditions Digest be simplified and consolidated into the Survey of Current Business.

I would like you to put on the record the substantive rationale for eliminating the econometric model program.

Mr. DARBY. OK.

Senator SARBANES. Just tell me substantively why you would support doing that, sort of abstracting it to some degree from budget crunch if there is such a rationale, or is it entirely budget crunch?

Mr. DARBY. Well, I think that when we realized what our budget numbers were going to be for 1990, it was clear that we would not be able to continue doing the things that we had been doing. The question was should we sort of try to take a salami slice and do everything a little less well, or should we try and concentrate on higher priority efforts.

We were already involved in reviewing our priorities as part of Mr. Boskin's working group, and as generally what I hope is a good management process.

Our feeling on the econometric model was that it was, in terms of triage, in the third group, and that it substantially had passed its usefulness. There was also a pull-in that we had already had to suspend publication of GNP by industry since February 1989. That's one-third of the detail on where GNP is produced, what are the expenditures, and where is the income, that we are not able to do. We needed to put talented people to work fixing that program. So that was the pull side.

But on the substantive side, the econometric model, we felt was largely duplicative of what was available in the private sector. We could acquire it on a contract basis, those government users of the model who needed the output, and the only users or consumers of the services of the model were other government agencies who felt that they could adequately get the services at a lower cost to the overall government from the outside. The main user is Chairman Boskin, and he may want to speak to that, but we've undertaken to help them in the adjustment to using private sector alternatives with some of the people on an interim basis, and then they will go on to help with these important GNP programs.

Senator SARBANES. Mr. Boskin, did you want to speak to that?

Mr. BOSKIN. Sure. I think we've had excellent cooperation. One of the primary purposes of the BEA model, historically, has been to provide some information to other government agencies, including the Council of Economic Advisers, and we have been adopting, as you put it, a more up-to-date technology transforming CEA's ability to do that, we have been considering some alternative arrangements, in any event, and we have been able to work out what we believe in terms of the aggregate of the Government cost-effective, sensible, and efficient way to make a transition.

That is, it's likely that within a year or two in any event we probably would not have been relying on BEA for this service, and they are now assisting us in the transition by allowing us to detail some of the people who were involved in the model to assist us to have something that is both to be less costly in the long run to the overall government and more effective to us.

Senator SARBANES. Mrs. Norwood, you mentioned, I think, that you were reallocating within your agency and that some survey you had dispensed with; is that correct?

Mrs. NORWOOD. Yes.

Senator SARBANES. What survey was that?

Mrs. NORWOOD. That's the mass layoff survey. It had been called plant closing and mass layoffs, and we now call it mass layoffs.

Senator SARBANES. I'll put the same question to you. Tell me the substantive rationale for eliminating that survey.

Mrs. NORWOOD. As Mr. Darby indicated, when we looked at the budget constraints within which we were operating, our first priority always is to try to maintain the very basic core of data that are needed for economic intelligence. So it was necessary to find some cuts, and that program has been developed over a period of years in each of the States. It's a Federal/State cooperative program, and

it provides data, but from what I could see, some States were using it, but many were not.

In addition, it was supposed to be a nationwide program, but we were not able to get all 50 States to come into the program. So it really rather lost its national character. What we are planning to do this year is to bring about some improvements. We have had some meetings with the States to try to work out what kind of data would be most useful for them, and what we are trying to do this year is working with one of the States, as the group which does this work, to develop a computer system which will be adequate to run the basic data which we have showed them how to.

Then any State which feels that these data are useful, and I'm sure there will be many, will be able to take it on themselves, but we will not have the funding to provide for it. We will have the system set up so that they can take it on.

Senator SARBANES. Well, I take it if I gave you, Mr. Darby, just out of the blue a pot of money, some additional money to use in the BEA, that you wouldn't put the econometric model back in, you would do something else with it; is that correct?

Mr. DARBY. That's correct, sir.

Senator SARBANES. Because you have in effect looked at this thing and, if I understand it, and I don't know all the details, but my understanding is in effect you've worked out a different way for the same service or comparable service at least to be provided, and that's going to cost somebody else some additional money because they are going to be contracting for it, but in the overall it will cost the Government less because the additional cost to get it through the private sector will be less than you continuing to run your model. So even if you receive more money, you wouldn't put the model back in; is that correct?

Mr. DARBY. That's correct, sir.

Senator SARBANES. Now, Mrs. Norwood, I'm a little concerned with what I heard from you because it seems to me we may well be losing some data altogether from what is transpiring.

If you were given additional money, would reinstating this survey be closer to something you might do?

Mrs. NORWOOD. Well, of course, as Mr. Boskin has said, we would be discussing with the working group the priorities that would be established.

You're right that there are some useful data here, and I would hope that some of the States will keep this up, particularly the States that are in the industrialized area where plants appear to be continuing to close down.

I would point out that we do continue to have the special supplement to the population survey, which is actually paid for by the Employment Training Administration, which we do every 2 years, which gives us an estimate of the numbers of people who have been affected by plant closings and what happens to them, whether they have found new jobs and what their personal characteristics are. So we do have some information of that kind.

We are always faced with tradeoffs that have to be made. We have, for example, in our OSHA budget of the Department for us to work on occupational safety and health statistics. I think those statistics are quite important. They are certainly important to the

Department of Labor, but I think they are important to the workers of this country and to the economy because they have economic impact.

That program needs redesign, and we are pleased that we have that. It's very difficult to make these tradeoffs and there are budget constraints within which we operate.

Senator SARBANES. Well, I understand that answer. Your reference to occupational health and safety statistics actually leads me into the next area I wanted to ask Chairman Boskin about.

In the press statement which the working group issued and in your statement this morning where you talk about suggested improvements and you touch on productivity output and prices, investment savings and national wealth, employment income and poverty, but there is not a heading for health education and environment, let's say.

I'm concerned as to whether you're seeing those as noneconomic statistics and they are somehow outside the purview of what the working group will pay attention to, or whether it's to come in the next step.

I guess my question is why do not these areas appear as the working group addresses the question of the quality of Federal statistics?

Mr. BOSKIN. Actually some of them do. It's just not perhaps obvious by the way they have been categorized. While there are many statistics developed and published on health and education, let's say, that have to do with health outcomes or educational achievement and so on, and while the health sector is one-ninth of GNP, and education is very important, it's an important component of future productivity and so on, it is not the direct focus of our working group. However, within the areas we have outlined, for example, measuring productivity in the service sector, measuring prices and measuring output, we will be taking a look at some of the most fundamental aspects of the interaction or the interface of education and health with the economy.

As I mentioned, defining what actually goes on in now a day's visit in a hospital or a visit to a doctor, et cetera, is apparently very different from what went on quite some time ago. Mrs. Norwood and her people are working on price indices for health care. In education, as in some other areas we measure output by the cost of inputs and thereby assuming there is no productivity growth.

It's hoped that one of the things that will come out of the working group's recommendations is to try to get better measures of these sorts of things.

The traditional kinds of education statistics such as test scores and things of that sort I certainly think are important, but if one were to arrange a continuum from data that have little or not economic significance to the core economic statistics, such as on the CPI and GNP accounts and things of that sort, traditional educational statistics are in a gray area of data that are important for various economic issues, are certainly important in and of themselves, are important to the production of the statistics for other purposes, and are also potentially useful in improving the core economic statistics, as I mentioned, for example, productivity in the service sector.

So we didn't mean to slight them and they are included somewhat in here. For example, better measures of fourth grade school performance I would put in the nature of education statistics, although I would be the first to argue, and as chapters of the Economic Report argued, that our educational performance is awfully important to the future of our economy.

So we didn't mean to slight them, and there is no intention to slight them, nor is there any intention to shift resources from statistics gathered for those other purposes at the expense of those statistics for the core economic statistics. We believe those are important in and of themselves.

Senator SARBANES. Well, I think the working group might want to consider addressing these as a category and not subsuming them elsewhere because there is considerable congressional concern about some of them. For instance, there is considerable concern about cuts in education statistics, and the budget proposal for this year gave the National Center for Educational Statistics higher appropriations, although the staffing levels don't seem to be adjusted correspondingly in order to carry out the data collection and analysis necessary.

Now, we have reports that the National Center on Health Statistics is probably going to have to eliminate the 1991 Health Interview Survey because of the current budget proposal, and obviously health care costs and their outcomes on the economy and just generally these health statistics are important economically.

The Congress is working on legislation to establish a Bureau of Environmental Statistics in a Senate bill, or a National Center for Environmental Statistics in the House bill. So it seems to me that probably the working group ought to either consider them in a separate category or somehow provide some reassurance that they are getting the kind of attention that some of these other areas are receiving.

Mr. BOSKIN. I think that point is well taken, Senator. I think that the first step that needs to be taken is for us to interact with our colleagues in those particular areas and see what is going on. Some of these areas would fall under the purview of the Domestic Policy Council, but we shouldn't let bureaucratic—

Senator SARBANES. Are you on the Domestic Policy Council as well?

Mr. BOSKIN. Most of the time, yes, on the areas that have anything to do with the economy, yes. When they get into areas that have nothing to do with the economy, then I don't.

Senator SARBANES. We're glad to see that interlocking directorate. [Laughter.]

The Supreme Court handed a decision down in the 1930's that said interstate commerce covered virtually everything. I mean the reach of the Government could flow almost without limit, and I have something of that view about the economic implications of all of these activities.

I know, Chairman Boskin, that you have to be down at the White House shortly, and I'm just going to ask a couple more questions.

I might observe that with the President now proposing that EPA go to a Cabinet level department that the environmental statistics in a sense might assume a little more importance. Most of the Cab-

inet level departments have a statistical agency within the department of sort. That's true of Education and of Health. So that will be another factor I think.

What do you think we need to do to make our statistical system first rate?

Mr. BOSKIN. Well, I wouldn't categorize it as less than first rate. With all due respect if I could say we need to do some things to keep it first rate through time and to improve it, and it seems to me that there are three key priorities.

One is to free up the human capital to deal with conceptual and methodological issues. I indicated earlier that there are just some areas where even defining the unit of account or conceptually to measure things like output and prices is much more difficult than in traditional sectors of the economy. That's going to be a difficult and a long process, but I think we badly need to do that because the economy has evolved over the previous two decades and beyond. So I think that's probably the major concern I have in doing new things and adapting to these changes.

Second, as both Mrs. Norwood and Mr. Darby have indicated, I think we have to make sure that we have the ability to attract and maintain in our statistical agencies quality individuals who have careers in this area and who have the ability not only to do the ongoing programs, but the ability to deal with changes, and also provide them with the resources in terms of capital and technology, et cetera, as necessary on an orderly basis, and we are taking some steps to do that.

Third, I think we have to do a better job of educating everyone about the importance of economic statistics. Some people were baraged by economic statistics. I have forgotten, sir, whether it was you or Senator Roth who indicated that every day data come out and then they are revised and the financial markets react to them, et cetera.

Janet Norwood used, I think, a very important phrase. These basically are economic intelligence. There is a way to describe where we are, where we have come from, and while many things will determine where our economy and its components will evolve, one of those things is where it is and how it has arrived there.

So I think it's very important that we do a better job of educating people about the importance of these data. I think that will have many beneficial effects, one of which hopefully will be to enable us to do a better job in securing the appropriations necessary to maintain and improve the quality of the statistical programs.

That's one of my purposes both as Chairman of the Council of Economic Advisers and as my history as a professor. I take that very seriously and I really appreciate the role that you and the JEC, as well as Senator Bingaman and his subcommittee have played in doing that.

Senator SARBANES. Very good.

Senator Kohl, of Wisconsin, has been in touch with me. Are you familiar with the fact that the Securities and Exchange Commission is terminating the publication of the SEC Monthly Statistical Review?

Mr. BOSKIN. I have heard that there were some changes underway in a variety of the independent agencies. I'm not familiar with the circumstances of the SEC, although I will talk to Mr. Breeden as soon as possible about it. Some of that reflects various types of deregulation where data that were provided automatically because of regulation and as an input into regulation are no longer required for the operation of the agency, and a determination has to be made for society as a whole.

It would be important to maintain any given set of such information that isn't now automatically generated as a byproduct of regulation, but in this specific case I really don't know the specific causes, but I will talk to Mr. Breeden about it.

Senator SARBANES. Does the writ of the working group reach to the SEC?

Mr. BOSKIN. While the SEC is an independent agency, as the Federal Reserve, et cetera, they have been in contact with us. They are invited to join us. The issue of data being discontinued not necessarily by a decision of the independent regulatory agency, but just because it's no longer provided to the agency has been one of the subjects we have discussed.

So, while we have no, in a sense, authority relative to them, we do have a mutual respect and interaction and we have had some input from them, but we will certainly follow this up.

Senator SARBANES. Well, I think one of the consequences of you being willing to step up and become the responsible person in this area if you're now going to be a lightning rod, obviously. [Laughter.]

Mr. BOSKIN. It comes with the territory, I understand.

Senator SARBANES. And there is considerable concern with some Members of the Congress with respect to this SEC decision. They don't think that there are alternatives available elsewhere, and they don't think it was carefully reviewed with the users of the information. They don't think the SEC is achieving savings of any magnitude and it's causing considerable concern, and I pass that on to you.

Mr. BOSKIN. I appreciate that, and I'll take that specific item up with Mr. Breeden soon.

Senator SARBANES. I want to make two final points. This has been a very helpful hearing and we appreciate it.

Often the revision of statistics or the elimination of certain statistical series are perceived by some as being done for political reasons. I guess the most extreme statement of this is well, if you stop collecting the statistics that show something is wrong, then it's harder to show that something is wrong and therefore you can paint a brighter picture.

I must say that I think some of what was done in the statistical arena in the 1980's was open to this criticism, and there was, I think, considerable skepticism, which can ripen into cynicism, which is a corroding attitude in a democracy. There is not a perception that the work you're doing is driven by any political agenda, and I commend you for that. I think it's very important that that be the case and that you be sensitive to the necessity that it be the case. I think you are, but I simply want to reemphasize that.

Mr. BOSKIN. Thank you, and I'm glad that is the perception because it is in fact the reality.

Senator SARBANES. Finally, we ought to try to help and we will try to help. We think you're doing good work in this area. I've taken an interest in it, and I've never asserted that it's one of the sort of Earth-shaking issues of our time. But if we don't do these basic things right in all the areas, then the whole structure will start eroding.

I commend the efforts you're making. It's our job here now to try to help you on the budget submissions, and we will do that. I will join with Senator Bingaman and hopefully others to try to get the appropriators to be responsive, even recognizing that part of the problem is that while your part of the budget is OK, it's in the context of other parts of the budget which are not from the congressional point of view and even from my point of view. There are other areas, and therefore we create that kind of difficult dynamic here, but we will try to be supportive.

We want the working group to realize the benefits of its initial proposals, and hopefully we can come back again for another round and continue to improve this matter.

But I very much commend the focus you've brought and the analysis that's going on, sort of the commonsense judgments that I sense are being made and most of all the commitment to try to have quality and excellence.

We appreciate your testimony and that of Mr. Darby and Mrs. Norwood very much.

Mr. BOSKIN. Thank you, Senator Sarbanes.

Mr. DARBY. Thank you.

Mrs. NORWOOD. Thank you.

Senator SARBANES. The committee is adjourned.

[Whereupon, at 11:50 a.m., the committee adjourned, subject to the call of the Chair.]

THE QUALITY OF FEDERAL STATISTICS

THURSDAY, MARCH 29, 1990

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

The committee met, pursuant to notice, at 10 a.m., in room 1334, Longworth House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representative Hamilton and Senator Sarbanes.

Also present: Jim Klumpner and Pat Ruggles, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

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

This morning, the committee will hold its second hearing this year on the subject of Federal statistics. The JEC has a history as an advocate for the integrity of our statistical infrastructure, beginning in 1948, shortly after the committee's creation.

Earlier this month, we heard testimony from Mr. Michael Boskin, the Chairman of the Council of Economic Advisers, as well as Commissioner of Labor Statistics, Janet Norwood, and Under Secretary of Commerce, Michael Darby. They reported on the initiatives proposed by the White House working group on the quality of economic statistics and the administration's budget proposals for statistical agencies. At that hearing, all three witnesses agreed that the Federal statistical system needs renewal.

Today, we are pleased to hear from three distinguished witnesses from outside of government.

Professor Sar Levitan, director of the Center for Social Policy Studies at George Washington University, and author of a recent JEC study on labor force statistics.

Mr. Joel Popkin, president of Joel Popkin & Co., and former Assistant Commissioner of the Bureau of Labor Statistics.

Professor James F. Smith of the Business School at the University of North Carolina, and president of the National Association of Business Economists.

Gentlemen, we've invited you to give us an assessment of the Federal statistical system and the working group's proposals to improve it. I encourage you to evaluate the system for us from the perspective of data users.

Please keep your oral presentations relatively brief so we can apply time to questions for discussions. Your prepared statements, of course, will be entered into the record in full.

Professor Levitan, would you begin for us, please.

STATEMENT OF SAR A. LEVITAN, DIRECTOR, CENTER FOR SOCIAL POLICY STUDIES, GEORGE WASHINGTON UNIVERSITY

Mr. LEVITAN. Thank you, Mr. Chairman, for including my prepared statement in the record. And in line with your admonition, I'll try to be very brief.

As you mentioned, the Joint Economic Committee has recently published a report that Frank Gallo and I prepared, "Work Force Statistics: Do We Know What We Think We Know—And What Should We Know?" I'll limit my remarks to seven recommendations. The background material for those recommendations is presented in the Joint Economic Committee publication.

My recommendations are as follows:

First, I believe that we should double the 56,000 CPS sample to get better data for States, as well as for some specific groups, particularly minority groups for which the sample, when it's disaggregated, is not adequate.

Second, I am concerned about what is happening to the nonresponse rates to CPS. We have two related recommendations in connection with the nonresponse rate. First, we ought to consider raising the wages of the enumerators. The enumerators' wage rates are very low and their turnover is extremely high. A higher wage would improve the quality of the enumerators. Second, we now rely upon the cooperation of respondents and we don't pay them. Maybe we ought to test whether payment to respondents would improve cooperation.

Third, we should make greater use of administrative data. Social Security and unemployment insurance data can potentially provide a wealth of information about life time earnings, about changes in the labor markets, particularly at the local level. We have not utilized these data because Congress, in 1976, prohibited Social Security to share its data with outsiders and the unemployment insurance data have been neglected. With current computer technology we can obtain, at relatively low cost, very important and rich additional data series for labor force analysis.

Four, related to the Social Security and UI, which could provide longitudinal data, we also ought to take a much harder look at what is happening with the longitudinal data that we are now supporting. Since BLS took over responsibility for the National Longitudinal Survey a couple of years ago, it has attempted to augment the usefulness of NLS, but additional work is necessary.

Five and six pertain to two recommendations that would cost very little money, which I hope will be popular these days.

One is that we ought to encourage BLS to provide labor market-related economic hardship measures. Right now, BLS concentrates on reporting employment and unemployment data, but it does very little to analyze labor market-related economic hardship and welfare-labor market connection. I think that BLS could be more diligent in providing labor market-related economic hardship data.

The other recommendation that does not involve added outlays deals with estimating the number of discouraged workers. BLS insists that discouraged workers should not be counted among the unemployed. We ought to apply to the count of discouraged workers the currently popular duck test. In the report, we explain how it should be done.

Finally, recommendation seven. In order to carry out these recommendations, I think that it is time for Congress to consider another commission on employment and unemployment statistics. We had one in 1977-79. I happened to have chaired that commission, but by the time the recommendations came out the then Department of Labor Secretary Raymond Donovan rejected every recommendation that involved any additional costs. In a short statement, which according to law, he had to report to the Congress, he repeated, I believe 11 times, that in good conscious, or some similar phrase he could not accept the commission's recommendations. BLS could not do much to implement the commission's recommendations for the simple reason that between 1980 and 1982 its labor force budget was cut by about 15 percent.

What is happening now? As you just indicated, Mr. Chairman, Michael J. Boskin has recently urged a review of selected labor force data as part of a general overhaul of Federal economic statistics.

But if we turn to Richard Darman's proposed recommendations for BLS labor force statistics, we find that instead of increasing the budget to carry out Mr. Boskin's recommendations, he recommended a cut of about 5 percent in real money. Richard Darman urged Congress recently to take the budget proposal seriously. And he said that his budget does not have any gimmicks. I don't know how he can improve statistics by cutting the labor force budget.

I hope that the Congress will not take Richard Darman seriously, at least as far as his recommendations for labor force statistics.

Finally, let me reiterate what the National Commission on Employment and Unemployment Statistics said some 11 years ago: "The Nation is served by a comprehensive labor force data system expertly prepared by a cadre of dedicated public servants." I fully believe so today. The problems that the BLS is facing are not within the BLS, but outside of BLS. We have to realize that statistics cost money and unless Congress is ready to appropriate additional funds for labor force statistics, the labor force data will continue to deteriorate as they have over the last decade.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Levitan follows:]

PREPARED STATEMENT OF SAR A. LEVITAN

I appreciate the opportunity to pick up on the testimony I presented to this Committee a decade ago. On that occasion I reported on the proceedings and recommendations of the congressionally mandated National Commission on Unemployment and Unemployment Statistics.

Regrettably budget cuts prevented the Bureau of Labor Statistics and the Bureau of the Census to implement any of the commission's recommendations that required additional outlays. The inflation adjusted BLS current services budget allocated for counting the work force dropped from \$96.3 million in 1980 to \$82.1 million two years later. By fiscal year 1989 the BLS budget for labor force statistics remained 6 percent below the 1980 level.

Hope springs eternal and if you invite me in the year 2000, I hope that I will be able to report greater progress than I can today.

The Joint Economic Committee already published a report prepared by Frank Gallo and myself: "Work Force Statistics: Do We Know What We Think We Know - And What Should We Know?" As the title indicates, this report reviews the state of labor force statistics. I will therefore limit my remarks to a few brief recommendations; the back-up data can be found in the above report.

Recommendations

1. **Current Population Survey.** The monthly employment situation report that commissioner Janet Norwood reports to the committee is adequate for estimating national employment and unemployment and for major labor groups or areas. BLS labor force data fall short, however, of providing reliable data on state, and localities (except for the 10 largest states and the two most populated metropolitan areas) as well as on minorities.

The size of the current CPS sample is about one-fifth lower than it was a decade ago. Consequently, the quality of disaggregated statistics become highly suspect. For example, data on Hispanics and blacks (particularly black youth) are flawed due to excessive sampling error. Doubling the current monthly population survey sample would yield reasonable reliable state data as well as statistically significant data for key groups in the population.

A major objective of the Bush and the Reagan administrations has been to reduce the role of the federal government by turning over many functions and programs to the state governments, although for the time being the promised 1,000 lights have not exactly lit up the horizon. If the decentralization of responsibility is to be implemented, more reliable state labor force data will be necessary. Leaving to the 50 states to develop their separate employment and unemployment data will result in a Babel of numbers.

2. Administrative data can potentially become a rich source for measuring various aspects of labor force activities. Appropriately exploited these data could shed light on a variety of important issues. Social security earning records can be used to investigate life time earnings histories. A few states have already utilized unemployment insurance data to study short-term economic transitions and the impact of government education, training and welfare programs on employment and earnings.

With appropriate safeguards for confidentiality, matching Current Population Survey and Survey of Income and Program Participation data with administrative records would provide added knowledge about the long-term impact of education, race, sex, disability and family status on employment and earnings. Computer advances have generated new opportunities, but statutory restrictions have frustrated the use of social security and other administrative data. Since 1978 the Social Security Administration has collected information on individuals' total annual earnings. The 1976 tax reform act proscribed, however, the distribution of social security information to other agencies or the public even if identifying information of individuals is removed from the records.

Congress should permit the Social Security Administration to make its records available. The experts assure me that this can be accomplished with adequate safeguards to preserve confidentiality. Indeed, until the 1970s these records were available with no demonstrable disclosure of individual records.

3. Longitudinal data need shoring up. Current BLS reports focus on presenting labor force data at a specific point in time. The importance of a longitudinal perspective for

better understanding of the labor market and of policy formulation is obvious. For example, CPS results may indicate an equal number of unemployed during two consecutive months. However the published data do not reveal how many individuals were out of work in both months. Such data are critical for understanding and eliminating unemployment.

4. The rising nonresponse rate, particularly for the March CPS income questions, is becoming troublesome. The nonresponse rate has quintupled during the past four decades. In 1987, the latest year for which data are available, 28 percent of the CPS sample failed to offer data on income.

The Bureau of the Census is also experiencing increasing difficulties in hiring and retaining skilled enumerators. Interviewing is a low-paying, part-time job with little career potential. Almost half of new Census Bureau interviewers leave within a year. To raise the quality of interviewers and enhance retention it is worth considering increasing their pay. It may also be worth considering paying respondents. The latter should be tested to check whether the results justify additional outlays.

5. Labor Market Related Economic Hardship. In the public mind unemployment is associated with economic want while work is presumably a guaranteed escape from poverty. In reality, about 4 of every 5 unemployed persons in recent years were not poor while several million persons who are in the labor force, including some 2 million who work full-time, year-round have remained in poverty. Developing a labor market related economic hardship index is long overdue. I would hope that this committee would encourage BLS to move in that direction.
6. Discouraged Workers. Finally, BLS should face up to the perennial problem of discouraged workers. The BLS publishes quarterly estimates about these workers, but continues to count them among persons who are not in the labor force, leaving to the consumers of the labor force statistics to interpret these figures as they might. This is not good enough and is subject to misinterpreting the total size of the labor force. The tentative data we do have suggest that it would stretch the point to include all discouraged workers, as they are now counted, in the ranks of idle persons seeking work.

Some five years ago the BLS published a brief and succinct analysis of the discouraged worker phenomenon. The data strongly indicated that between one-third and one-half of the persons counted as discouraged workers were indeed unemployed but were not counted as such because they had not searched for a job within the four weeks prior to the survey. An examination of discouraged worker trends, as reported by BLS indicate that the number of discouraged

workers swells during recessions and declines during recovery periods. For example, during the 1981-82 recession the number of discouraged workers rose to a record high of 1.8 million, but declined to less than half of that number during the last quarter of 1989. Having objectively and carefully analyzed the data, as is its usual practice, BLS surprisingly concluded that the "evidence presented here supports the the present practice of not including discouraged workers in the labor force."

I fully appreciate the reluctance of the BLS to include a significant portion of those who are now counted as discouraged workers among the unemployed. For example, the latest reported unemployment rate would have been about 5.6 percent instead of 5.3 if BLS had adopted a more rigorous definition of discouraged workers. I don't recommend that BLS raise the "official" unemployment count, nor do I expect that this committee recommend such action. However, truth in packaging dictates that BLS should adopt a more realistic estimate of discouraged workers in order to achieve a more reliable count of employment and unemployment.

Statistics Cost Money

Testifying before this committee on March 1, 1990 the chairman of the Council of Economic Advisors, Michael J. Boskin, spoke persuasively on the need to improve labor force and other government statistics. However his colleague, Richard Darman who had admonished Congress a month earlier to "be serious" about implementing the proposed budget apparently failed to take Dr. Boskin seriously. On page A887 of the proposed budget for fiscal budget 1991 we find that for counting the work force the proposed BLS fiscal year 1991 budget would be \$66,000 less than in the preceding year.

Darman assured Congress and the public that the budget President Bush proposed is "without gimmicks." He did not reveal how we can get better statistics with less money. I hope that Congress would not take Mr. Darman's BLS proposal seriously.

Eleven years ago a congressionally mandated commission concluded, after extensive and thorough review of our labor force statistics, that "the nation is served by a comprehensive labor force data system expertly prepared by a cadre of dedicated public servants." I fully concur with this assessment and it is no less true today than in 1979. However, if the statistics are to reflect changing economic conditions and meet policy needs, periodic revisions and improvements are necessary, and that costs money.

Representative HAMILTON. Thank you very much, Mr. Levitan. Mr. Popkin, please proceed.

STATEMENT OF JOEL POPKIN, PRESIDENT, JOEL POPKIN & CO.

Mr. POPKIN. Chairman Hamilton, Vice Chairman Sarbanes, thank you for inviting me to discuss our needs for economic statistics.

For more than 25 years, I've worked both as a producer and a user of statistics. As you mentioned, this is not the first set of hearings the Joint Economic Committee has held on statistical issues. Throughout its history, the JEC has been the one institution of government continually committed to seeing that the Nation's economic history is being chronicled properly.

I know of that commitment first hand. I first testified before this committee 25 years ago. It was my first appearance before Congress. The hearings were about how the United States could measure its wealth and integrate those measures with national income and product account data. I remember that testimony very well because there was some pain involved. Senator Paul Douglas was a committee member then. At one point, when I was discussing how to measure land wealth, he peered down at me and asked whether the famous 18th century economist, David Ricardo, would have agreed with me. I was unprepared for the question, and got an early lesson in how to prepare for these hearings, and what to do when you don't know the answer to a question.

Another example of the JEC's commitment to the integrity of Federal statistics is illustrated by the monthly hearings it holds when the unemployment situation data are released by the BLS. Those hearings were started by the JEC in 1971 when the administration ordered an end to the press conferences that Harold Goldstein and I, then both BLS Assistant Commissioners, held monthly when the employment rate and consumer prices indices were released. The JEC stepped right in and stepped up those hearings so the public would continue to have access to impartial technical interpretation of the data that were reported, and it continues that tradition today.

You've asked me for my assessment of the current state of Federal statistics and the proposals of the President's working group to improve them. My review of economic data needs certainly lends support to the need for information in the areas identified by the President's working group. But it goes further to identify other important gaps and urge more effort in a number of areas.

The needs I perceive for economic statistics fall into four categories. They are addressed in detail in my prepared statement, but let me quickly summarize them.

First, we need improved and expanded measurement in the non-goods producing economic sectors, which continue to generate more employment growth than the goods producing sectors. I use the awkward term, "nongoods," because the term, "service sector," glibly masks too wide a variety of industries to be usefully characterized and analyzed as services, as one industry. The particular needs in the nongoods sectors are, one, a revision of the standard industrial classification; two, the identification and measurement

of the information economy; and, three, the regular collection of data for deregulated industries.

The second major need is for comprehensive and integrated individual and household micro data sets to help us understand the causes and effect of the stagnation in our standard of living and how the burden it creates is being distributed among various population groups.

Third, we need improved measurement of the state and growth of small businesses, particularly those that are home based, and the collection of more demographic information about the entrepreneurs who establish them. The small business statistics program of the SBA should be supported to a greater extent, both per se, and by programs in other statistical agencies which can, for example, array by business size more of the data that are collected.

Fourth, there is a need through coordination with other countries or by our own effort to put industry sector data for our trading partners on a comparable basis with our own, so that studies of industry productivity and cost differentials and of competitiveness with our trading partners can be undertaken.

It is important, I think, for Congress to seize upon the administration's interest in improving statistics to make certain that the various possible directions for new work are fully considered, priorities and timetables are set, and adequate funding is provided. But there is reason to be encouraged. Statistics about the U.S. economy are essentially a public good. They make an important contribution to infrastructure. Such goods and indeed much of the infrastructure, our infrastructure, has been permitted to deteriorate. In the case of statistics, that deterioration has caused the depletion of our ranks of senior economic statisticians and limited the Government's access to promising younger statisticians. The efforts of both are so important to the attainment of a useful and accurate set of statistics, one that is responsive to the Nation's needs to know where it is, and to decide where it wants to go. The undertaking of new statistical initiatives also will have a positive effect that should not be ignored, on the ability of the Federal Government to recruit high quality staff for statistical agencies.

In short, this is a good time to commit to rebuilding the Nation's stock of statistics and of statisticians.

Thank you.

[The prepared statement of Mr. Popkin follows.]

PREPARED STATEMENT OF JOEL POPKIN

Mr. Chairman, members of the Committee, thank you for inviting me to discuss our needs for economic statistics. For more than 25 years I have worked both as a producer and as a user of economic statistics. I am now president of Joel Popkin and Company, a private sector economic consulting firm specializing in the measurement, analysis and forecasting of wages and prices. I came to Washington in 1963 to work on the development of wealth accounts, statements of assets and liabilities, tangible and financial, that could be integrated with the widely used National Income and Product Accounts (NIPA's). When that project was complete I joined the staff of the Bureau of Economic Analysis (BEA) where I helped build econometric models that would forecast and simulate GNP. Then I moved to the Bureau of Labor Statistics (BLS) where I became responsible for the compilation of the Consumer (CPI) and Producer (PPI) Price Indexes, and the collection of household data on consumer expenditures. At the Council of Economic Advisers (CEA), I participated in a working group on statistics like the one CEA Chairman Boskin reported on in his latest annual report and in his testimony earlier this month before your Committee. Later, as director of the now defunct Washington office of the National Bureau of Economic Research (NBER), I advised the Council on Wage and Price Stability, the Census Bureau and the BLS on statistical policy and measurement issues. In 1978 I established Joel Popkin and Company. We conduct statistical measurement and measurement research for our clients, which include Fortune 100 companies, labor unions, the U.S. and foreign governments and international organizations. I continue to serve on committees that monitor and advise on matters related to the Federal Statistical System and to participate in conferences about measurement of economic magnitudes.

You have asked me for my assessment of the current state of the Federal statistical system and the proposals of the President's working group on improving economic statistics. This is not the first set of hearings the Joint Economic Committee (JEC) has held on statistical issues. Indeed, throughout its history the JEC has been the one institution of government reliably concerned with how the Nation's economic history is being chronicled. The Committee has been an interested ear to which social scientists can turn when they have ideas and/or concerns about Federal statistics, and the JEC has been a force in generating and promulgating its views about statistical needs and how they are being met.

Your hearings come at a time when the Executive Branch of government has revisited statistical needs and developed a set of priorities for economic statistics; such attention is welcome, if overdue. It is welcome because of the focus it brings to statistical needs. It is also welcome because it could be a harbinger of the revival of an organizational apparatus like the one we used to have, one that actively set statistical priorities, worked to secure funding, for those that were deemed necessary, and oversaw the progress in achieving the goals that were set. I am of course referring to the potential for reemergence of a strongly committed and properly staffed Office of Statistical Policy in OMB. After twenty-five years as a participant in the production and use of Federal statistics, I still cannot convince myself that a centralized statistical system is necessary. But I miss, and I think others do as well, the program direction and coordination provided by the Office of Statistical Policy in the 1960's when I came to Washington. Its staffing and influence has ebbed significantly since then. The reestablishment of such a unit -- modest in size, but comprising again first rate statistical and subject matter specialists, would indeed be a welcome occasion for the statistical community.

So much for my comments on the organization of Federal Statistics. Let me turn now to the substantive needs I perceive for economic statistics. They fall into four categories:

- I. Improved measurement in the nongoods producing economic sectors, which continue to generate more employment growth than the goods-producing sectors.
- II. More comprehensive and better integrated household demographic data to permit closer monitoring of the standard of living of the American worker, family household and consumer unit.
- III. Better measurement of the state and growth of small businesses, particularly those that are home-based, and collection of more demographic information about the entrepreneurs who establish them.
- IV. Better concordances of U.S. industry data with those of other countries to facilitate comparisons of production costs and competitiveness in detail by industry and of living standards of employees.

I will discuss these four areas in the order they were just mentioned.

I. It is no recent revelation that we need better measurement in the nongoods sector. I recognized that need in a paper published over fifteen years ago in the National Association of Business Economists journal (Business Economics, May 1973) and others did as well. I refer to the sector as the nongoods-producing sector because the term service sector is too broad to be useful. What is all too commonly called the service sector is a number of very different industries that need to be analyzed differently. The urgent need for data in this large, heterogeneous area, a need recognized by the President's working group, prompts three recommendations:

A. The U.S. Standard Industrial Classification (SIC) badly needs revision in which these industries are more properly placed in a new hierarchical structure. This requires (1) the development of a conceptual basis for the SIC, something it continues to lack, (2) the identification of the units of observation from which data will be collected -- the present use of the establishment as the unit of observation is creating problems, (3) the development of a classification structure for cells, and (4) road maps by which such cells can be aggregated in different ways to serve different end uses.

B. Certainly in nongoods and even in goods-producing industries, little can now be said about the role of information production and its use. This is partly a classification problem. An example will highlight the present confusion. Newspapers, magazines and books are considered goods and are classified in the manufacturing sector. Radio and TV are classified in the communications sector (in many other countries they are classified in the entertainment industry). In contrast, publicly accessible data bases are included in business services. All of these industries provide information and/or entertainment. The production of information -- data and analysis -- is a growing source of output and jobs. It is also an important category of inputs to production. The identification of these activities, despite their ubiquitous nature, is essential. But even if identified, statistical agencies must give more attention to defining and measuring information inputs and outputs and the prices associated with each. The measurement of the information economy should have been a prominent priority on the list of the President's working group.

C. Finally, some nongoods producing industries -- telecommunications, transportation and financial institutions -- have been partly deregulated. This has substantially reduced the amount of data on these industries that are made available as a by-product of the collection of administrative information by regulating government agencies. This data gap needs to be filled. The Census Bureau appears to be addressing this requirement.

II. The second general area of data needs is that of demographic data. The U.S. standard of living has changed little over the past fifteen or so years. The impact of that stagnation seems to have been spread unevenly among households, resulting in real wage declines particularly for those headed by younger adults. The President's working group has proposed improvements in household statistics and even provided funding in the 1991 budget to restore the reduction in the size of the important household Survey of Income and Program Participation (SIPP). We need an integrated set of household data on income by source including income in-kind, consumption, assets, liabilities, net worth, taxes paid by type, etc., by demographic characteristics of households and of employed household workers.

III. The number of full and part-time small businesses and persons engaged in such businesses have been growing faster than the number and employment of large businesses. The growth of small businesses is intertwined with that of the nongoods producing sector. There are several possible reasons for this growth. One is that with the exponential growth of the world-wide body of knowledge and information, small businesses have advantages in its provision and analysis.

Another reason is that the likelihood of making a career of working for one employer has diminished. This is perceived by new labor force entrants as a rise in the risk of working for a large company relative to that of starting one's own business. A third reason is the advance in telecommunications. A home-based business can service the nation if not the world with an 800 telephone number and a fax machine and there are other reasons as well.

But, as the President's working group notes, it is more difficult and costly to collect data from small businesses than from large ones. It is difficult to keep the universe of small businesses up to date and relatively larger samples are required to measure small business activity. Yet the need for information is substantial, as is manifest in the demand for data from the files developed by the Small Business Administration. These files contain combined data on employment and company size in substantial detail by industry and geographical area, the only source of such data available to the public on a frequent basis. SBA's accomplishments in this area, which are not specifically noted by the President's Working Group, need reinforcement from the Administration and Congress.

IV. The need for data on the flow of goods and services and of financial transactions between the U.S. and other countries has been given ample attention in the President's working group report. But the report did not mention the need to have ready access to data for sectors of foreign economies that can be directly compared, industry by industry, with those of the U.S. Concordances have been developed for some sectors for some countries. (Joel Popkin and Company prepared one for the Commerce Department.) With such concordances it is possible to rearrange data to compare productivity growth and levels in some industries in the U.S. with those of our major trading partners. More work in accomplishing this kind of analysis is needed, including the extension of the collection of relative international price level data, such as those used to make purchasing power parity comparisons among countries, to permit the calculation of industry comparisons of costs and profits among countries.

My review of economic data needs certainly lends support to the need for information in the areas identified by the President's working group. But it goes further to point up gaps or urge more effort in four areas:

1. Identification and measurement of the "information economy."
2. Comprehensive and integrated individual and household micro data sets to help us understand the stagnation in our standard of living and how the burden it creates is being distributed.
3. The small business statistics program of the SBA should be supported to a greater extent, both per se and by programs in other statistical agencies which can, for example, array more of their data by business size.

4. There is a need, through coordination with other countries or by our own effort, to put industry sector data for our trading partners on a basis comparable with our own, so studies of industry productivity and cost differentials and of competitiveness can be undertaken.

It is important for Congress to seize upon the Administration's interest in improving statistics to make certain that the various possible directions for new work are fully considered, priorities and timetables are set and adequate funding is provided. But there is reason to be encouraged. Statistics about the U.S. economy are essentially a public good that make an important contribution to infrastructure. Such goods, and indeed much of the infrastructure, has been permitted to deteriorate. In the case of statistics, that deterioration has caused the depletion of our ranks of senior economic statisticians and limited access to promising younger statisticians the efforts of both are so important to the attainment of a useful and accurate set of statistics that is responsive to the Nation's need to know where it is and to decide where it wants to go. The undertaking of new statistical initiatives has a positive effect that should not be ignored on the recruitment of high quality staff for statistical agencies. In short, this is a good time to commit to rebuilding the Nation's stock of statistics and of statisticians.

Representative HAMILTON. Thank you very much, Mr. Popkin. Mr. Smith, please proceed.

STATEMENT OF JAMES F. SMITH, PROFESSOR OF FINANCE, UNIVERSITY OF NORTH CAROLINA BUSINESS SCHOOL, AND PRESIDENT, NATIONAL ASSOCIATION OF BUSINESS ECONOMISTS

Mr. SMITH. Good morning, Chairman Hamilton and Vice Chairman Sarbanes. It's a great pleasure for me to be here this morning. Unlike Mr. Popkin, this is my first appearance before the Joint Economic Committee, although I did have the great privilege of attending the 40th anniversary of the act creating this committee, and thoroughly enjoyed all those seminars and associated functions.

It is a real feeling of déjà vu for me to be here this morning. On March 16, 1982, nearly 8 years ago, it was my privilege to appear before a subcommittee of the House Committee on Post Office and Civil Service to discuss this same topic. And, as in my prepared remarks, I commend that hearing record to you for a number of interesting items that are directly relevant to what we're talking about today.

The primary reason why you've invited me this morning is not in my role as a professor at the University of North Carolina, but rather as the first academic ever to be president of the National Association of Business Economists. We have some 3,750 members, not only all across the United States, but indeed a number around the world. And almost all of those members are vitally concerned with the quality, timeliness, and reliability of the entire range of statistics produced by the Federal Government, GNP statistics, inflation statistics, Department of Energy statistics, mining from Interior, and so forth. We have members in almost every business you can think of.

Most of them are in private companies. Most of them are making judgments or advising top management on decisions on when and whether and where they should expand, whether to build new retail stores or new distribution facilities, whether they should hire more people or lay people off, sell bonds or issue equity. Almost all of these decisions are based on the currently available Federal statistics, and therefore, the price of bad statistics is not from most of our members' point of view, just bad policy made in Washington, but bad business decisions which cost them on the bottom line.

The NABE board of directors has been strongly interested in this area for some time. We established a formal statistical committee in 1985, which was chaired by Mr. Joseph W. Duncan, vice president and chief statistician of Dun & Bradstreet, formerly head of the Interagency Committee on Federal Statistical Policy, both within OMB and also at the Department of Commerce. This committee meets three or four times every year, discusses these issues, and keeps our members advised. The current chairman of that committee of NABE is Mr. Martin Fleming, vice president for planning at Cahners Publishing, and a member of our board of directors, and sitting right behind me this morning, making sure that we have everything right on the statistics area.

A copy of our report is included for the published record.

We are cognizant of the work that the American Economic Association has done in this area, and we also maintain regular communications with all three members of the President's Council of Economic Advisers and are aware of what the President's working group, chaired by Mike Boskin, is doing. And we strongly applaud and support the high level attention being paid to these important issues. We have also been involved with and maintain communications with the people in the Office of Technology Assessment who prepared the recent September 1989 study, "Statistical Needs for a Changing Economy."

We started out working with our members to improve the data they provide, because we discovered that a lot of people complained about the quality of statistics and when someone like Joel Popkin or Janet Norwood, or Alan Young at BEA said: "Well, what do you do with the questionnaires that come from Census or BLS or the Department of the Interior?" People said: "Gee, I don't know." Well, we said: "You should go find out who fills those out in your company." And we worked to both make those more accurate, get them back promptly and indeed to have top management understand, if you want to use this to analyze where our company stands in relation to others, it won't work if we don't send our data in.

It was NABE members primarily from IBM who worked closely with the Bureau of Economic Analysis to make the rather important improvements in what have computers actually cost over the last 25 years, which as pointed out by Mr. Boskin in his testimony a week or so ago before the committee, added one-tenth of 1 percent to the real GNP growth rate over the last 20 years, which amounts to several hundred billion dollars of output we didn't know that we had. Probably based on Mr. Levitan's comments, we didn't know we had all the workers producing that output as well.

A few years back, some colleagues of mine at Union Carbide Corp. were talking with some former colleagues of Joel Popkin's from both BLS and BEA who were bemoaning the fact that the agencies did not have adequate computer facilities to produce the U.S. input-output tables and we volunteered to let them do that work at Union Carbide at only our internal cost and with an agreement that obviously we would not have any access to any data before it was available to the public. The IO tables came out 3 years before they otherwise would have, and I would submit, at far less cost than would have been the case otherwise.

My MBA students, who number about 200 every spring, and another 75 in the fall in a different program, get a firsthand look at the importance of government statistics and their quality. A major project that they do is to pick a company or organization of their choice, build simple single equation models to forecast its sales or gross revenues if it's a financial institution, and its earnings, mostly using data from the BEA that are on the Business Conditions Digest diskettes, and we certainly hope that the diskettes keep being around, even though the digest is now defunct.

When they complete this exercise, they learn, most of them for the first time, how important the quality of statistics is to determining whether or not firms make money. And lest you think this is purely an academic exercise, so far a full 9.5 percent of last year's class have received jobs in the private sector doing this sort

of work. So there is a market for people able to analyze government statistics and apply them to business.

Two additional issues that I think are very important and where any contributions you can make would be most valuable: The first is that, as you well know, there is no system for agencies to collect user fees as one way of offsetting some of the costs of collecting and disseminating statistics. If they put out a facsimile subscription, or better, a set of diskettes, or a fancier publication, there's no way for the agency to recoup those costs. The money simply goes into the Treasury's general fund and not back to the agency. There is an exception I'm aware of for custom work that the Census Bureau does. A good example of how valuable that can be is the recent effort by the National Association of Shopping Center Developers, I believe is the name, who are paying several hundred thousand dollars a year to the Census Bureau to publish and make available to the public, more data on retail sales on a regional basis than we currently get. Probably that would be a useful way to go.

Another problem I would strongly urge you to look into is the unintended consequences of the Paperwork Reduction Act. As you know, agencies get a quota from OMB as to how much paperwork they're supposed to reduce, and a good way to meet your quota is to get rid of one line on a form or even a form that goes to thousands of businesses or individuals. We have documented cases, at least three that I'm aware of, of business firms who have been told—and banks—that a particular Federal statistical series is being eliminated due to the Paperwork Reduction Act, and in one case, 100 percent of the firms in the sample signed a petition requesting that this paperwork not be dropped, and once it has been done, as you all well know, it really does take an act of Congress to get the data collection restored.

President Bush recently quoted Abraham Lincoln as having once said, "If we could just know where we are and whither we are tending, we could better judge what to do and how to do it." The need for high quality Federal statistics that are available as quickly as possible is even greater today than it was in President Lincoln's time. We cannot expect policy to move in the right direction or businesses to plan adequately for the future if we don't have a good idea of what has happened in the past, especially the recent past.

Now is the time to act to save our statistical system, to improve it, to make it an attractive place for new young statisticians to come work, and to measure the growing interdependence of the United States with other countries. We have staved off disaster for 8 years while these budgets have been cut and cut, and while we've also enjoyed the second longest economic expansion in the history of the United States. But now is definitely the time to allocate a few more of our vital resources to this critically important area.

It has been an honor for me to have this opportunity to share my thoughts and those of the NABE statistics committee with you, this morning, and I'll be pleased, as everyone else, I assume, to attempt to answer any questions about anything we talked on.

[The prepared statement of Mr. Smith, together with an attached report, follows:]

PREPARED STATEMENT OF JAMES F. SMITH

Good morning! Chairman Hamilton, Vice Chairman Sarbanes, and other members of the Committee, it is a great pleasure for me to appear before you today to discuss the condition of the Federal Statistical System and ways to improve it, as requested in your letter of invitation.

My appearance here today truly carries with it a real case of dèjà vu. Almost exactly eight years ago, on March 16, 1982, it was my privilege to appear before a subcommittee of the House Committee on Post Office and Civil Service to discuss this same topic. The published record of those investigations (Impact of Budget Cuts on Federal Statistical Programs, Serial No. 97-41) contains a great deal of material that is directly relevant to the subject of today's hearings.

The primary reason why you invited me to testify at these hearings is because of my current role as president of the National Association of Business Economists (NABE). The 3,750 members of NABE are nearly all vitally concerned with the quality, timeliness, and reliability of the whole panoply of statistics produced by various agencies of the Federal government. Most of our members work in private business organizations that must make their decisions on such critical issues as when and whether to expand capacity, purchase new equipment, build new retail stores, warehouses or other distribution facilities, source in new parts of the United States or abroad, hire new workers or prepare for layoffs, sell more bonds or issue equity on the basis of government statistics. These areas and the myriad of other decisions that make the difference between whether the firm grows, prospers, and provides new employment opportunities for new entrants into the labor force or declines and perhaps even fails rely heavily on statistics produced by the Federal government. The members of NABE have been extremely interested

in federal statistical issues throughout the 31-year history of the organization.

In 1985, the NABE Board of Directors voted to establish a formal Statistics Committee to enhance the dialogue between our members and the federal agencies that produce the statistics. This committee was originally chaired by Dr. Joseph W. Duncan, vice president and chief statistician of Dun & Bradstreet, who was elected as a Fellow of NABE last year, primarily for his outstanding work on this committee. The committee meets three or four times a year, usually in Washington, D.C., and is currently chaired by Dr. Martin Fleming, vice president for planning at Cahners Publishing and a member of our Board of Directors

In early 1988, the NABE Statistics Committee published a report containing its analyses and recommendations. This report was accepted by the Board of Directors and was distributed to our entire membership with a recommendation that they read it and act on its proposals. A copy of the report is attached to my testimony today for your use and information. You will note that one of the recommendations in the report is for the Joint Economic Committee to conduct hearings on the issues surrounding the need for federal statistics that are accurate, timely, and of the highest possible quality.

The NABE Statistics Committee maintained active communications with the members of the American Economic Association Committee on Statistics throughout their work on the report on these issues. We also are cognizant of the work of the President's working group on statistics, which is chaired by the Honorable Michael J. Boskin. We applaud the high level attention being paid to these important issues and are eager to see the suggested improvements

take place over the next five years, beginning with enhanced budgets for the statistical agencies in fiscal year 1991.

The NABE Statistics Committee has also developed contacts with the authors of the September, 1989, study by the Office of Technology Assessment, Statistical Needs for a Changing Economy. We have had discussions at committee meetings about the findings of this report.

One aspect of the NABE Statistics Committee report that we have repeatedly stressed to our members is the importance of their getting involved in their own organizations in making sure that requests for statistical information from federal agencies are responded to in a timely fashion and that the top managers in their organizations are aware of the need for such cooperation. Indeed, many of our members have made efforts far beyond this to improve federal statistics.

It was NABE members from IBM and elsewhere who worked closely with the Bureau of Economic Analysis to develop the new price data for computers that has improved the quality of the data on producers' durable equipment, the overall GNP deflator, and thus the total GNP figures. In earlier years, it was NABE members at Union Carbide Corporation who volunteered computer time to the federal agencies that had inadequate computer facilities available to produce input-output tables for the U.S. economy. Union Carbide only charged the government at its internal computer costs and did not ask for any access to the data before they were made available to the public. The result was that these data, which are critical to any analysis of potential bottlenecks in the economy, were made available two or three years before they would have been otherwise.

My MBA students at the University of North Carolina get a first hand introduction to the importance of government statistics for business firms. They are required to build single equation models to forecast one year ahead the sales (or gross revenues) and earnings for a company of their choice using mostly data from the Bureau of Economic Analysis that are on the Business Conditions Digest diskettes. We certainly hope that these diskettes continue to be available, despite the demise of the Digest itself. In this exercise, the students learn the sensitivity of business firms to the state of the external economic environment and thus the importance of having accurate and timely economic statistics.

There are two additional issues relating to economic statistics that it would be very helpful for the Congress to investigate. The first of these relates to the use of user fees to offset some of the costs of collecting and disseminating federal statistics. Under current law, there is no incentive for a federal statistical agency to investigate the market demand for any of its data. This is because no matter how much money comes in for subscriptions to publications, for diskettes or for other services that are generally available, the money just goes into the Treasury's general fund and does not go to the particular department. The Census Bureau is allowed to recoup actual costs for custom computer runs of its data, but that is one of the few exceptions.

It is quite likely that the Bureau of Economic Analysis would not have had to eliminate the Business Conditions Digest if it were able to charge a subscription price that would cover the full cost of producing the publication. Similarly, a facsimile subscription to a variety of government statistics could probably be sold at a premium rate to many of our members to

produce some much needed revenues for the statistical agencies. However, under current law there is no incentive to test such a system.

Another issue relates to the unintended consequences of the Paperwork Reduction Act. Many surveys have shown that the paperwork that individuals and businesses object to most relates to taxes. However, the reductions that agencies actually undertake all too frequently relate to some aspect of statistics. If you can eliminate a form or even a line or two on a form that goes to millions of individuals or business firms, you can get many credits from the Office of Management and Budget for meeting or exceeding your targeted reduction in paperwork. However, most of the firms that fill out statistical forms also use the information for market research, competitive analysis, strategic planning or some other important purpose.

Several of our members have documented cases in which the firms affected by the elimination of paperwork that also got rid of important statistical information have actually petitioned the agency involved to keep collecting the information. Unfortunately, as you well know, once paperwork has been eliminated, it usually does really take an act of Congress to get it restored, no matter how much the people who provide the information want it. This situation really should be changed.

President Bush recently quoted Abraham Lincoln as having once said, "If we could just know where we are and whither we are tending, we could better judge what to do and how to do it."

The need for high quality federal statistics that are available as rapidly as possible is even greater today than it was in President Lincoln's time. We cannot expect policy to move in the right direction or businesses to plan adequately for the future if we don't have a good idea of what has

happened in the past, especially the recent past. The time to act to save our statistical system and improve it to capture the growth of services and the growing interdependence of the United States with other countries is now. We have staved off disaster in the statistical agencies for eight years, while we have enjoyed the second longest economic expansion in the history of the United States, but we need to allocate more resources to this vitally important area as soon as possible.

It has been an honor for me to have this opportunity to share my thoughts and the NABE Statistics Committee report with you. I would be pleased to answer any questions you may have about my testimony.

EXECUTIVE SUMMARY

REPORT OF THE STATISTICS COMMITTEE OF THE NATIONAL ASSOCIATION OF BUSINESS ECONOMISTS

Executive Summary

During the past three years the Statistics Committee of the National Association of Business Economists has been reviewing the current state of economic statistics generated by federal statistical agencies. In this report to the membership of the Association, the Committee endorses a number of priorities established by the Working Group on the Quality of Economic Statistics which was appointed by the Cabinet Council on Economic Policy. The attention of this high-level group underscores the importance of improving the basic economic statistics which serve as the foundation for policy making in both the public and the private sectors of the U.S. economy.

In a special review of the budgets of the four key statistical agencies that are responsible for general use economic statistics, the Committee concludes that as a nation we are not investing adequately in the information base that is necessary for understanding current and long-term developments in the national economy, and for formulating effective policy to deal with emerging problems and concerns. The Committee concluded that the

basic resources available for key economic statistics have been static in real terms since 1976, a period which spans budgets submitted by the last three Presidents of the United States.

The Statistics Committee developed recommendations focused on two groups—decision makers in Washington and the membership of the National Association of Business Economists. The recommendations to both groups cover three general areas (which are described in more detail in the full report). They are:

1. **Resources:** The need for increased resources for the federal statistical agencies.
2. **Concepts:** The need for conceptual refinement and improvement.
3. **Social Cooperation:** The need for improved social responsibility in providing data to the federal statistical agencies.

GENERAL RECOMMENDATIONS

The general problems of the federal statistical system must be addressed by the agencies and their host departments, by the Congress, and by other thought leaders in our society.

Resources:

The federal budget is in serious disequilibrium. The deficit itself is a major economic problem. However, the budget needs of the statistical agencies are trivial relative to the overall deficit problem. The following actions are needed:

1. The Office of Management and Budget should provide leadership in addressing the statistical needs that have been identified. The need for adequate national statistics is not a narrow interest of statisticians or business economists, it is a need which serves the broad general concerns of public decision making. OMB should start with a call to the statistical agencies for a realistic assessment of current and future resource needs, including staffing.
2. The Congress should assist in the process by outlining areas of deficiency as they are identified in hearings, and as current problems are defined by existing committees.

3. The statistical agencies should set forth proposals for correcting current deficiencies and for undertaking research and testing on data collection efforts that will overcome the more challenging problems.

Concepts:

The lack of academic, business, and governmental attention to methodological problems in the national income accounts and in the definition and collection of key economic indicators is a serious intellectual shortcoming. As a start, we recommend:

1. The National Science Foundation should establish a program for funding research on basic economic indicators.
2. The major statistical agencies should set up internal research units with the assignment of identifying major problem areas that merit both internal and external research. Their findings should assist the National Science Foundation in setting up its program; but the NSF program should also be equally driven by external suggestions and proposals.

Social Cooperation:

Perhaps the most difficult area to address is the current social attitude that government asks too many questions and that it is not necessary to provide accurate or carefully considered information in response to government inquiries. Our recommendations are:

1. The Joint Economic Committee and others should establish programs of hearings, investigations, and reports to publicize the needs for and benefits of accurate economic indicators.
2. The general news media should be encouraged to inform viewers and readers about the civic responsibility associated with providing accurate statistical information to the government. For example, the release of data products from the 1987 censuses of the U.S. economy and the occasion of the 1990 Decennial Census offer outstanding opportunities to bring public attention to the role of citizens and business in providing the basic raw materials for statistical measures of economic and social well-being.

**SPECIFIC RECOMMENDATIONS TO
MEMBERS OF THE ASSOCIATION:**

The National Association of Business Economists has a clear interest in the subject of the quality of economic indicators. Most of the members of the Association have jobs that require analysis and interpretation of economic indicators. Clear understanding of the concepts behind the indicators and of the limitations of the data are critical professional skills. Therefore the Committee makes the following recommendations to the Association:

Resources:

While the Association does not have any specific responsibility in the area of resources for the federal statistical agencies, it can make a contribution:

1. The Association should disseminate this report to the full membership so that a growing base of professional economists can address the points raised in this report.
2. The Association should distribute this report to Executive Branch leaders, the Congress, and the media with an endorsement from the NABE Board to underscore the importance of actions to address the problems which have been identified.

Concepts:

NABE members are important users of government statistics. Their experience can be helpful in addressing the methodological issues that have been raised:

1. The Statistics Committee should be a standing committee of the Association. It should serve as a forum for identifying deficiencies in key economic indicators and for suggesting areas of improvement.
2. Members of the Association should work with the statistical agencies in order to find ways to improve basic economic statistics. Industry representatives may group together to provide better data on key items such as prices, quality, productivity, etc.

3. *Business Economics* should continue to seek articles on the quality and character of economic statistics as part of an Association program to keep the membership informed about these issues.

Social Cooperation:

Members of the National Association of Business Economists have the opportunity to play a key role in improving the quality of the nation's economic statistics. They can work to improve the data flowing from key U.S. corporations to the federal statistical agencies.

We recommend that:

1. Members of the Association should work inside their companies to make certain that accurate statistical reports are submitted to the federal statistical agencies. They should encourage complete reporting, review the data to make sure that correct economic interpretations have been made, and assist management in reviewing results so that they will appreciate the importance of supplying accurate data.
2. As representatives of the profession, members should take every opportunity to inform fellow citizens and business leaders about the importance of providing accurate data in governmental statistical inquiries.

The problems discussed in this report are important. The solutions are difficult and will require a long time. The price of failure to move forward will be great, especially if the result is bad policy and poor decisions caused by inadequate statistics.

REPORT OF THE STATISTICS COMMITTEE OF THE NATIONAL ASSOCIATION OF BUSINESS ECONOMISTS

Prepared by The Statistics Committee
for the Board of Directors, NABE
February 1988

Introduction

The Statistics Committee of the National Association of Business Economists was initiated in July 1985. During the past three years the committee has held a number of meetings with key representatives of the federal statistical agencies and with other experts who are knowledgeable about U.S. federal statistics. The committee was created to evaluate the current state of federal statistics and to develop suggestions for improving the quality of statistical indicators used by federal policy makers and by business decision makers. The committee focused on general economic indicators, but it also reviewed other critical statistical programs such as the decennial census which is used as a benchmark for many measures of economic well being.

At the request of the Board of Directors of the Association, the committee has prepared this overall report. While the membership of the committee has changed since the first meeting, all participants in the committee were given an opportunity to review the final draft and to provide comments of elaboration or dissent.

NABE members who have participated in the process are listed in Appendix B. Members who responded to the distribution of the final draft are noted with an asterisk.

A major objective of this report is to deal with two issues:

1. What has happened to the level of resources available to the major federal statistical agencies during the past twelve years?
2. In the face of available resources, what problems currently exist and what actions are underway to address these problems?

This report is directed to the membership of the National Association of Business Economists since many of our nation's economic statistics are based upon data provided to the government by business enterprises. The committee believes that business economists can make an important contribution to the accuracy of national statistical indicators by providing assistance and encouragement to the officials in their companies who provide the raw data to the federal statistical agencies. Further, if business leaders recognize the importance of accurate economic statistics, it is hoped that additional social and political pressure will be focused on both the executive and legislative branches of government to assure that needed improvements are implemented.

As a first step in the process of bringing business attention to these problems, the Statistics Committee submits this report to the Board of Directors of the Association and recommends:

That the Board of Directors review and comment on the report, and that the report be published and distributed to the full membership of the Association.

At its meeting on February 10, 1988, the committee formally approved and submitted this report (with comments from committee members) to the Board of Directors of the National Association of Business Economists.

Growing Public Interest in Federal Statistics

There has been a wide range of public criticism about statistics that concern the economy. For example, at the time this report was being edited for its final review by the Committee, *The New York Times* of Sunday, January 17 printed two items about statistics. The first appeared on the editorial page (page 26):

The foreign trade deficit may have shrunk by more than \$4 billion in November, as the Commerce Department reported, but statisticians know that raw monthly totals can be off by as much as \$2 billion. They will eventually refine the figures. For overall world trade statistics, however, a much larger error defies refinement.

Washington's monthly reports cover trade in goods, but exclude international travel, dividends and interest, foreign aid and other payments. The Government periodically combines the trade figures with these other transactions to compute the "current account." It's this figure that's out of whack worldwide.

The global numbers balanced until the mid-1970's. By 1982, however, adding up all countries' inflows and outflows showed a round \$100 billion more flowing out than in, enough to blur the facts on which governments base policy. What accounted for this "Black Hole"?

Investigators from the International Monetary Fund found most of the leakage in services and other money transfers, especially dividend and interest payments. Also, official funds, like foreign aid, showed bigger donations than recipients acknowledged. An obvious possibility is that at least some of the money disappears into the pockets of people who conceal it from fiscal authorities.

The I.M.F. collects statistics, not taxes, and it says that the hole had shrunk to \$65 billion by 1986. Need there be another inquiry to explain why it got smaller? Or just another reminder: Spongy facts yield spongy policy.

The second *New York Times* article is a somewhat lighthearted attack entitled "Are They Statistics or Guesswork?" by F. W. Goodrich, Jr.—a "Connecticut Opinion" article (page 28). Among other comments, Goodrich noted: "Think how difficult it must be to gather the figures necessary to compile the sum total of the value of all the goods and services produced by the whole country during a given period of time. Getting all that information from all the companies and individuals in the country who make something to sell must be a tremendous undertaking. Especially when you consider people like my Uncle Seth, who whittles small animals and sells them to neighbors."

A more extensive review of issues related to the quality of federal statistics appeared in *Business Month* in December, 1987 in an article entitled, "The Indicators Don't Indicate Very Much." A copy of the text is attached to this report. However, to set the stage for this report, the following comment indicates the concerns which were expressed by the *Business Month* writer, Edward M. Mervosh. He states:

As corporate America makes its spending plans for 1988, it is keeping a watchful eye on the economic indicators coming out of Washington. For all the attention they get, however, many of those indicators are misleading. They do not reflect the revolutionary economic changes of recent years: the growing importance of international trade and finance, the shift from manufacturing to services, the shift within the manufacturing sector from smokestack industries to high technology. "All of the key economic indicators are getting less reliable at a critical time," says Delos Smith, a senior economist at The Conference Board.

These criticisms are not isolated stories. An illustrative listing of similar articles appears in Appendix C.

A Special Look at Expenditures for Statistics

Each year the Statistical Policy Office in the Office of Management and Budget prepares a "Special Report on the Statistical Programs and Activities of the U.S. Government." The latest published report was for fiscal year 1987. The report for 1988, normally available following the release of the President's budget, was not yet available in early April of 1988. The tables provided in the latest available OMB report (see Appendix D) show that the estimated 1987 Budget, on a constant dollar index basis with 1982 as 100, provided for real increases for many statistical agency budgets, yielding the total index of 140.4 for 1987 programs.

As a result of discussions with key agencies responsible for major economic statistics, the NABE Statistics Committee concluded that the diversity of programs labeled as statistical programs made it difficult to evaluate the actual trends occurring in those key programs related to the most widely used and fundamental economic statistics. Thus, in cooperation with the agencies, a **Constant Program Approach** (a set of selected programs was evaluated over time to eliminate other budget changes that would be attributed to new programs) was initiated earlier to examine the budgets of statistical programs that generate the major economic statistics used by the private and public sector in the analysis of the state of the national economy. This analysis included statistical programs for four agencies:

1. The Bureau of Economic Analysis which is responsible for the National Income Accounts;
2. The Bureau of Labor Statistics which produces many key series such as the basic price indices;
3. The Internal Revenue Service which provides key administrative records statistics for the national accounts; and
4. The economic statistics programs within the Bureau of the Census.

In using the **Constant Program Approach** an effort was made to isolate the major economic statistics programs and to adjust the budgets to exclude transfers of programs from one agency to another that do not change the availability of statistics, and new programs that are highly specialized and likely to be temporary

and thus are not part of the mainline economic monitoring system. The budget impact of program transfers and specialized temporary programs obscures the basic trends which are occurring in the funding of the major ongoing economic statistics programs. Budget numbers were developed for the period 1976 through 1988, providing more than a decade of historical information.

An index of real spending for federal economic statistics is presented in Table 1 and also in Chart 1 on the following page. The index number indicates real budget changes from 1976 to the present year for the major programs associated with major economic statistics for each of the agencies covered. (A comparison is made with the total agency budgets reported by the Office of Management and Budget -- see Appendix D.) The OMB index is based upon the total set of programs and activities of the agencies. The constant program index calculated by the NABE Statistics Committee shows that the constant dollar budget for the programs that generate the major economic indicators has

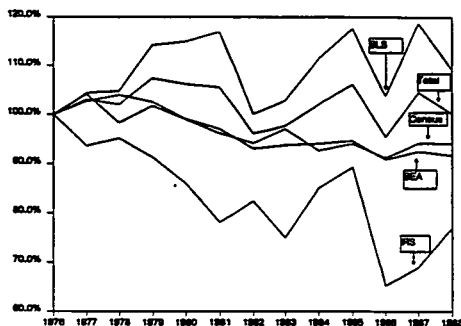
TABLE 1

Real Spending for Federal Economic Statistics- NABE Estimate
(1976 = 100)

	<u>Census</u>	<u>BLS</u>	<u>BEA</u>	<u>IRS</u>	<u>Total</u>
1976	100.0	100.0	100.0	100.0	100.0
1977	104.2	104.4	102.7	93.6	103.1
1978	98.3	104.8	104.0	95.2	102.1
1979	101.8	114.3	102.6	91.4	107.5
1980	99.1	115.0	99.2	86.1	106.3
1981	96.2	116.9	97.1	78.1	105.6
1982	94.2	100.1	93.1	82.4	96.1
1983	97.1	102.9	93.8	74.9	97.7
1984	92.7	111.4	94.1	85.0	102.1
1985	94.1	117.6	94.6	89.3	106.2
1986	91.2	103.8	90.9	65.2	95.4
1987	94.2	118.7	92.5	69.0	104.6
1988	94.1	109.1	91.7	77.0	100.2

Chart 1

Trends in Budgets for 1988 Economic Statistics



declined in all agencies except the Bureau of Labor Statistics, with the statistical program of the Internal Revenue Service being most severely reduced.

On an overall basis, OMB estimated that constant dollar expenditure levels for the four statistical agencies had increased by 40.4% between 1978 and 1987—a sharp contrast with the constant program estimate that these budgets increased less than 4.6%, and the NABE estimate that for 1988 the budgets will be back to 1976 levels.

It is clearly difficult to undertake a long-term analysis of federal agency budgets because there are continuing productivity improvements associated with the introduction of new technology, redefinitions of samples, and expansions or reductions in the coverage of the questions asked in individual statistical surveys. There are also important questions concerning what programs contribute directly to major economic statistics. For example, the oil embargo in 1973 drew attention to the lack of information available at that time concerning sources and uses of alternate forms of energy. In fact, the deregulation of the energy industry in recent years has resulted in sharp reductions in the level of expenditure on energy statistics from the peak levels achieved in

response to the oil embargo and the ensuing energy crisis. Many observers could argue that energy statistics remain essential as a critical indicator of the economic health of the U.S. economy. However, the analysis presented here has a more restricted coverage, *focusing only on the programs that generate the most widely used major economic indicators.*

In a similar vein, a major improvement in income statistics undertaken on the social statistics side of the Census Bureau has enormous significance for economic analysis. This new program, the Survey of Income and Program Participation (SIPP), seeks to measure the impact of income-in-kind as well as the role of asset positions on the standard of living of households. This program represents one of the major initiatives undertaken in recent years. Excluding the program, as was done for the present analysis, can be criticized as ignoring a major improvement in statistical programs that potentially affects economic analysis. However, it should be noted that the SIPP is still in a state of experimentation and that it is not used to generate regular economic indicators.

The main intent of the Constant Program Analysis was to take the fundamental statistical program for economic statistics that existed in the mid-1970's and to evaluate how support for that core program has evolved during the past decade including additions and reductions in the basic program content. The period involved includes the budgets submitted by three Presidents (Ford, Carter and Reagan) and thus is intended to reflect an *apolitical perspective.*

It is of concern that there have been essentially no real gains in the resources devoted to basic economic statistics for more than a decade. During this period, the national economy has grown in complexity and size. *Real Gross National Product has increased 39% (from 1976-1988) at the same time that economic statistics programs have remained essentially flat.* It is of particular concern that the amount of research necessary for the introduction of new measurement techniques has been virtually stagnant during this period. Specific innovations in statistical programs introduced during this decade are few in number.

The main new programs started with additional funding over the decade were the expanded coverage of services, multifactor productivity measures, mass layoff and plant closing surveys

(which are not included here as a mainline program), improvements in employment figures derived from employer payrolls and in local area personal income, as well as completion of the international price program. Additional funding also was provided for the periodic major revisions of the Current Population Survey used for the unemployment rate, implementation of new expenditure patterns for the Consumer Price Index, benchmarking the Producer Price Index, and developing a modest revision of the Standard Industrial Classification. It should be noted that when these revisions, such as rebenchmarking the Producer Price Index, are completed, funding is reduced back to pre-revision levels. In other programs, such as expanded coverage of services, the programs introduced a more sophisticated methodology and expanded the program content to be implemented on an ongoing basis.

Key program reductions during the decade included termination of family budget surveys; elimination of the quality of life and income size measures in the national accounts; stopping the development of construction price indexes for nonresidential buildings; dropping data on monthly selected services receipts; termination of the development of job vacancy measures; elimination of statistical labor series on turnover, new hires, and dismissals; reduction in the program devoted to the development of certain local area unemployment rates; elimination of spot market prices; and elimination of the annual oil and gas survey.

In recent years there has been wide recognition of the deterioration in the accuracy of statistics about international trade, particularly resulting from the slowdown in the availability of foreign trade export and import data. A number of steps were undertaken in 1987 to improve upon this difficult situation, but there is still considerable uncertainty about "real" changes in the flow of trade.

Problems with the trade statistics were covered in detail during the 1986 hearings of the Joint Economic Committee. Since those hearings, the carryover (trade reports relating to prior months) has been reduced by more timely data processing at the Customs Service, but the lack of price change information and of seasonal adjustment for the monthly figures still results in difficulties of interpretation of these closely watched statistics.

In addition to the well-known problems with the trade statistics there are a number of other signs of deterioration in key federal statistics. Examples include a slowdown in the availability of residential construction additions and alterations spending, declines in the sample size of the IRS Statistics of Income Program, and in statistics relating to retail and wholesale trade surveys.

There is a common concern that because of the resource constraints, statistical programs have not kept pace with the dynamic changes occurring in the domestic and international economies, and as a result the basic statistical information needed for economic analysis and policymaking is not available or it is not built using concepts which are appropriate to current economic conditions. This appears in several problems that have been building up over the years which adversely affect the quality and relevance of economic data currently and in the long run. These may be broadly divided into two categories: methodological - changes which are especially important for maintaining quality; and content - the changes which are critical to assuring the relevance of key economic indicators.

Methodological Problems (Quality):

Some problem areas under this category are the following:

- Continuing decline in response rates on some surveys (see discussion below);
- Deterioration in the accuracy and timeliness of foreign trade data, in part reflecting cutbacks in Customs Service programs that are the source of the data;
- Less research on known problems such as the underground economy, nonresidential building construction price indexes, and the effects of changing worldwide financial instruments on the balance of payments;
- Lack of up-to-date official reassessments of the Consumer Price Index (last done by the Stigler Committee in 1960), and of the leading and lagging indexes (last done in 1975);

- Lack of a reassessment of the poverty standard (adopted in the early 1960's) to reflect societal agreement on minimum living standards in the late 1980's and the expansion of noncash income maintenance programs over the past 20 years.

These problems are in part related to limited resources. But it is important to note that the decline in response rates to surveys stems from the increasing public resistance to filling out forms, especially those required by the government. This institutional phenomenon seems to be insidious, and because it is at the core of credible information, it needs to be dealt with forthrightly. It is also unfortunate because statistical programs account for a very small portion of the total federal reporting burden on the public (as measured by the Office of Management and Budget). Programs such as income tax reporting are especially burdensome.

The problem of response rates is also affected by differing views of the merits of mandatory vs. voluntary reporting. A recent report by the Office of Management and Budget, which concludes that response is slightly better on voluntary than on mandatory reports, has been challenged by the Census Bureau as being flawed by not accounting for distinctions between simple and complex questionnaires, frequency of the required reporting, infrastructure available to different agencies in collecting information, and whether an agency enforces mandatory reporting by taking legal action against nonrespondents. The OMB perspective is important because of its responsibility to approve federal data collections from the public. These actions should be based on sound analysis of all key features of survey design. If, in fact, mandatory programs are not yielding sound information, there are serious public administration issues to be addressed.

The decline in response rates requires high-level attention of policy officials. It also may be desirable to have an advisory commission develop criteria for when to use mandatory reporting and how best to enforce it.

Content Problems (Relevance):

- Lack of a basic revision to the Standard Industrial Classification (SIC) that reflects the substantial changes in American business resulting from the burgeoning of new industries, technologies, financial arrangements and company reorganizations. Implementing the 1987 SIC revision will provide a net increase of 35 new classifications in the services, wholesale trade and manufacturing industries. However, changes in industrial structure will continue to occur, and it is evident that a more fundamental review is long overdue. A major program should begin immediately in anticipation of the 1992 revision.
- Lack of a government-wide effort to obtain information necessary for analyses of American industrial competitiveness. This would include consistent data for relating foreign investment, foreign trade, domestic production, and domestic and international production costs one to the other.

In response to the Joint Economic Committee's concerns which were noted at the beginning of this study, the Administration asked the Cabinet Council on Economic Policy to establish a Working Group on the Quality of Economic Statistics. This Working Group issued its final report in April 1987. The Statistics Committee asked that the present report provide some comment on the Working Group recommendations. While it is not possible in a limited space to cover fully all of the areas addressed by the Working Group, the following paragraphs highlight several recommendations which relate to the topic of budget resources for major statistical agencies.

These comments are organized along the topics identified in the full report of the Working Group. Thus the discussion should not imply any special order of priority.

Accuracy of Gross National Product Estimates - The Working Group identified several "priority areas for review." They were merchandise trade, domestic and international services, business fixed investment, the underground economy, and price indices that include improved treatment of quality change. The Working Group has requested that these areas be the subject of

detailed review. *From a practical point of view, following the review it will be essential to obtain budgets to implement the recommendations.*

Adequacy of Merchandise Trade Statistics – The Working Group's basic recommendations concerning implementation of the Harmonized Commodity Description and Coding System, measurement and reduction of classification coverage errors in both import and export data, and the increased accessibility and timeliness of domestic production and related data needed for the analysis of trade issues are sound and should receive high priority. As noted in the discussion above, administrative actions have reduced carry-over in monthly import statistics and separate efforts have identified major reasons for underreporting of exports; however, *once again, implementing the Harmonized System and further improvements in monthly data will require additional funding of current programs.*

Adequacy of Statistical Measurement of the Service Sector – The Working Group correctly emphasized two key problem areas: 1) limited detail and coverage, a legacy of the time when this sector was of less importance; and 2) difficulties in measuring the prices and qualities of the products, or even defining what the products are. This is a key area for further research and experimentation. The Working Group calls for private sector help, but it should be noted that little private or public sector original research has been undertaken; hence a key issue is "leadership." The academic community should be funded to initiate the basic conceptual work that is essential as a first step.

Quality of the Business Lists Used in Economic Surveys – It has long been recognized that a common sampling frame for business statistics would improve data comparability and accuracy. The Standard Statistical Establishment List (SSEL) was originally developed to meet this need, but problems with the confidentiality of Census and IRS information has limited interagency use of the SSEL. The Working Group recommended legislative actions to deal with the confidentiality issue, but past experience has demonstrated that there is much opposition to such an approach. *Therefore, a better alternative would be to fund the development of a standard statistical sampling frame that is freely available within the government for statistical uses.* Care must be taken to assure that the government does not compete with

private sector direct mail and other list building activities, but this could be accomplished by restricting the use to direct statistical uses by key government agencies with responsibility for developing economic statistics.

User Fees for Statistical Services – The Working Group takes the position that "a system of user fees for statistical information would capture some of the advantages of a market." Users would have an incentive to evaluate more critically the quality and usefulness of the statistical products they purchase. While there is certainly some validity in this position, as a practical matter it is unreasonable to expect that income generated by selling government data beyond the user fees that currently exist would provide a significant offset to the budgets of statistical agencies. *It is more realistic to recognize that better government information, especially in the area of economic indicators, will provide a major social and economic benefit by contributing to better public and private decision making.*

The effort of the Working Group represents an important step in the direction of bringing high-level attention to the issues associated with federal statistical programs. The Working Group should be encouraged to follow up on the recommendations which have already been made. Further, the Working Group could play a key role in drawing attention to other areas of concern.

Thus the twelve-year pattern of constant resources for key economic statistics has created a situation where much needs to be done to both maintain and improve the quality and the relevance of our nation's basic economic statistics. This analysis of the budget is only one step in the more important task of identifying specific areas of weakness and in defining better concepts and approaches to the measurement of our economic condition.

The Situation Today

Thus, while it is easy to get confused by the myriad program changes and alterations which occur as statistical agencies try to cope with a changing economic system in the face of ever-tightening budget resources, it is clear that there is a long history of failing to initiate new and improved programs that adequately deal with problems such as the increasing globalization of economic interactions and the emergence of smaller firms as key players in the national economic system. The growth of the services sector, which is dominated by small firms, introduces difficult methodological issues as the government seeks to reduce the reporting burden on the public at the same time that it needs information to understand critical economic changes.

While there may be debate concerning the value of some programs that have been reduced in recent years, and while there is certainly some pride in the improvements which have occurred in key areas, the inevitable conclusion, nevertheless, must be that as a nation we are not investing adequately in the information base that is necessary both for understanding our national economy and for formulating effective policy to deal with emerging problems and concerns.

A number of suggestions for improvement in the statistics produced by the federal government have recently been put forth by the Cabinet Council Working Group. On the basis of the Cabinet Council's recommendations the suggestions are to be implemented by September 30, 1988.

**Cabinet Council's Suggested Areas for
Improvement in Economic Statistics**

The NABE Statistics Committee reviewed the findings reported by the Working Group and the committee endorses the recommendations contained in their report. These recommendations are summarized on the next page.

1. Accuracy of the GNP estimates:

- Lack of good information on trade in services and underreporting of merchandise exports affects the foreign transactions components in the national accounts;
- Underestimation of the volume of nonresidential construction in censuses and surveys carries over into the GNP estimates;
- Because of difficulties in measuring quality improvements in services, construction, and various high-tech products, real growth may have been underestimated;
- Elimination of some regulatory agency data collection (i.e., transportation and communications) adversely affects the national accounts.

2. Adequacy of merchandise trade statistics:

- Timing problems—the reporting of imports and exports in a month other than the month the transaction actually took place;
- Underreporting of exports;
- Misclassification of imports and exports (errors in the basic import and export documents);
- Lack of comparability, timeliness, and accessibility of domestic production statistics.

3. Adequacy of current statistical measurement of the services sector:

- Limited service industry detail and coverage;
- Difficulties in measuring the prices and qualities of the products in the service sector;
- Lack of detailed service data in the Standard Industrial Classification (SIC) system;

- The problem of how to measure increased quality differences so that real GNP and productivity are not understated.
4. **Quality of the lists of business establishments that federal statistical agencies use to collect economic data:**
- Coverage problems (i.e., annual and subannual statistics on manufacturing, statistics on nonresidential construction, statistics on the service industries);
 - Removal of barriers to sharing of lists among statistical agencies to assure comparability of SIC coding and the comparability of data series published by different agencies (i.e., to facilitate data exchange, submit legislation to permit the Census Bureau to disclose business identification and classification information to specified statistical agencies);
 - Designate BLS and NASS (National Agricultural Statistical Service) to act as "central collection agencies" for certain nonfarm and farm business lists, respectively.
5. **Development of a system of user fees for statistical services provided by federal agencies:**
- Identify the statistical products that should be covered;
 - Specify how charges should be set;
 - Specify the relationship between federal government *producers* of statistics and government *users* with regard to budget authority and appropriations;
 - Indicate what legislative and administrative changes should be needed.

Conclusions and Recommendations for NABE

The report of the Cabinet Working Group highlights several areas of concern and current action by the federal statistical system in the development of improvements in the basic economic indicators that are used by government and others in understanding the character of the U.S. economy. The fact that such high-level attention was devoted to these problems over 18 months ago is noteworthy. Clearly, important efforts are underway to correct some of the deficiencies which were identified by the Cabinet Working Group. However, the Statistics Committee of the National Association of Business Economists has more pervasive concerns.

First, as this report demonstrates, the resources available to the principal federal statistical agencies have been excessively constrained for nearly one and one-half decades. This situation of tight resources has made it very difficult for the statistical agencies to undertake research into new areas of concern, to attract young and innovative new staff with the enthusiasm for making creative contributions, to retain experienced staff in the face of better opportunities in the private sector and universities (or in many cases as independent consultants), and to undertake program improvements that in earlier periods would have been funded through productivity gains and other internal efficiencies. Basically, most of the core programs have been fighting to hold their own in the face of difficulties with respondents, quality of inputs, and other operational difficulties in an age of resistance to governmental intervention.

Second, there is little evidence of interest or concern in the academic, business, or governmental community about the practical problems of measuring a post-industrial economy driven by global interdependence. The post-industrial economy is characterized by growth in difficult to measure service industries such as health care, education, human services, and other intangible activities where the product is subject to considerable variation and judgment concerning quality and value. Further, recent evidence suggests that many smaller enterprises are engaged in these service functions, and there are many well-known problems associated with collecting accurate information from small firms. Thus, the statistical agencies, operating in an environment that is

rapidly shifting, are faced with unparalleled challenges to devise new data concepts and definitions and to implement clever data collection procedures that will overcome the difficulties associated with intangible service activities at home and difficult measurement problems with offshore production and intra-company transfers across national borders.

Third, there is evidence that the social attitudes associated with deregulation, and a general attempt to reduce the role of government in individual and corporate decisions, have made data collection about economic activities more complex and unreliable. While there is considerable debate about the extent of the "off-the-books" or underground economy, it is clear that cash transactions, barter arrangements, and unreported income are important features of economic arrangements in the late 1980's. Some large corporations refuse to supply voluntary statistical reports to the government because they do not wish to incur the expense of providing such information and since they distrust the confidentiality provisions that are associated with such data submissions. *These difficulties all contribute to reduced reliability of the basic information that supports the nation's key economic indicators. The statistical agencies have no choice but to seek methods to impute or estimate the areas where direct measurement is unwieldy.*

These three areas of broad concern are controversial. Some observers believe that some of the difficulties have been around for many years. Others feel that present methods recognize these problems and that measurement errors have not increased in recent years. While there is disagreement about the seriousness or the newness of these problems, the Statistics Committee believes that it is important to attack the difficulties with greater vigor in the future. Thus, recommendations are directed to each of the three areas. For simplicity, the three areas discussed above are labeled:

1. **Resources:** The need for increased resources for the federal statistical agencies.
2. **Concepts:** The need for conceptual refinement and improvement.
3. **Social Cooperation:** The need for improved social responsibility in providing data to the federal statistical agencies.

Conclusions and Recommendations

The committee's recommendations cover two areas. First, recommendations are addressed to the general problem of solving the basic needs. Second, specific recommendations are addressed to members of the National Association of Business Economists and to the Association itself.

GENERAL RECOMMENDATIONS

The general problems of the federal statistical system must be addressed by the agencies and their host departments, by the Congress, and by other thought leaders in our society. These problems are important, and they require broadly based efforts to provide the basic economic information that will make it possible for public policy makers and private decision makers to address the economic challenges which lie ahead.

Resources:

The federal budget is in serious disequilibrium. The deficit itself is a major economic problem. However, the budget needs of the statistical agencies are trivial relative to the overall deficit problem. The following actions are needed:

1. The Office of Management and Budget should provide leadership in addressing the statistical needs that have been identified. The need for adequate national statistics is not a narrow interest of statisticians or business economists, it is a need which serves the broad general concerns of public decision making. OMB should start with a call to the statistical agencies for a realistic assessment of current and future resource needs, including staffing.
2. The Congress should assist in the process by outlining areas of deficiency as they are identified in hearings, and as current problems are defined by existing committees.
3. The statistical agencies should set forth proposals for correcting current deficiencies and for undertaking research and testing on data collection efforts that will overcome the more challenging problems.

Concepts:

The lack of academic, business, and governmental attention to methodological problems in the national income accounts and in the definition and collection of key economic indicators is a serious intellectual shortcoming. There are no short-term solutions. However, in the long run improvement of the nation's economic statistics is dependent on a major effort on this important front. As a start, we recommend:

1. The National Science Foundation should establish a program for funding research on basic economic indicators.
2. The major statistical agencies should set up internal research units with the assignment of identifying major problem areas that merit both internal and external research. Their findings should assist the National Science Foundation in setting up its program; but the NSF program should also be equally driven by external suggestions and proposals.

Social Cooperation:

Perhaps the most difficult area to address is the current social attitude that government asks too many questions and that it is not necessary to provide accurate or carefully considered information in response to government inquiries. This problem can only be addressed by a long-term program of explaining to the general public, including small business, that good policy and decisions require accurate information. As noted elsewhere in this report, there has been media attention to the weaknesses in our economic statistics, but the real need is for encouragement of greater cooperation in responding to surveys and more accurate reporting to the agencies collecting statistical information. Our recommendations are:

1. The Joint Economic Committee and others should establish programs of hearings, investigations, and reports to publicize the needs for and benefits of accurate economic indicators.
2. The general news media should be encouraged to inform viewers and readers about the civic responsibility associated with providing accurate statistical information to the government. For example, the release of data products from the 1987 censuses of the U.S. economy and the occasion of the

1990 Decennial Census offer outstanding opportunities to bring public attention to the role of citizens and business in providing the basic raw materials for statistical measures of economic and social well-being.

**SPECIFIC RECOMMENDATIONS TO
MEMBERS OF THE ASSOCIATION:**

The National Association of Business Economists has a clear interest in the subject of the quality of economic indicators. Most of the members of the Association have jobs that require analysis and interpretation of economic indicators. Clear understanding of the concepts behind the indicators and of the limitations of the data are critical professional skills. Therefore the Committee makes the following recommendations to the Association:

Resources:

While the Association does not have any specific responsibility in the area of resources for the federal statistical agencies, it can make a contribution:

1. The Association should disseminate this report to the full membership so that a growing base of professional economists can address the points raised in this report.
2. The Association should distribute this report to Executive Branch leaders, the Congress, and the media with an endorsement from the NABE Board to underscore the importance of actions to address the problems which have been identified.

Concepts:

NABE members are important users of government statistics. Their experience can be helpful in addressing the methodological issues that have been raised:

1. The Statistics Committee should be a standing committee of the Association. It should serve as a forum for identifying deficiencies in key economic indicators and for suggesting areas of improvement.

2. Members of the Association should work with the statistical agencies in order to find ways to improve basic economic statistics. Industry representatives may group together to provide better data on key items such as prices, quality, productivity, etc.
3. *Business Economics* should continue to seek articles on the quality and character of economic statistics as part of an Association program to keep the membership informed about these issues.

Social Cooperation:

Members of the National Association of Business Economists have the opportunity to play a key role in improving the quality of the nation's economic statistics. They can work to improve the data flowing from key U.S. corporations to the federal statistical agencies.

We recommend that:

1. Members of the Association should work inside their companies to make certain that accurate statistical reports are submitted to the federal statistical agencies. They should encourage complete reporting, review the data to make sure that correct economic interpretations have been made, and assist management in reviewing results so that they will appreciate the importance of supplying accurate data.
2. As representatives of the profession, members should take every opportunity to inform fellow citizens and business leaders about the importance of providing accurate data in governmental statistical inquiries.

The problems discussed in this report are important. The solutions are difficult and will require a long time. The price of failure to move forward will be great, especially if the result is bad policy and poor decisions caused by inadequate statistics.

DISSENTING VIEWS

The process of editing and revising this report provided several opportunities for individual Committee members to express alternative views. However, the final version was completed without a final review, which means that some members of the Committee may not fully agree with all statements in the report. In particular, we believe it is important to highlight three specific dissents from earlier versions.

First, many of the federal agency representatives who assisted in the preparation of the report expressed their concern that the "Constant Program Approach" was misleading because all programs have evolutionary changes on a year-over-year basis. Hence they suggested that important developments were overlooked in the budget examination. The Committee understands the limitations of the analysis, but it has decided that the perspective provided by the "Constant Program Approach" is more representative of the actual trends than the gross budget numbers.

Second, Jay Woodworth noted: *Substantively, I have two points. First, I'm concerned about the tone of the 'General Recommendations' and the impression left with the reader that we're just another special-interest group pleading for more federal spending to alleviate what we regard as a problem. I suggest that you try to fold in the concept that the statistical agencies (and OMB) should be fully encouraged to be more creative in charging end users for data and reports, so that at least the cost of data distribution can be heavily offset with user charges (though 'distribution costs' are generally just a small part of the total statistics budget). User charges would also give the agencies a clear incentive to disseminate the information in a form and through a medium that users want.*

His view of user charges was not included because present procedures do not provide for budget offsets from such revenues (they go to the general treasury).

Third, Ed Fiedler noted: *I do have one major concern about the report, less specific than I would like it to be, but serious enough to come under the heading of a dissenting view, as follows: The report reflects exaggerated expectations about government statistics. In several places it comes close to taking the attitude that the government's statistical programs are a failure for not providing all*

the high-quality, problem-free statistics that economists think might be useful. Our goals for economic statistics should be realistically ambitious, not perfectionistic.

The Committee generally agrees that the goals should be realistic, but it also feels that much needs to be done.

APPENDIX A

Real Spending for Federal Economic Statistics -- Actual Budget Levels
(Thousands of 1982 dollars)

	<u>Census</u>	<u>BLS</u>	<u>BEA</u>	<u>IRS</u>	<u>Total</u>
1976	50,206	102,424	20,827	18,700	192,157
1977	52,337	106,907	21,397	17,500	198,141
1978	49,345	107,370	21,651	17,800	196,166
1979	51,096	117,093	21,373	17,100	206,662
1980	49,743	117,823	20,650	16,100	204,316
1981	48,319	119,778	20,228	14,600	202,925
1982	47,288	102,505	19,389	15,400	184,582
1983	48,728	105,434	19,544	14,000	187,706
1984	46,566	114,094	19,595	15,900	196,155
1985	47,248	120,488	19,692	16,700	204,128
1986	45,810	106,307	18,933	12,200	183,250
1987	47,301	121,599	19,258	12,900	201,058
1988	47,236	111,794	19,100	14,400	192,530

Note: The figures represent agency budget appropriations (in constant dollars) except for:

Census: The quarterly financial report which was transferred from the Federal Trade Commission to the Census budget in 1982 is excluded.

Bureau of Labor Statistics: The mass layoff and plant closing surveys initiated in 1985, and transfers of funds from the Employment and Training Administration to the BLS budget for ongoing employment statistics programs in 1978, 1979, 1983, 1984, 1986 and 1988 are excluded.

Bureau of Economic Analysis: Reimbursable funds from other agencies for the regional program are included in all years, and reimbursable funds for the military price project are included in 1977 and 1978. The transfer of funds

from IRS to BEA in 1984 for BEA to reimburse IRS in later years to tabulate data for the national accounts formerly financed by IRS is excluded. In earlier periods these funds were in the IRS budget. The BEA program for the international service survey is excluded since it represents a new program start-up.

Internal Revenue Service: Funds for statistical consulting to other IRS divisions are excluded.

The purpose of the above exclusions is to focus on mainline programs that are not affected by inter-agency transfers of funds into the base budget of the statistical agencies or by interagency reimbursable funds, except for the inclusion of BEA reimbursable funds received from other agencies for the regional program and the military price project. All other program additions and reductions over

the twelve-year period are included. Examples of these changes are the Census termination of monthly selected services and replacement with expanded annual services, BLS termination of family budgets and addition of multifactor productivity, BEA termination of quality of life and income distributions in the national accounts and addition of international services, and IRS reductions in the samples of taxpaying units in the Statistics of Income Program.

The constant dollar measures exclude the effects of inflation, and thus represent real resources. For Census, BEA and IRS, the actual budgets are deflated to constant dollars by the GNP fixed-weighted price index for federal government non-defense services purchases which covers employee compensation and purchased services. For BLS, the actual budget is deflated by excluding mandatory wage cost increases specific to the agency for general pay raises, in-grade step, increases, and retirement increases.

APPENDIX B

Members, NABE Statistics Committee

- J. Gregory Ballentine, Peat, Marwick Mitchell & Co.
- W. Van Bussmann, The Chrysler Corporation
Kathleen M. Cooper, Security Pacific National Bank
- Robert G. Dederick, The Northern Trust Co.
- Joseph W. Duncan, The Dun & Bradstreet Corporation
(Chairman, 1985-1987)
Kathryn M. Eickhoff, Eickhoff Economics, Inc.
- Edgar R. Fiedler, The Conference Board
Martin Fleming, Cahners Publishing Co. Inc.
Murray Foss, American Enterprise Institute
- Jerry L. Jordan, First Interstate Bancorp
- Ben E. Laden, Ben E. Laden Associates
(Chairman, 1987-present)
- Jay N. Woodworth, Bankers Trust Company

- *Indicates Statistics Committee members who responded to distribution of the final draft of this report.*

APPENDIX C

List of Articles on Issues in Federal Statistics

- September 1984, "The Standstill Statistical System," by Courtenay Slater, American Demographics.
- Autumn 1984, "Concepts of Poverty," by Courtenay Slater, Journal of Socioeconomic Studies.
- November 1984, "The Service Sector of the U.S. Economy: Issues in Data Improvement," by Courtenay Slater, with Martin Marimont, Study prepared for the National Academy of Sciences, National Research Council.
- November 1984, The Federal Statistical System, by Courtenay Slater, with George E. Hall and others, prepared for the Congressional Research Service, Library of Congress, published by the Committee on Government Operations, U.S. House of Representatives.
- February 1985, "Coming Crisis in Federal Statistics; Deregulation and austerity are imperiling the collection of vital forecasting data," by Joseph W. Duncan, Dun's Business Month, p. 45.
- June 3, 1985, "The unmeasurable economy," by Susan Lee, Forbes, pp. 99-102.
- June 30, 1985, "The Economy Has Left the Data Behind," by Joseph W. Duncan, The New York Times.
- June 30, 1985, "The Key Statistics are Still Reliable," by Janet L. Norwood, The New York Times.
- July 8, 1985, "Numbers You Can't Trust," by John S. McClenahan, Industry Week, pp. 60-61.
- September 1985, "Addicted to Statistics," by William Alonso and Paul Starr, Review, pp. 27-28 (excerpted from Items, a publication of the Social Science Research Council).
- October 16, 1985, "Commerce Dept. Acts to Plug Leaks of Economic Data," by John M. Berry, The Washington Post.
- October 27, 1985, "Measuring the Service Economy," The New York Times.
- December 2, 1985, "Giving the Lie to Statistics," Editorial, The Washington Post, National Weekly Edition, p. 26.
- January 2, 1986, "The Science (Ha!) of Quality Statistics," by Clyde H. Farnsworth, The New York Times.
- January 10, 1986, "Critics Say U.S. Economic Picture is Blurred by Reliance on Bad Data," by Paul Blustein, The Wall Street Journal, p. 19.
- January 23, 1986, "How Poverty is Mismeasured," by John C. Weicher, The Wall Street Journal.
- March 16, 1986, "Those Misleading Economic Indicators," by Geoffrey H. Moore, The New York Times, p. F3.
- March 17, 1986, "Capitol Hill Report Finds Some Flaws in Economic Data," by Paul Blustein, The Wall Street Journal.
- March 17, 1986, "Service Concerns Feel Slighted by Federal Classification Code," by Steven P. Galante, The Wall Street Journal, p. 23.
- March 17, 1986, Testimony of Courtenay Slater and Joseph Duncan on the Quality of the Nation's Economic Statistics, Hearings of the Joint Economic Committee, U.S. Congress.
- March 17, 1986, "Gloomy Data Making Economists Uncertain about Growth," by Barnaby J. Feder, The New York Times, p. A1.
- March 18, 1986, "U.S. Statistical Problems Seen," The Washington Post, pp. E1 + E12.
- March 20, 1986, "Jobless Report is Challenged," The New York Times.
- March 27, 1986, "Who Really Understands What's Going on With Budget Numbers?" by Alan Reynolds, The Wall Street Journal.
- March 1986, Opportunities for Improving Economic Statistics, by Courtenay Slater, published by the Joint Economic Committee, U.S. Congress.

APPENDIX C (con't)

April 28, 1986, "Economic Statistics: Why They Often Lie," by Irwin Ross, *Fortune*, pp. 58-60.

June 1986, "Budget cuts imperil federal stats," by Stephen Barias, *Business Marketing*, pp. 19 + 35.

June 3, 1986, "Why the Experts Don't Agree on Future Population Figures," by Eugene Carlson, *The Wall Street Journal*, p. 31.

June 23, 1986, "Rethinking Export Curbs," by Clyde H. Farnsworth, *The New York Times*, p. D2.

July 1986, "The Status of Federal Economic Statistics," by Sidney L. Jones, *Business Economics*, pp. 31-36.

July 1986, "Federal Statistics and Business Economists," by Joseph W. Duncan, *Business Economics*, pp. 26-30.

July 1986, "Needed Improvements in Economic Statistics," by Geoffrey H. Moore, *Business Economics*, pp. 21-25.

July 1986, "Recent Developments in Economic Statistics at the Census Bureau," by Charles A. Waite, *Business Economics*, pp. 10-15.

August 18, 1986, "Census Bureau Economic Statistics—Data Quality, Budget Austerity and Other Dimensions of Change," by Charles A. Waite, Presented to the 1986 Joint Statistical Meetings, American Statistical Association, Biometric Society, and Institute of Mathematical Statistics, Chicago.

August 25, 1986, "Accounting for the Head-Counters," by F.A.O. Schwarz, Jr., *The New York Times*.

September 8, 1986, "A Good Statistic Tells of Good Times," by Alfred L. Malabre, Jr., *The Wall Street Journal*.

September 22, 1986, "Obscene Riches - of Misinformation," *Insight*, p. 49.

October 1986, "The Statistics Corner," by Joseph W. Duncan, *Business Economics*, pp. 53-54.

October 30, 1986, "Illiteracy Statistics: A Numbers Game," by Jonathan Kozol, *The New York Times*.

December 1986, "Sensitivity of BLS economic projections to exogenous variables," by Norman C. Saunders, *Monthly Labor Review*, pp. 23-29.

April 1987, "Ain't Behavin': Forecast Errors and Measurement Errors in Early GNP Estimates," by Knut Anton Mork, *Journal of Business & Economic Statistics*, Vol. 5, No. 2, American Statistical Association, pp. 165-175.

August 1987, "Evaluation of the GNP Estimates," by Allan H. Young, *Survey of Current Business*, Vol. 67, No. 8, pp. 18-42.

December 1987, "The Indicators Don't Indicate Very much," by Edward M. Mervosh, *Business Month*, pp. 55-57.

January 17, 1988, "Are They Statistics or Guesswork?" *The New York Times*, p. 28.

January 22, 1988, "Simon Kuznets Isn't Here When We Need Him," by Lindley H. Clark, Jr., *The Wall Street Journal*, p. 26.

January 30, 1988, "Jiggering the Data," by Bruce Stokes, *The National Journal*, Vol. 20, No. 5, p. 290.

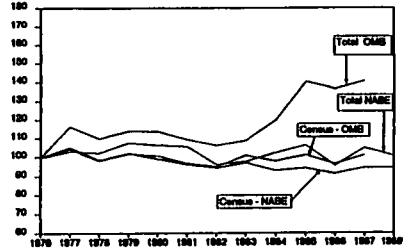
January 1988, "Yesterday's Statistics," by Courtenay Slater, *American Demographics*.

March 29, 1988, "An Antiquated, Irrelevant Index," by Lacy Hunt, *The Wall Street Journal*, p. 30.

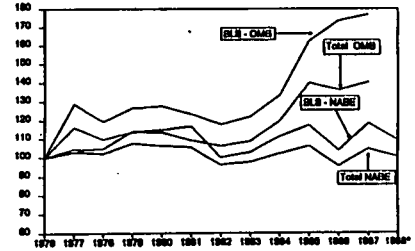
April 1988, "Garbage In, Gospel Out; The trade statistics capture plenty of attention. Too bad they don't capture the truth," *Inc.*, Vol. 10, No. 4, pp. 51-52.

INDEX OF SPENDING FOR FEDERAL ECONOMIC STATISTICS NABE Index vs. OMB Index

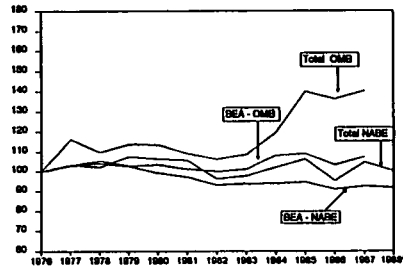
Bureau of the Census



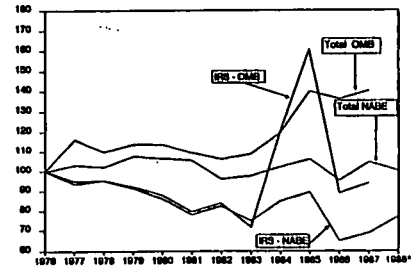
Bureau of Labor Statistics



Bureau of Economic Analysis



Internal Revenue Service



* OMB data not available for 1988



Sinking Feeling
 Trade-Gap News Sends
 Stock Market Reeling
 Into a Record Tailspin
 Washington Stays Sanguine,
 But the Dollar Declines
 And Interest Rates Soar
 The Dow's Drop: 95.46 Points

Washington
 step—again.
 Finally
 day

Retail Sales Rose
 1.3% in August
 On Auto Buying
 Industrial Output Was Held
 To an Increase of 0.3%

WASHINGTON—A report on August retail sales showed a 1.3% increase over the previous month, but industrial production fell 0.3%.

Industry Output Up 0.3%

WASHINGTON, Sept. 18 (AP)—The Federal Reserve Board today reported that the nation's industrial production rose 0.3% in August from 77.1 billion dollars' worth of goods and services.

**G.N.P. Growth Revised
 Down Slightly, to 2.8%**

WASHINGTON, Oct. 19 (AP)—The Commerce Department today revised its estimate of the nation's gross national product for the third quarter.

**Leading Index Climbed 0.5% in August;
 Service-Personnel Forecast Is Overstated**

WASHINGTON, Oct. 19 (AP)—The Commerce Department today reported that the leading index of economic activity rose 0.5% in August.

THE INDICATORS DON'T INDICATE VERY MUCH

Business makes decisions by the light of government statistics that may have little relation to reality.

BY EDWARD M. MERVOSH

As corporate America makes its spending plans for 1988, it is keeping a watchful eye on the economic indicators coming out of Washington. For all the attention they get, however, many of those indicators are misleading. They do not reflect the revolutionary economic changes of recent years: the growing importance of international trade and finance, the shift within the manufacturing sector from smokelack industries to high technology. "All of the key economic indicators are getting less reliable at a critical time," says Delos Smith, a senior economist at The Conference Board.

Take the statistics on foreign trade, which is now the overriding factor in the health of the economy. The trade numbers reported by the Census Bureau, which are given top billing by the press, have shown deficits of about \$15 billion for months. On the face of it, those numbers say that the United States is going nowhere in its efforts to become more competitive, even though the dollar has been declining for two years. Adjusted for inflation, however, the numbers look much brighter.

The trouble with either measure of the deficit, say experts, is that the raw data collected by the U.S. Customs Service, on which the numbers are based, are late, incomplete and unreliable. And if the numbers are adjusted for inflation, the experts say, the prices used are far from accurate. "The trade numbers are the flakiest numbers the government puts out," says Lucy Hunt, chief economist for the CM&M Group, a Wall Street investment firm.

Most of the economic indicators are constructed from information gleaned in surveys by the major statistical agencies:

the Commerce Department, the Census Bureau, the Bureau of Labor Statistics and the Federal Reserve. The Census Bureau does the biggest share of the sampling and then gives the information to the other agencies, where statisticians and economists refine it.

Since the beginning of the decade, however, the budgets of the statistical agencies have been flat. They need more money to hire topflight economists and statisticians and to install more sophisticated computers and telecommunications equipment. The Commerce Department, which puts together the data for the gross national

The trade numbers are the flakiest numbers the government puts out.

product, has only one computer for 60 people analyzing the public sector, one of the biggest and most important aspects of the economy. Says Lawrence Chimere, president of the WEFA Group, a forecasting service that is one of the nation's biggest users of government data: "The bottom line is lack of resources."

In 1986, after years of paying little attention to the quality of the economic data, the American Economic Association set up a special committee, under Thomas Juster of the University of Michigan, to study the numbers. A statistical study group of the National Association of Business Economists has issued several reports

highly critical of government data. And last year, Senator Paul Sarbanes, the Maryland Democrat who heads the Joint Economic Committee, held hearings on the adequacy of the economic data. The committee concluded that the data were deteriorating because of spending cuts by the Reagan administration.

It is not only the Democrats who are critical of the administration's starving of the statistical agencies. Some hard-line conservatives have charged the administration with making the economy look much weaker than it really is. Conservative Republicans argue that moderates around Reagan are keeping the real information from him in order to push a tax increase, anathema to the right wing.

In response to the mounting criticism, especially from the right, the Cabinet's Economic Policy Council, which is headed by Treasury Secretary James A. Baker, produced a comprehensive study last spring, concluding that the key economic indicators are basically sound.

Critics still don't agree. "Too many numbers are revised too often," says Ronald Schramm, assistant director of the Center for Business Cycle Research at Columbia University. "When numbers are revised too often it generates enormous uncertainty." Joseph Duncan, chief economist of Dun & Bradstreet Corporation, says: "What is most worrying is that as our economic problems are becoming more complex, we're becoming less and less able to gather the facts we need for analysis and policy-making."

Here are the principal areas that critics say need particular attention:

INTERNATIONAL A major deficiency of the trade data is simply the lack of

timely, comprehensive raw information from exporters and importers. The information is gathered by the Customs Service, which is widely regarded as too small and poorly equipped to handle the work load. Preliminary studies by the National Association of Business Economists conclude that after subtracting for inflation, spending on the Customs Service was flat from 1976 to 1986, a time when the volume of U.S. trade tripled.

Some improvements have been made at the Customs Service, but big problems still remain. In August, the United States signed an agreement with Canada, our biggest trading partner, to use that nation's import data as a proxy for American export data. The problem is that Washington can't get accurate information from U.S. companies. Before the pact with Canada, the United States was underestimating monthly trade figures with that country by at least \$1 billion. Similar problems remain with the trade data for Mexico, Japan and other major trading partners.

Obtaining adequate measures of the prices of exports and imports also contributes to the unreliability of the trade numbers. Good price measures are especially important in assessing how much the declining dollar is really helping U.S. competitiveness. And without such price indexes, adjusting the trade numbers for inflation is considered hazardous. "We may not be able to measure changes in the real trade deficit," says Joel Popkin, a Washington-based economic consultant.

GROSS NATIONAL PRODUCT Total foreign trade last year was about \$600 billion, making it the biggest business in the United States. Miscalculations can throw off measurements of the growth of the entire economy. Studies by Courtney Slater, of Slater & Hall Associates, a Washington-based economic-consulting firm, show that bad trade numbers caused the gross national product to be revised upward by as much as one and a half percentage points in each of the last three quarters of 1985 and the first quarter of 1986. Congress and the White House use the numbers to set budget targets, and the Federal Reserve uses them to help set monetary policy. "It obviously makes a big difference in setting policy if the economy looks weak or strong," says Jerry Jordan, chief economist for First Interstate Bancorp, "and for some time we didn't know which it was."

The government's difficulty in keeping up with the shift in manufacturing from smoketack industries to high technology is another big problem in measuring the gross national product—the job of the Commerce Department's Bureau of Economic Analysis. For one thing, the bureau is unable to measure the prices of many



CAROL CARSON CALCULATOR OF THE GNP

As deputy director of the Bureau of Economic Analysis, Carol Carson is responsible for helping to put together the quarterly gross national product figures, the most comprehensive measure of economic output. The little-known bureau is a pivotal agency in the government statistics network, drawing on all the other statistical agencies for the data needed to construct the gross national product numbers. The bureau also puts out the widely followed leading economic indicators.

Carson, 48, who holds a doctorate in economics from Georgetown University, is also editor in chief of the monthly *Survey of Current Business*, one of the world's most widely used compendiums of economic data.

Carson points out that the gross national product accounts were first being developed during the Depression. "Like now," she says, "the economy was going through dramatic changes. Intuitively, we knew things were bad in the 1930s. But we didn't know how bad until we had GNP numbers."

high-tech goods, especially telecommunications equipment, because it doesn't have the data. Nor can it calculate improvements in quality.

In recent years, prices of many high-tech products have declined while quality has improved. But the government is relying on outdated price and quality information. Two years ago, a joint study by International Business Machines Corporation and the Bureau of Economic Analysis produced new price indexes for computers.

When the new price index was introduced, it showed a much slower rise in prices than had been calculated. Result: When the bureau subtracted inflation from the gross national product for the years 1972 to 1984, it found that it had been underestimating real growth by about 0.1 percent. That seems like a small number, but it translates into several hundred billion dollars in real growth. "What we need are price indexes like those for computers in other industries, like the rapidly growing telecommunications sector," says Popkin.

SERVICES The service sector's importance in the economy has been growing for decades, and it now accounts for about 60 percent of the gross national product. At least, that's what the government estimates. But it might be much bigger. To begin with, the government does not have a good fix on just what service businesses are out there. "Information about business establishments is the core of many economic indicators," says Popkin. "In the service sector, we really don't know much about what is being produced or where." To further muddy the picture, the government has even less understanding of what is going on in international services, especially since deregulation and advances in electronics have created enormous and rapidly changing global financial markets.

It has always been difficult to measure output in the service sector because it doesn't produce tangible products. And if it's tough to measure output, it's impossible to assess productivity. "Estimating productivity in the service sector is largely guesswork," says Lawrence Chimere of Wharton Economics.

Moreover, economists have long believed that the vast service sector was relatively stable compared with the industrial sector. When goods production dropped during recessions, the theory ran, services acted to cushion the downturn. Now, many economists are beginning to question this time-honored thesis because they question the adequacy of the data on services. "We can't be sure what influence services have on the business cycle until we know more about both domestic and international services," says Columbia University's Ronald Schramm.

THE UNDERGROUND ECONOMY Estimates of the size of the underground economy vary widely. Dun & Bradstreet's Joseph Duncan figures that it's about 10 percent of the gross national product, while the government says it's only about 4 percent.

The government, however, is even less able to measure the underground economy than it is services, even though it means the loss of hundreds of billions in tax revenues. If the government could garner these taxes, the budget deficit could be cut dra-



JANET NORWOOD CRUNCHER OF THE JOBS NUMBERS

Janet Norwood, commissioner of the Bureau of Labor Statistics, is the most visible of the thousands of number-crunchers in the federal government. Each month she is called upon by the press or Congress to comment on the unemployment numbers reported by the bureau. Norwood, now 63, was appointed commissioner by President Carter and twice reappointed by President Reagan. She holds a doctorate in economics from Tufts University and is considered to be a nonpartisan professional by both Republicans and Democrats, who are keenly aware of the sensitivity of the jobless numbers.

The unemployment statistics get such play in the press that they overshadow the Bureau's reports on prices, wages and hours worked. Norwood, along with most economists, believes that the broad measures of unemployment and inflation are pretty good. Still, she says, "We need more information on white-collar pay and productivity in services. We need to invest more and direct it more intelligently."

atically without raising taxes or curbing spending, according to many experts. Finally, since Internal Revenue Service tax data are used to help calculate the gross national product, the inability to tap the underground economy means that the government picture of the overall economy may be greatly distorted.

BUSINESS INFORMATION Many experts believe that the biggest problem facing government economic statistics is the lack of up-to-date lists of business es-

tablishments. These are indispensable to the surveys that government agencies do to construct almost all key economic indicators. If the lists are deficient, the surveys will be inadequate and the indicators will be unreliable. "Good lists are needed to measure the size of economic sectors and to determine what's happening to prices," says Carol Carson, deputy director of the Bureau of Economic Analysis.

It's not just that lists in services are weak. Dun & Bradstreet studies show that more than 50 percent of employment growth comes from businesses with fewer than 50 employees, but the Bureau of Labor Statistics doesn't survey such companies. Moreover, to save money and reduce paperwork, the Office of Management and Budget has ruled that the government will not survey companies with fewer than 100 employees about shipments, orders or inventories, even though those companies are widely considered among the most dynamic in the economy.

The issue of how much information to gather from business is highly political, because the the Reagan administration pledged itself to "getting government off people's backs" and reducing business' paperwork. In general, the public supports the idea of less government. But the public, including business, wants and needs accurate information about the economy. And most experts say that the demand for good economic data is growing rapidly. The public is considered more sophisticated about the economy, partly because the press has been paying a lot of attention to it, and partly because the rapid deregulation of the financial markets has vastly increased the number of people who want information about it.

"With all the economic problems of the past couple of decades, people understand that what used to be arcane economic reports have an impact on them," says Charles Waite, associate director of economic programs at the Census Bureau. "Certainly the impact of economic reports on stock and bond markets is more evident than ever before."

The growing public awareness of the economic indicators is sure to increase the political pressure on the government to improve the data. "As a society we're ambivalent," says Joseph Duncan. "We want privacy and we also want more information. But fundamentally we're a statistical society, and in the high-tech information age we're likely to become more that way and demand better data."

Business has perhaps the biggest stake in good economic indicators. And business influence will play a decisive role in determining whether the data get better—and how soon. Corporate America is already complaining loudly about the Office of



CHARLES WAITE PROVIDER OF THE RAW DATA

The Census Bureau does much more than count the population. "We provide most of the raw data for the other statistical agencies," says Charles Waite, associate director for economic programs. "We do much of the surveying and sampling for the Bureau of Economic Analysis, the Bureau of Labor Statistics and other agencies." The Census Bureau also puts out reports on foreign trade, housing starts, retail sales, wholesale trade and manufacturing shipments, orders and inventories.

A graduate of the University of Michigan, Waite, 50, has been a government statistician for 27 years. He concludes that some sectors of the economy, such as services, foreign trade and manufacturing, are not being covered adequately. Still, Waite says, "We've more than doubled the resources devoted to the service sector."

Waite acknowledges that there's a lot more to be done. "We need more information on what manufacturing companies are exporting and on the costs of materials purchased abroad."

Management and Budget's plans to cut the 1990 census sample from 16 million to 10 million households. Business worries that the much smaller population sample will make the Census, on which it relies heavily for marketing and advertising campaigns, far less accurate.

In the end, without reliable economic indicators, business budgets could become almost as wide of the mark as the budgets that have come out of Washington in recent years. ■

Representative HAMILTON. Thank you very much, gentlemen, for your testimony.

I want to begin just by getting a quick impression from you.

Do all of you agree that we have a deterioration in the quality of Federal statistics? And how serious would you state that deterioration, if you think it's a fact?

Mr. LEVITAN. It's difficult to say how serious it is, but in the area which I follow most closely, labor force statistics, there has been a deterioration. I alluded, for example, that in 1987, 28 percent of the current population survey sample failed to provide income data, casting serious questions about the quality of the income statistics. We cite other problems in the report that this committee published last December. The statistics have deteriorated because of lack of funds, and because neither the Bureau of the Census nor the BLS is given an opportunity to exploit the data with current technology because of the budgets cuts Congress reduced the current labor force services budget in BLS from \$96.3 in 1980 to \$82.1 million in 1982. While some of the cuts have been restored, adjusted for inflation, this budget remained, in 1989, 6 percent below the 1980 level. Census and BLS cannot develop the statistics we need to get a better understanding of what is happening in the labor force.

Representative HAMILTON. Mr. Popkin, Mr. Smith, do you agree with that assessment?

Mr. POPKIN. Well, I, too, am aware of the anecdotal information about the deterioration of the statistics that are being produced. And in fact, I hear comments about reporting in general to surveys, not just the household surveys.

However, I think there's another aspect of deterioration and that is not progressing, not advancing into new areas in a timely way; that is really a form of deterioration. And that's why, for example, we're a nation now which talks a lot about all the information we produce. But, we have no idea what the quantity of that information is, what it's contribution to productivity is, what price is paid for it. So I tend to think of both aspects, the anecdotal information about response rates to existing statistics, and the failure to move more aggressively to keep ahead of statistical needs by preparing statistics in new areas that need measurement.

Representative HAMILTON. Mr. Smith.

Mr. SMITH. I would concur with Joel Popkin. I think it's more, you know, we have probably as good a statistics on steel production, as ever. We don't in electricity production because we don't capture the new cogenerating facilities.

But the real problem is having data on the changing U.S. economy. Appendix A in our NABE report shows that the spending in 1988 in real terms for the major four agencies was \$192 million which is just what it was in 1976, with the economy being 45 percent larger in real terms. Obviously, if you have the same number of people trying to count everything, you simply can't do it.

Representative HAMILTON. There are certain statistics, of course, that those of us who are politicians, as distinct from those of you who are economists and statisticians, we pay a lot of attention to, as well. Unemployment statistics, price statistics, trade statistics, and GNP.

Are those as good as they ever were, today? These highly visible important statistical indices, such as the Consumer Price Index?

Mr. SMITH. The GNP statistics are better in the sense with the major contribution being this improvement in the deflator for computers. That was an area that people knew about and complained about for 10 years, but you have to get engineers, analysts, and IBM and the association of office and computing manufacturers together and then they literally donated people to work with government statisticians for several months to improve those series. That's the sort of thing we're working to encourage our NABE members to do; that's one way of stretching thin government resources a little bit further.

There are some other examples in the GNP data. They're not perfect but I think they're better today than they were 25 years ago.

Mr. LEVITAN. Both Mr. Popkin and Mr. Smith suggested that, that we are stressing anecdotal data. As far as labor force statistics, I don't think that the data are anecdotal. The current population sample survey was 71,000 in 1981; it is less than 56,000 today. The sample size may be enough for estimating national employment and unemployment data but once you start to disaggregate the data it becomes less and less reliable.

I alluded to the rising nonresponse rates. These data do not receive much publicity. In 1978, nonresponse to income data for the March sample of the CPS was 18 percent. Compared with 28 percent 9 years later. These are not anecdotal data. The deterioration may be due to the high turnover of enumerators and the limited training they receive. Changing attitudes of the population may also have contributed to the nonresponse rate. I conclude that as far as labor force statistics are concerned, the deterioration is real not anecdotal.

Mr. POPKIN. I don't mean to disagree with you, Mr. Levitan, on that. The reason I use the phrase, anecdotal, was really not so much because of the point about response rates in the labor force series, because those can be measured. But stories that I hear about whether there's enough time to edit statistics coming in from businesses, to call the business back and ask them about why a report either didn't come in, came in late, or doesn't look right. Those were the sort of anecdotal things that I was referring to.

With respect to the key statistics that you look at, Mr. Chairman, I think that they are weak in the area of services. Now, they've always been weak in the area of services, but that area has become increasingly important. And I think that our lack of knowledge about the services feeds back on our lack of ability to understand what's happening to our productivity, why it has slowed down, and what policies need to be pursued to improve it.

Representative HAMILTON. In order to do that, do we need additional funding of statistical agencies in the Federal Government?

Mr. POPKIN. I think so. And I think that good new programs generate a lot of interest, and it's a wonderful time to go out in the job market and the labor market and recruit new statisticians who would be interested in solving problems in those difficult areas. I think that, frankly, the most difficult area and probably one of the weakest areas in terms of measurement is the whole issue of medi-

cal care. What is the true inflation rate in medical care services, what is the output of the medical care industry. The medical care industry accounts for 11 percent of GNP. Policy is made about it every day, all kinds of pricing policies, expenditure policies, and utilization policies. And I would submit that that's an area in which statistics are very weak. That's not just a problem of the Federal statistical system, I might add.

I'm going to go to a conference the National Bureau of Economic Research is holding on measurement in the service sector in May. And I noted that on that program, there is not one paper devoted to measurement problems in the medical care area. So the academic community doesn't know the answer, either. These are difficult areas, and I think the only way that we're going to get a handle on them is by funding those areas explicitly.

Representative HAMILTON. Now, the working group on economic statistics just rules out health, education, and environmental statistics as noneconomic. They're outside the scope of the work as they define their work.

Is that a serious mistake by the working group on economic statistics?

Mr. POPKIN. I think that's giving up too easily. I don't think we should give up that easily and say it's intrinsically something we can't measure.

The way our economy is evolving words like infrastructure, externalities, public goods, these are becoming more and more characteristic of the kinds of things that go on in our economy, and they pose the most difficult measurement issues, but I don't think that's a reason to just throw up our hands and say we can't do anything about them.

People used to say the same thing about price indexes for computers 20 years ago, and now we have one.

Mr. SMITH. I would concur totally. In NABE, we have a series of roundtables of common interest groups within our membership. Our newest one is manufacturing, but the one just before manufacturing was health care. That's the most rapidly growing one we have. It is members of NABE interested in comparing those sorts of statistics with overall government statistics. And Joel Popkin is absolutely correct. If we get better data in that field, we'll have higher quality GNP data and higher quality price numbers, and probably higher quality labor force numbers, as well.

Representative HAMILTON. Well, I must say, from my perspective, it's difficult to understand how a working group on economic statistics would just rule out things like health care and the environment in today's world as being noneconomic. It seems to me that can have very profound economic consequences.

I have a number of other questions, but I've taken a little time here. I'll turn to Senator Sarbanes.

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

Gentlemen, we're very pleased to have you here, and we appreciate your testimony. I've had a longstanding interest in this issue because I think it is an important part of the infrastructure, broadly defined, that provides the foundation for a quality economy.

First of all, I want to ask this question: What's the nature of the interaction that the private sector has had with the President's working group chaired by Michael Boskin?

Mr. SMITH. It has been very limited. We had one member from that committee at the statistics committee meeting before last, which was in December, another member in February, and actually the chairman of the statistics committee, Marty Fleming, is going over there this afternoon to have more dialogue with them. So we're working on beefing up those ties and having input on what are private sector economists concerned with and how can we help.

Senator SARBANES. When you say to meet with them, you mean to meet with the working group, or with the people at the Council?

Mr. SMITH. The people at the Council who are involved with the working group.

Senator SARBANES. Well, wouldn't it make sense for your association to have a meeting with the working group to, in effect, communicate rather forcefully to Michael Boskin that you think it would be a good idea to have a session that includes the working group and representatives from your association.

Mr. SMITH. Well, we'll bring that up with them this afternoon. It's an excellent idea. We should have done it already, but we'll certainly follow up, promptly.

Senator SARBANES. We have an opportunity now with this working group—at least someone's been made the responsible person to address the issue—and it seems to me we need to take every advantage of it. I'm just a little concerned. I don't know whether they should hold a set of hearings at which private sector representatives could appear, but there ought to be more of an interchange than I perceive is going on now. It's important to develop that.

You mention an important question in your statement, Professor Smith, and it's also in the report that you attach of your statistics committee, under the phrase, "social cooperation." It is this: How much recognition do you think there is in the private sector of the need for accurate and reliable and comprehensive statistics? I know your membership is aware of it, but that's your membership. How much does that awareness extend through the business community? To what extent do they recognize they have to be forthcoming in providing the information if they're going to reap the benefit in using the information which is assembled?

Mr. SMITH. I think we've done a lot of good. There's probably a lot more to do, in stressing to our members and then following up and talking to people, what are you doing in your company.

I can give you a good for instance. When I was at Union Carbide before becoming an academic, we received a request from the Bureau of Labor Statistics for a series of price quotes on pretty detailed industrial commodities and a number of business managers complained that it's hard to get these data, they're really confidential, why should I give them to the Government and so forth. Fortunately, they complained to people and the management committee who asked me, well, gee, they say it takes time and it's complicated and what if somebody got their hands on it? Why would they need to know this?

And I prepared a memorandum which covered, for example, here's how you judge the growth of the industry, here's how you do the comparisons. Where do you think the data come from if you don't fill them out? We did some internal consolidation so each division didn't have to fill out the same form. And the result was, people said, oh, gee, well, I trust those data better now than I used to. Because they knew who filled out the form.

And of course, like anything else in business, just like with you all, when you direct your staff to look at something, they take a lot greater interest when senior management does it in business, it filters down through the ranks; I should fill out that form.

There's growing interest in the mass media in this area. A series of articles in the New York Times and the Washington Post and the Associated Press has written them on, what happens when the person from the Current Population Survey knocks on your door, or where do these data come from, or what is involved in producing this huge concept, called GNP. We have a long way to go, particularly with the public at large. But I would submit to you that a lot of our members have taken right off of that recommendation and run with the ball in their companies.

Senator SARBANES. Well, now is this a large business/small business dichotomy? There are after all hundreds of thousands of small businesses that don't have their own business economist to write the kind of memo that you wrote to the Union Carbide management committee, which got Union Carbide to follow a reasonable course. But most small businesses don't have that. Isn't there a dichotomy within the private sector?

Mr. SMITH. Well, there's always a dichotomy. I know one, the largest small business organization, the National Federation for Independent Business, their chief economist, who's Bill Dunkelberg, who's dean of the Business School at Temple University and a former member of the statistics committee and of our board of directors, puts out regular survey results for them that go to their members; hey this is important. And they do their own surveys, as you are probably well aware, of business optimism and hiring plans which at least the half million or so small businesses that are members at any given time of that group have a good awareness of the importance of filling these forms out.

As I say, every survey I've seen, people say, I hate government paperwork, when you delve into it, when the survey takers delve into it, the paperwork nobody likes is that that comes from the IRS. They have to fill that out.

Mr. POPKIN. If I may, Senator Sarbanes, I'm not as sanguine about our ability to cover small business, and I point that out in my testimony.

Actually, the National Association of Business Economists, a lot of its members are, as you point out, the ones that are still wealthy enough to be able to afford to have chief economists. And actually a lot of the action in the economy is in the area of the high tech, small companies producing goods that are important in our exports. They're in knowledge and information, companies which have a tendency to be small in size.

And I think it's more expensive to collect data there, and I do think NFIB does a good job of polling its members. But I still sense

an inadequacy within the Federal statistical system of a proper sampling frame, even, that keeps abreast of the dynamics of small business and can even indicate who to send the form to to collect data. So I would say, with small business accounting for about half the economy and in some of the areas that are dynamic and growing very rapidly, I think that we do need much greater effort, not just in Federal funding, but in education, as well, to improve the statistics in that area.

Mr. LEVITAN. Senator Sarbanes, I can't respond directly to your question about business reactions. But I do have a good feeling of what the media are interested in. The media are responsive to cyclical changes, at least as far as labor force statistics are concerned. I used to get a great many calls from media people when unemployment rose in 1981 and 1982. But in the last 9 months, as long as Commissioner Janet Norwood reports to you every month that unemployment is 5.3 percent, there is little interest in labor force data. Should Commissioner Norwood report tomorrow that it's 5 or 5.6 percent, then I think that media interest would be revived.

Senator SARBANES. How sharp is this supposed conflict between timeliness and reliability? Or let me lead into this question.

How serious is the problem of the extensive revision which takes place with some of our statistical indicators? I think, for instance, of the trade figures, where we have really incredible revisions once they come along. You have some of that in the GNP figures, although I think that's improved a bit.

Would you address that issue?

Mr. SMITH. Well, some of that, I mean, the trade figures, as hard as this is to believe but from everything that I can tell, and with other people who follow them very closely, are far more accurate today than 2 or 4 years ago. We used to have this horrible problem of carrying over things we counted as exports or imports this month that actually happened a year ago or 11 months ago or 6 months ago; we have rid ourselves of that.

Census has basically said, it doesn't seem to matter what we do, we can't count United States exports to Canada very well; let's go into cahoots with Statistics Canada, and accept their measures of imports from the United States, which as you will recall, added \$1 billion a month to U.S. exports, so it was a nontrivial correction.

Some of that, there's nothing I can think of you can really do. I mean, we always get upward revisions, almost always, in personal income data, 3 or 4 or 5 years after the fact; the bulk of that comes from the fact that the IRS data lag 3 years, which is a function of the fact that you have 3 years to go through an audit cycle. And so you don't get the exact data for 3 years, and I don't think telling the American people if you got audited, and you kicked in immediately in adding enough IRS agents to do it in 6 months would be a very popular thing to do.

It's always nicer to be more timely. That's the hardest question to answer in a company. When you talk to a retailer, he says, well, I know my sales the day after they happen. Why does it take the Government 6 weeks to figure out retail sales, and I send my form in the next day. That's an area that used to be horrible; it has become better, the retail sales data. It's a hard question to explain to business people. I usually do it by saying, well, think of the fact

that there are 2 million retailers in the United States. If you have to get a form back from every one of them who may not be quite so prompt and accurate as you are and check with them, if you still have anybody doing checking.

It's a good system; it could be better. And if we don't put some more money into it, it's going to get a lot worse, soon. We have been starving it for 8 years; that's the real problem.

Senator SARBANES. As we move toward a global economy, should we be thinking of internationalizing statistical collection and reporting?

Mr. LEVITAN. I think what is necessary is through the OECD and ILO to agree on common definitions rather than on internationalized statistics. BLS has played a major role in this area. With due regard for varied labor market institutions it is necessary to agree that we measure the same thing. For example, do the Germans and Japanese measure wages and compensation as we do?

Senator SARBANES. Who's out of step on that? The U.N. has tried to do some of that, have they not?

Mr. LEVITAN. Yes.

Senator SARBANES. And, as I gather, a lot of countries follow the U.N. pattern or model, whatever you want to call it.

Mr. SMITH. It's called a system of accounts.

Senator SARBANES. Who sticks out like a sore thumb in following a separate path in the international community, if I could ask?

Mr. SMITH. We do, in a lot of ways. That's in the White House working group of getting our GNP statistics to match the rest of the world. There's a horrible problem with the international trade statistics. There's a horrible problem in having standard industrial classification codes be comparable on an international basis.

Senator SARBANES. Most everyone else is doing it one way and we're doing it differently, is that right?

Mr. SMITH. Yes. The basic problem is the rest of the world agreed on a system which we agreed on but they've moved to it; we haven't had the money to go back, you know. You can say, fine, let's move to it tomorrow. But you can't do that if you don't have the money to conform at least some of the history. You know, having a jump in the—well, the trade deficit fell \$2 billion because we changed the definition, or GNP went up x or down y , I don't know how you could base them all on something like that. And that gets very expensive to go back and conform the past to the new definitions.

What are we, a year behind or something on the SIC updates?

Mr. POPKIN. I guess. Well, not only that but as someone said, the 1987 revision of the SIC was stillborn. It really reflected virtually no change; it did not reflect the changing structure of the U.S. economy.

I wanted to respond to Senator Sarbanes' question about timeliness and reliability. I was in at the beginning on that when the Office of Statistical Policy, when it existed in its full fledged form at OMB back in the late 1960's, early 1970's, actually directed Federal statistical agencies to publish things faster than they were publishing them, and that had to do with the monthly Economic Indicators, Congressman Hamilton, that you look at as they come out.

I'm less concerned with that issue, and would be less concerned with some slippage in timeliness to improve short-term reliability. Because I think that monthly numbers are blown far out of proportion. Everybody takes a rate and multiplies it by 12, as though it's going to continue for the next 11 months, and partly that's a media driven thing.

The timeliness versus reliability issues that I'm more concerned about is, for example, one that was touched upon in the Office of Technology Assessment's report where we are still waiting for an input-output table to measure the changes in the structure of the U.S. economy that occurred between 1977 and 1982. The Japanese, it says in that report, wanted to compare input-output tables for major countries in 1985, and so they set about going to France and Germany and getting their input-output tables for 1985, and they came to us and we didn't have one. We didn't have one for 1982. So they hired a consultant to put that table together for us. I don't think that should happen.

Mr. LEVITAN. On a more simple basis, to respond to your question, Senator, I would say that we are trying to overemphasize timeliness. What happens, let's say, in GNP, as the Bureau of Economic Analysis reports one figure, a second, a third, the confidence in the Government data declines. I don't think that we ought to be hypochondriacs. I know I don't take my temperature every day, or my cholesterol count every day. And I think that government agencies should—I know there will be pressure on them—but they should hold up the data until they have a much greater confidence in what they are going to report. And I think that GNP, for example, if they report only once rather than three times, would help a great deal for the public to trust the numbers that are being published.

Now, there are always big changes where the GNP rose nine-tenths or 1.1 percent, sometimes much greater changes. And I think that doesn't do any good for our cost in the Government statistics.

Senator SARBANES. I have just one more question, Mr. Chairman.

Mr. Smith, do you think it would help if you could get the importance of statistics elevated up to the level of the CEO's in one of their meetings in terms of one of their policy statements?

Mr. SMITH. Absolutely. If you can get something on the Business Roundtable agenda or the Business Council, but the Roundtable's the larger group, I can guarantee from personal experience you get a lot more action. That's the 200 largest firms in America, and they have a lot of trickle down.

Senator SARBANES. You think it would help if the President of the United States could find some opportunity to put in a good word for collecting statistics and why it's important to the working of the economy?

Mr. SMITH. Oh, absolutely. That's another good way to have corporate CEO's look at it closely. But, I mean, yet again, to have you and Congressman Hamilton, when you're talking to a group, slip it into a comment if it's a business group.

Senator SARBANES. Unfortunately, I noticed in the Wall Street Journal this morning, and I'll just read the item: "The House approved legislation to elevate the EPA to a cabinet level environ-

mental department. The Bush administration opposes the measure because of a provision to establish a statistics bureau within the department for data collection and analysis."

Mr. Chairman, thank you very much.

Representative HAMILTON. Thank you, Senator Sarbanes. I guess you'd agree that the statistical information we have is as good as any in the world?

Mr. SMITH. I would agree to that, or almost.

Representative HAMILTON. Would all of you agree?

Mr. LEVITAN. Yes, sir.

Representative HAMILTON. What are your impressions of this working group at the White House headed by Mr. Boskin?

Mr. LEVITAN. My impressions are influenced by the vagueness of the proposals. I would think that after a year or more they should have come up with more specific recommendations and with estimates of costs during this year, next year, or during the budget cycle of 5 years. So far, all I read is that they're thinking good thoughts but nothing that helps me to know how the administration intends to improve economic statistics.

Mr. POPKIN. Mr. Chairman, I was on a such a group in 1973 when I was at the Council of Economic Advisers. We had something called a working group of users of statistics within the Government. And it was very helpful. I think we were able to identify the needs of the executive branch for statistics and to make recommendations about what should be done.

I think the problem with it is that all of the people who serve on that working group are doing that as only a small part of their other responsibilities. And statistics, in the big picture, that's a small part of their responsibilities. I think that this would be a good time to consider revitalizing within OMB the notion of the old Office of Statistical Policy which would be a place where the working group, such a working group as Chairman Boskin headed, could hand its recommendations. The group could then solicit recommendations from the Congress, from the business community, from the labor community, and set a course of action. The problem with these working groups is, they come in, they're full of ideas, and there's no follow up.

Representative HAMILTON. Now, they're going to make their final report available later this summer, as I understand it.

Mr. LEVITAN. Didn't they say the same thing last summer?

Representative HAMILTON. I'm sorry, I didn't hear you.

Mr. LEVITAN. I said, didn't they say the same thing last summer?

Representative HAMILTON. They may very well have. They told us, I think, that they were going to have their final report at the end of this summer.

But in any event, I gather that each of you feels that that group is not doing the kind of comprehensive review of our statistical programs that needs to be done?

Mr. LEVITAN. Amen.

Representative HAMILTON. Is that a fair statement?

Mr. SMITH. I agree with Joel Popkin. If you don't assign somebody who is involved on a full-time basis, you're just not going to get much done.

Representative HAMILTON. Should we have in the Government a single centralized statistical office?

Mr. SMITH. Certainly one to coordinate policy which we had for years, and—does it even exist anymore?

Mr. POPKIN. That's been the major deterioration. That group has really deteriorated from—

Representative HAMILTON. We did have it at one point?

Mr. POPKIN. In the 1960's, it was the best in the world. It's gone down hill ever since.

Representative HAMILTON. There is a single centralized statistical office but it's gone down hill. Is that the point?

Mr. POPKIN. Well, it's an office, a centralized coordinating office, not a large office; it's not a centralized statistics system like they have in Canada. Canada has one statistical office that produces data, Statistics Canada. We have our BLS in the Labor Department; our Census Bureau in the Commerce Department. We have a decentralized collection system, and I'm not convinced that that's the problem, that we would gain anything by putting BLS and Census together. But I think that we need a stronger coordinating group within the executive branch of the Government at a level where it has more clout.

Representative HAMILTON. Where should that be?

Mr. POPKIN. Well, I would like to see it stay in OMB. Now, I know that the Bonin Commission in its report in the late 1970's recommended setting up such an organization in tandem with the Council of Economic Advisers. There would be the Council of Economic Advisers and the Council on Statistics, that would perform that function, and both would report directly to the President. That's an alternative.

Representative HAMILTON. We have a vote pending in the House. I do have a few more questions.

Will it be possible for you to stay for a few minutes, 10, 15 minutes for me to vote, and then I'll come back and we'll have a few more questions.

So the committee will stand in recess.

[A short recess was taken.]

Representative HAMILTON. The committee will resume its sitting.

I still want to try to get a better gauge on how serious the problem is on statistics. Are you able to cite examples of decisions being made on the basis of faulty statistics?

Mr. POPKIN. I think, Mr. Chairman, that in terms of cyclical analysis, not recently, there have been examples. For example, failing to call a business turn a recession or something like that.

I don't see that as the problem. I see the policy issues that have been seriously affected being those that relate to competition, international trade policy, policy about how the burden of the stagnation in our standard of living has been shared throughout the economy. In other words, I think that there's a lot of information that hasn't been collected and properly analyzed which I think would shed light on policy directions for some of the really big issues.

I just did a study that was published in Kiplinger's Changing Times magazine, and I'd be glad to provide it for the record, if you like. It's a study that shows that the males in the United States

working at full-time year-round jobs in 1988 were making 15 to 20 percent less than males the same age were making in 1973. We don't know exactly how that happened and what the role of education, of job opportunity, how those variables could have interacted with this.

So I would say that there's a serious deterioration in our ability to make policy that affects longer structural needs of the economy. It's less of a cyclical issue.

Mr. SMITH. We've a lot of problems in the business area. For example, in the OTA report on the SIC codes, you don't know what industry you're in, so you can't figure out where the opportunities lie. Examples given here are that, even under the 1987 SIC revision, which as we all earlier pointed out, still doesn't match the international code, all computer manufacturing, whether it's PC, a micro, a mainframe, or a super computer is under one four-digit SIC code. All eating places are under one, whether it's a Burger King or McDonald's or Maison Blanche. That makes it a little hard to figure out where it is that you're going.

I would suggest that if you have Bill Seidman talking to you some time, you might ask him about how many of the assets now held by Resolution Trust that came about because the statistics lagged on population movement, on building permitting activity, and we wound up trying to put up four office buildings on four corners, when the community could support one, three of which or maybe all four of which are now owned by the Government.

Representative HAMILTON. The responsibility for overseeing the decentralized Federal statistical system is with the Office of Information and Regulatory Affairs at OMB. And the Acting Administrator of that group testified not long ago, when he was asked if more resources were needed for OMB's statistical policies, he said that there were adequate resources available, but that the current staff could do more. Now, that staff, as I understand it, has been cut from 55 or 60 professionals down to 5. And I take it, from what you've said this morning, that you would not share the view that he can continue to do an adequate job with the resources that he has?

Mr. SMITH. Absolutely. Joel Popkin commented in some detail and I'm sure he will again, but that's a critical area to have an office of Federal Statistical Policy that looks across interagency issues. And there's no way that five people can do it. I don't know if you need 55 but—

Representative HAMILTON. What activities ought they to be doing now that they're not doing?

Mr. SMITH. Well, historically they've done things like conform across agencies to make sure that we didn't have BLS collecting these data and IRS doing something very similar, or if the Federal Reserve was doing something, making it available to the rest of the Government. And they've also been responsible for dealing with the international organizations that decide, you know, there is an international SIC classification—that's not what it's called, it's SITC, OK. There is an international one, and we don't fit it, as we talked about earlier. And then, you could have that sort of oversight looking at the points Sar Levitan made a long time ago, of well, what's a nonresponse in this area, what is it in this area. Can

we test ways to lower that. Obviously, lowering nonresponse saves money and improves accuracy.

Mr. POPKIN. I would add that my recollection is that the legal basis for that office is in the Federal Reports Act. And it's primary purpose is to look at surveys that agencies are proposing and either approve or disapprove them. Now, different Directors of the Office of Statistical Policy have used that authority more creatively than others. But I think that, if such an office is to be revitalized, and if top nationally recognized economic statisticians are to be recruited for positions in that office, which I think is badly needed, that perhaps Congress might also want to look at the charge and responsibility of that agency and extend it beyond those that are merely part of the Federal Reports Act of 1940.

Representative HAMILTON. Are we having trouble getting good people into this area in the Federal Government? The statistical area?

Mr. POPKIN. I think so. For half a dozen years, now, I've heard that statisticians, it's very hard for the Census Bureau to hire statisticians. I have not—

Representative HAMILTON. They're not able to compete with the private sector?

Mr. POPKIN. Not able to compete with the private sector. That's partly I would say a salary issue; there's some salary problems there. But it also is an issue of enthusiasm, the development of new programs that would draw imaginative people who want to make a positive contribution. That's why I think this is such a good time. If you are going to put money in it, that means new programs, and if you can get some people on the outside excited about it, they'll come and join your effort.

Representative HAMILTON. Just to pick up on a line of questioning that Senator Sarbanes was following. Is my understanding correct that our U.S. statistical system is moving closer to the standard international practice or further away? I wasn't clear.

Mr. SMITH. Well, it's moving closer but it's a very slow movement.

Representative HAMILTON. Slow movement, and we're still the odd man out, is that it?

Mr. SMITH. Until we're conformed. Other countries have moved more rapidly. I mean, we participated in all the international working parties, the U.N. systems are out there; here's the way to classify. As I said, it's partly because of lack of funds to go back and conform the historical data.

Representative HAMILTON. If you try to improve the quality of our statistics, should our first priority be to maintain the core data system that we now have or is the priority to undertake research and innovation efforts to look into some of the new areas? I had the impression, Mr. Popkin, in one of your comments earlier that you felt that we're not moving into the future; our statistical information is not as good as it ought to be about future trends in the economy, and so forth.

Mr. POPKIN. Yes. Structural, longer run structural issues. I certainly would put the bulk of my funds into those areas, and hope that it spills over and revitalizes the system generally, and that some of the issues that Professor Levitan commented on and about,

the basic statistics that are coming out, that in the process, they'd be improved as well.

There's one other comment about leading the world or not leading the world or conforming to the world. I think the issue of the standard industrial classification used in the United States, and its urgent need for revision is in fact a project that other nations have not really grappled with. What they've done is to agree upon an international trade system and try to get everybody to conform, but I don't know that in terms of the standard industrial classification that underlies that system, that it's a terribly forward looking system.

So while there's some areas where I think we need to conform, I think there are other areas in which we could very productively take the lead, such as developing a standard industrial classification that will let people look at the information economy and how it's developing. That kind of thing. The Europeans are not doing that, either.

Mr. LEVITAN. As far as labor force statistics, Mr. Chairman, I think that we have taken the lead and other nations have adopted much of our system.

I would like to return, Mr. Chairman, to an earlier discussion about coordinating. I am not sure that we can rely very much on coordination. Somebody defined coordination as an unnatural act between unconsenting adults. I'm talking from a narrow perspective of labor force statistics. We have one income data series based on CPS published by Census while employment and unemployment data are published by BLS. I think there's a great deal to be said for centralization. Right now, we have two separate surveys; the Current Population Survey, and the Survey of Income and Program Participation. They cover a great deal of the same data. BLS makes very little use of SIPP and Census makes very little use of other parts of the labor force statistics. I am therefore not as convinced as Mr. Popkin suggested that centralization is a bad idea. I think, as he mentioned, Canada has it, U.K. has it. While the obstacles are formidable, we might want to move to a more centralized system than just rely upon a few people at OMB who don't do the job, anyway.

Mr. POPKIN. Could I just add that I would not like to see the effort to improve statistics, which in my view is so urgent at this time, get intertwined with a simultaneous effort to reorganize the Federal statistical system. I'd like to do that in happier days.

Mr. LEVITAN. When are happier days coming, Mr. Popkin?

Representative HAMILTON. One of the concerns we've heard expressed in this committee recently is that we don't measure productivity very well. Is that a problem of statistical gathering or is that just a problem inherent in the measurement process, here?

Could we do a better job of measuring productivity which all the economists tell us is so critical?

Mr. LEVITAN. We would have to come to what Mr. Popkin said before, to get better data on service industries, which we don't have now. And until we get it—

Representative HAMILTON. It's possible to get that data, I gather, from what you say?

Mr. LEVITAN. There's a great deal of improvement. We'll never get the same data as we can get from manufacturing, I imagine, but there's a great deal that can be done.

Representative HAMILTON. Do you think the figures on productivity are particularly unreliable?

Mr. LEVITAN. Well, it depends within what area you would say. When they published, let's say, that total productivity has risen by two-tenths of 1 percent, I would say that may have been 1 or it may have been minus 1. In other words, there's a great deal of latitude.

Representative HAMILTON. You mean, the figures may not even be in the ball park?

Mr. LEVITAN. I'm afraid that sometimes they aren't. But we don't have enough data, and that again, I hate to be repetitive so much, but it costs money to do something about it, and Mr. Popkin tells me that it's tough to hire statisticians, so you have to get more statisticians and maybe even my friends in the Government will love that if I say, we have to increase the salaries in order to attract better people.

Representative HAMILTON. Well, I want to make sure, Mr. Levitan, that I understand you. I mean, you've just indicated to me that those figures on productivity aren't worth much at all. I mean, that's my impression from what you said.

Mr. LEVITAN. Well, I wouldn't say that they are not worth much at all, but I look at it with a great deal of skepticism and until we can get actual better data on service industries, I think we'll remain in the same boat. And how much it would cost to get it, I have no idea, really.

Mr. SMITH. It's an area where, I mean, I would certainly agree with what he says. The data outside of manufacturing are terrible on productivity. I'll give you a few examples.

Productivity is essentially zero over the last 15 years, one-tenth of 1 percent a year in the area of retail sales. Think back 15 years ago, any store you went to, you had an army of clerks there ready to wait on you, tell you something about whatever it is you wanted to buy. Most stores today you go into, you could shoot a cannon through them, and you can't find a single clerk. Retail sales are up, employment is certainly far less per store, and therefore productivity must be way up, and any retailer would tell you it is, but the data show that it isn't.

Another area is in banking. If we didn't have phenomenal improvement in productivity in banking, we would have a system choked to death trying to clear checks. It simply wouldn't be possible, just to take one area. And we would have, what, tens of millions of people working as tellers and clerks processing things by hand. We don't have that. Obviously productivity has been tremendous.

It all relates to Joel Popkin's point; we haven't captured the information revolution at all well in a statistical sense.

Representative HAMILTON. Your examples make me think that our productivity is a lot better than we've published.

Mr. SMITH. Basically, almost all the revisions wind up being upward so that suggests that, absolutely, that's the case.

Representative HAMILTON. How about the savings rate? Do we know what the savings rate is in the country?

Mr. SMITH. You like attacking terrible figures.

Representative HAMILTON. That's another one that's not too reliable?

Mr. SMITH. Well, the interesting thing with that one is that you have two completely opposite data sets to look at, derived in totally different ways.

If you look at the flow of fund statistics put out by the Federal Reserve, you discover that savings have been reasonably high and going along pretty well. And if you look in the national income and product accounts, they've plummeted to the postwar low in 1987, and then have been coming back. Normally, well, first note, if you really want to get into that, you should invite Tom Juster from the University of Michigan to come testify because he knows more about the savings rate than any other living person I can think of.

But, second, he points out that most of the revisions in the national income and product accounts turn out to match what we've been seeing in the flow of funds accounts. Which suggests, I guess, that you can get somewhat better data on savings by looking at the institutions where we do our savings, whether it's mutual—

Representative HAMILTON. Now you have the Federal Reserve over here with the flow of funds data, and then you have the Bureau of Economic Analysis over in the Department of Commerce with savings and investment data, and you're saying that they go in different directions?

Mr. SMITH. They go in different directions because they're derived in different ways. The savings rate in the national income and product accounts is simply adding up personal income, subtracting taxes and personal consumption expenditures and saying, the difference is savings.

Any revision in the income side or on the expenditure side changes savings measured that way.

Representative HAMILTON. Why don't we integrate the two?

Mr. LEVITAN. In the absence of greater centralization I think that we need an authority who would be able to decide how to reconcile or combine different series, not only as far as savings are concerned. But we have no institutional arrangements by which we can try to straighten out conflicting data that come out from different agencies and unless we have some kind of a centralized authority we'll have to live by the motto caveat emptor.

Mr. SMITH. The other problem is that if you try integrating the two, you raise a whole lot of issues regarding holes in the national income and product accounts that nobody really wants to deal with at the moment, that is, if you go to banks or credit unions or insurance companies and ask what are your inflows from American citizens, so you have a comparable figure or from people living in the United States, you get exactly whatever their inflows are. You add all that up and then that change is increased savings. Obviously, if you think about it, that gets to whether the money that's being saved came from legal or illegal activities, it's all picked up there, you have a big problem with the underground economy and how big that may be nobody knows, but in the national income and

product accounts, and that's just one of the cans of worms that you'd open with that.

Representative HAMILTON. We have a lot of interest now in distribution of income. And spreading gap, so forth, that you've read about.

Do we accurately measure today the distribution of income in the country?

Mr. POPKIN. I think that is measured reasonably well. I think that the restoration of funds for the Census SIPP survey is important in that respect. And I'm certainly pleased to see that happen.

I think our shortfall has to do with integrating well, that which is not measured as often. And that's part of this Federal Reserve-executive branch difference, because the consumer balance sheets that give the savings estimate from the flow of funds are under the Fed, as you mentioned, and the income data are measured in the Census Bureau.

I think we need to integrate income data with wealth data in demographic detail. Now, oddly, that was what I was testifying here about 25 years ago when Senator Douglas asked me that question. We had developed a set of wealth accounts, an approach to measuring wealth, and we wanted to integrate it with national income product accounts. The Bureau of Economic Analysis and the Department of Commerce has measured some of those wealth aspects; namely, the tangible assets.

What's needed is to measure the financial assets and integrate the whole thing together. As far as an organization to do that, I see no reason why all of that couldn't be given to the Bureau of Economic Analysis.

Representative HAMILTON. I presume we can measure fairly accurately income from salaries and wages, right?

Mr. POPKIN. Right.

Representative HAMILTON. Do we measure income from rents and interest and dividends accurately?

Mr. POPKIN. Probably less so, although I noticed that the kinds of questions—I happened to get the long form in the census—and they asked you quite a lot of questions about that. I think there's more need to do that.

And also in terms of a lot of proprietor's income, the IRS has to be viewed also as a source of those kinds of data.

Representative HAMILTON. How about these statistics on poverty, the poverty thresholds and all of this business. What's your reaction to those? Are they fairly accurate?

Mr. LEVITAN. That certainly needs a great deal of revision. We started with the present series in 1965, and at that time, it was already to a large extent dated and based on a 1955 survey. We have not changed that at all. To what extent do we say that totally that food is one-third of total income and that's the way we measure the poverty data. They are not accurate and that needs a great deal of revision. SIPP might provide some additional insights into revising the data but I don't see any movement in that direction.

Representative HAMILTON. So the food consumption study from 1955 is what the current lines are based on, is that right?

Mr. LEVITAN. Still the same.

Representative HAMILTON. Now, why is that? I mean, is that just because there are insufficient resources to improve it? I mean, here we are in 1990; that's half a century ago. Why are we relying on those statistics?

Mr. LEVITAN. I would say two reasons. One is inertia; the second one is that, as you know, a lot of money is based on the poverty data, and then the HHS is rather reluctant to step into a hornet's nest, and therefore the easiest way is to continue with the old data without changing it.

In 1977, I think Congress required, at that time, I guess it was still HEW, to review the poverty statistics; it was handed into a number of people working in the Government; they did not want to step on sensitive toes so they decided to leave it the way it was.

Representative HAMILTON. I see.

Mr. POPKIN. Could I just add something to that, Congressman Hamilton?

Representative HAMILTON. Surely.

Mr. POPKIN. Because I was at the Bureau of Labor Statistics at the time when we used to publish something called "Standard Budgets," which were another way to approach that poverty threshold. And I recommended that the BLS not publish those budgets. And I'd like to leave this committee with the notion that whether the poverty level is three times the food budget, or whether it should include a 19-inch television set or what it should include is nothing that I, as an economist, feel qualified to tell you about. So I think that the inertia that's developed, why that hasn't changed, is the economists don't feel legitimately that they can come forward and define it, and I really think it's a political issue, and that the Congress should define, based on study, what it thinks the poverty level is.

Representative HAMILTON. I see.

Well, you've been at it here quite a while. I'll wrap it up.

There's one other area I want you to comment on, just because the figures are so prominent now, and that's the area of the trade deficits. And what your impression is of the accuracy of the data we have with respect to the goods flowing in and out of the country.

Mr. SMITH. Well, the main point there that the quality of the data is far better than it was as recently as 2 years ago, by working with Canada to take their import data and use it as our export data, rather than worrying about the trucks we don't catch in our records.

We're working on similar efforts now with Mexico. Obviously, it is the only other place we export to by truck. And also we are comparing data with some of the European countries, with Japan, and with South Korea.

The Census Bureau went on an all-out effort, visiting every customs district in the United States, and explaining to customs inspectors—which is part of the Treasury—from whom the original data come, how important it was to check what the goods were, as best you could ascertain the value, and do it on a timely basis. And we have rid ourselves of almost all of the carry-over problem.

So the data are a lot better than they used to be. And whether we were missing more exports than imports, the reported dramatic

improvements we seen in the trade balance over the last 4 or 5 years, are exactly what has happened or we've been improving for a longer time and we're just counting it better now. I have no idea.

Representative HAMILTON. The monthly trade data tends to be erratic.

Mr. SMITH. It's very erratic.

Representative HAMILTON. Is that because the trade flows vary or because our reporting varies?

Mr. SMITH. It used to be because the reporting varied; now it's more, we don't have good seasonals on it, trying to seasonally adjust it is very, very difficult, and nobody can predict when businesses are going to decide to do something, and for that matter, when K mart orders a lot of shirts from Taiwan. If that boat docks in Los Angeles on August 31, it's an August import; if it's September 1, it's a September import. And those things are random variables and that has a lot to do with the flipping up and down. So you're well advised to look at quarterly or semiannual or even annual data.

Representative HAMILTON. How about the quality of statistics data on the U.S. foreign debt?

Mr. SMITH. Well, the Fed just published a wonderful analysis that said if you made reasonable assumptions about converting this to market value from book value, that the United States is not even close to being a debtor nation; we have \$789 billion of assets abroad, and foreigners have \$466 billion of assets here.

Joel Popkin's the wealth person; that whole area of wealth is terrible on a statistical basis.

Representative HAMILTON. You know, there's enormous concern out in the country, at least I think I observe it and I believe my colleagues do about the extent of foreign investment in the United States, the Japanese taking over and so forth.

Are we gauging that accurately? Do we know what's being done here in the country?

Mr. SMITH. Well, recent inflows we gauge accurately. What we don't do a very good job of is pointing out, all right, if foreigners own \$466 billion of assets in the United States, we must have total assets of somewhere around \$15, \$16 trillion, so \$466 billion is a pretty small share.

Representative HAMILTON. Do you think that's an accurate figure?

Mr. SMITH. Well, it's more accurate than the commonly available figures. Is it within \$100 billion of the truth? Probably so. Is it a lot closer than that? Who knows.

Foreigners don't own very much of the United States, any way that we measure it. And it's probably true that we have bigger shares abroad.

Representative HAMILTON. Mr. Popkin.

Mr. POPKIN. I was just going to say, I think the issue there has to do with a question you raised earlier; it's not so much whether we're making a mistake in measuring the extent of it. But I think people are more concerned with what the direction will be in the future. And to the extent that not knowing where it is right now makes it hard for you to make that judgment, then I think it is an

important policy. It becomes a very important statistic for policy purposes.

Representative HAMILTON. Thank you very much for your help and guidance this morning. We appreciate it.

The committee stands adjourned.

[Whereupon, at 12:10 p.m., the committee adjourned, subject to call of the Chair.]

○