
HEARINGS
BEFORE THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES
NINETY-FIFTH CONGRESS
FIRST SESSION

JUNE 8 AND 9 AND JULY 25 AND 26, 1977

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

20-615 O

WASHINGTON : 1978

878

JOINT ECONOMIC COMMITTEE

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

RICHARD BOLLING, Missouri, *Chairman*

HUBERT H. HUMPHREY, Minnesota, *Vice Chairman*

HOUSE OF REPRESENTATIVES

SENATE

HENRY S. REUSS, Wisconsin
WILLIAM S. MOORHEAD, Pennsylvania
LEE H. HAMILTON, Indiana
GILLIS W. LONG, Louisiana
OTIS G. PIKE, New York
CLARENCE J. BROWN, Ohio
GARRY BROWN, Michigan
MARGARET M. HECKLER, Massachusetts
JOHN H. ROUSSELOT, California

JOHN SPARKMAN, Alabama
WILLIAM PROXMIRE, Wisconsin
ABRAHAM RIBICOFF, Connecticut
LLOYD BENTSEN, Texas
EDWARD M. KENNEDY, Massachusetts
JACOB K. JAVITS, New York
WILLIAM V. ROTH, JR., Delaware
JAMES A. MCCLURE, Idaho
ORRIN G. HATCH, Utah

JOHN R. STARK, *Executive Director*

LOUIS C. KRAUTHOFF II, *Assistant Director*

RICHARD F. KAUFMAN, *General Counsel*

ECONOMISTS

G. THOMAS CATOR
WILLIAM A. COX
THOMAS F. DERNBURG
ROBERT D. HAMRIN

KENT H. HUGHES
SARAH JACKSON
JOHN R. KARLIK
L. DOUGLAS LEE

PHILIP McMARTIN
DEBORAH NORELLI
GEORGE R. TYLER

MINORITY

CHARLES H. BRADFORD
M. CATHERINE MILLER

STEPHEN J. ENTIN

GEORGE D. KRUMBHAAE, Jr.
MARK R. POLICINSKI

CONTENTS

WITNESSES AND STATEMENTS

WEDNESDAY, JUNE 8, 1977

Bolling, Hon. Richard, chairman of the Joint Economic Committee: Opening statement.....	Page 1
Carlson, Jack, vice president and chief economist, Chamber of Commerce of the United States.....	2
Karchere, Alvin J., director of economic research, IBM Corp.....	48
Teigen, Ronald L., professor of economics, University of Michigan.....	54

THURSDAY, JUNE 9, 1977

Bolling, Hon. Richard, chairman of the Joint Economic Committee: Opening statement.....	83
Schultze, Hon. Charles L., Chairman, Council of Economic Advisers.....	84

MONDAY, JULY 25, 1977

Hamilton, Hon. Lee H., member of the Joint Economic Committee: Opening statement.....	141
Hartman, Robert W., senior fellow, the Brookings Institution.....	143
Gordon, Robert J., professor of economics, Northwestern University.....	185
Fair, Ray C., associate professor of economics, Yale University.....	217

TUESDAY, JULY 26, 1977

Bolling, Hon. Richard, chairman of the Joint Economic Committee: Opening statement.....	251
Lance, Hon. Bert, Director, Office of Management and Budget.....	252

SUBMISSIONS FOR THE RECORD

WEDNESDAY, JUNE 8, 1977

Carlson, Jack: Statement entitled "The Economic Impact of the Administration's Energy Plan," before the Senate Finance Committee, June 6, 1977.....	19
Hannaford, Hon. Mark W., a U.S. Representative in Congress from the 34th Congressional District of the State of California: Statement.....	79
Karchere, Alvin J.: Letter of response, dated August 10, 1977, to the request of the committee concerning IBM's assessment of the feasibility of achieving the joint objectives of full employment and a balanced Federal budget by 1981.....	80
Teigen, Ronald L.: Prepared statement.....	57

THURSDAY, JUNE 9, 1977

Reuss, Hon. Henry S.: Press release entitled "The Employment Situation: May 1977," Bureau of Labor Statistics, Department of Labor, June 3, 1977.....	101
--	-----

IV

Schultze, Hon. Charles L. :	
Clarification of interrogation by Representative Reuss regarding the rate of unemployment among black Americans-----	100
Response to additional written questions posed by Senator Javits----	135
Letter of response, dated July 26, 1977, to Representative Bolling's letter, dated June 10, 1977, requesting further information on the orderly marketing agreement with Japan on imports of television receivers and on full employment budget estimates through 1978--	138
MONDAY, JULY 25, 1977	
Fair, Ray C. :	
Forecast of the U.S. economy through 1980-----	219
Gordon, Robert J. :	
Paper entitled "Can the Inflation of the 1970's Be Explained?"-----	190
Hartman, Robert W. :	
Prepared statement with an attached paper entitled "Budget Prospects and Process"-----	146
TUESDAY, JULY 26, 1977	
Lance, Hon. Bert :	
Prepared statement-----	253

THE 1977 MIDYEAR REVIEW OF THE ECONOMY

WEDNESDAY, JUNE 8, 1977

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

The committee met, pursuant to notice, at 10:01 a.m., in room 1202, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representative Bolling; and Senators Javits and McClure.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; G. Thomas Cator, William A. Cox, Kent H. Hughes, L. Douglas Lee, Katie MacArthur, and Steve Watkins, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, Stephen J. Entin, George D. Krumbhaar, Jr., M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

This morning the Joint Economic Committee convenes to review the economic outlook for the remainder of 1977 and for 1978. In recent weeks we have received encouraging statistics on the performance of the U.S. economy thus far this year. The questions now facing Congress are: What type of economic performance can we expect for the remainder of this year and for the future, and have policies been adequately tailored to address these expectations?

Despite the pitfalls that are involved in trying to predict the path that the economy will follow 18 months in the future, the long lag between the time when policy decisions are considered and when their impact on the economy is felt makes forecasting essential. It is time to begin thinking in very broad terms about whether we wish to accompany tax reform with tax reduction and if so, what general magnitudes seem most appropriate.

The administration's long-range objectives call for:

A reduction of the unemployment rate to 4.75 percent in calendar 1981;

A reduction in the inflation rate to 4 percent by the end of 1979; and

A balanced Federal budget in fiscal 1981.

Now we all know that as the economy improves, the budget tends to become more restrictive. Certain recession-related expenditures like unemployment compensation tend to drop, and the revenues rise substantially. Moreover, achievement of budgetary balance will require considerable spending restraint.

In consequence, it appears that achievement of the longer range objectives will depend heavily on vigor in the private sector and, in particular, private investment.

I think the question we all have to ask ourselves is this: How realistic is such an expectation? What will provide the stimulus for private investment? And what should we do if it is not forthcoming? This will be a major question as policy unfolds.

We are privileged this morning to have three outstanding economists to discuss these and related issues with the committee. Our first witness is Mr. Jack Carlson, vice president and chief economist, Chamber of Commerce of the United States. He will be followed by Mr. A. J. Karchere, director of economic research for the IBM Corp. The final witness will be Mr. Ronald L. Teigen of the University of Michigan.

Mr. Carlson, please proceed with your statement.

STATEMENT OF JACK CARLSON, VICE PRESIDENT AND CHIEF ECONOMIST, CHAMBER OF COMMERCE OF THE UNITED STATES

Mr. CARLSON. Thank you, Mr. Chairman. I am Jack Carlson, vice president and chief economist, Chamber of Commerce of the United States on whose behalf I am here today. It is a pleasure for me to appear before the Joint Economic Committee and to present our views on the economic outlook for the remainder of 1977 and 1978.

I will have charts and attachments. May I put those in the record? Representative BOLLING. Without objection they will be included at the end of your statement.

Mr. CARLSON. The basic Chamber forecast made in January remains appropriate for 1977 and 1978. Real GNP can be expected to grow by about 4.9 percent this year over last year. In terms of the halves of the year, it looks like we will experience 3 or 4 percent in the first half and 5 percent for the second half: for next year, a 4.5 percent growth, somewhat slowing down from the rate we have seen this year.

In comparison with the average of all past business cycles since 1950, the U.S. economy is recovering satisfactorily from the very deep recession of 1974-75. The forecast for 1977 and 1978 indicates a better-than-average performance. [See chart 1.] However, we will be below our experience of other cycles.

In comparison with other industrialized countries, the United States' real GNP growth forecast is above average and is surpassed by only Japan. [See chart 2.]

Inflation remains a problem. Consumer prices are forecast to increase by 6.5 percent for 1977 and continue at a high rate through 1978. I don't see a much lower inflation rate than 6.5 percent. In comparison with the average previous business cycles since 1950, inflation remains high and is forecast to continue above 6 percent throughout the next 18 months. [See chart 3.]

Consumer price inflation in the United States is less than most other industrialized countries, however. [See chart 4.] So our experience by comparison, except for West Germany, tends to be reasonable compared to other countries.

We are all suffering from the same problem. The great success story of the economy is the creation of new jobs. In comparison with the

average of past business cycles, nonagricultural employment growth has performed equally well and promises to do better during the next 18 months. [See chart 5.]

In comparison with other industrial countries, U.S. employment is performing very well and promises to continue through 1978. [See chart 6.]

In marked contrast to the high success of creating current jobs, the economy is not laying the groundwork for creating new jobs in years beyond 1977.

As you so aptly pointed out, real business fixed investment has been weak and is forecast to grow too slowly to create the plant and equipment necessary to fully employ the larger labor force in 1979 and beyond. While over a 12-percent rate of real growth is needed, or 11.5 percent of GNP instead of 9.5 percent, only about a 7½-percent growth rate is expected during 1977 based on the Commerce Department's plant and equipment survey released June 7, 1977. I found those rather disappointing.

At best only a similar growth rate can be expected during 1978. Moreover, most of the expected growth will be in short-life assets such as lightweight trucks and business cars and upgraded equipment. The volume of new long-life plant and equipment will continue to grow slowly.

The disappointing growth in nonresidential investment is evident when compared with the average of previous business cycles since 1950. [See chart 7.] That is clearly well, well below any past experience.

I have shown in chart 8 what the relationship has been in all past business cycles since 1950 to show our performance is the worst we have had in a postwar period.

The disappointing performance of fixed investment is difficult to explain in view of improved business sales and profits, lower interest rates and higher financial liquidity. The explanation must be sought in the additional uncertainties that cause businessmen to hesitate to invest at normal levels for this point in the business cycle.

The experiences of the 1970's have created more caution: Exchange rates were set afloat; the memory of wage and price controls has not faded; the commodity shortages of 1972-74 shocked the economy; the OPEC oil embargo and quintupling of crude oil prices created the greatest shock of all. Businessmen are understandably cautious in the light of this experience.

But it is not just the past that creates uncertainty. The future is unsettling as well. Federal policies are uniformly discouraging direct investment since the first of this year, although they may be serving other admirable and desirable objectives.

The Federal Government enacted a modest stimulus program without directly stimulating investment, the first time this has happened in two decades. Even the initial stimulus package proposed by the administration included a much smaller proportion than had previously been the case in 1975 or 1964; in fact, one-half the proportion.

The Federal Government refused to lift price controls on natural gas on a permanent basis and, thereby, discouraged both conservation and production investments.

Fortunately, the President and the Congress have initially rejected broad wage and price controls, but have created residual uncertainty about future wage and price policy by proposing creeping price and wage controls: (a) wage and price controls for hospital health care. According to Secretary Califano's statement yesterday, he proposes price controls on doctors. Further, (b) new price controls for intrastate natural gas; and (c) more stringent price controls for crude oil.

In addition, the administration proposed expanding the staff and funding for the Council on Wage and Price Stabilization, the likely embryo of a new wage and price control effort. At least that is the symbolic meaning of it to the business community.

The President proposed additional Federal spending above the \$29 billion increase in the Ford fiscal year 1978 budget. The additional proposed spending totaled \$25 billion: \$8 billion on January 31, \$11 billion on February 22, and \$6 billion in March, April, and May. The House and Senate second budget resolutions will likely add even more expenditures than we have seen in the first budget round. Investors fear that Government may be setting its spending on a track that will increase inflationary pressures in 1978 and 1979.

The OMB Director's criticism last week of the Federal Reserve's slight tightening of credit by raising the Federal funds rate reflects a preference for more expansive monetary policy and presumably a less stimulative fiscal policy. Director Lance stated that there is inadequate reason for bank lending rates to increase, because banks are awash with funds and have not experienced enough loan demand to justify higher interest rates. Nonetheless bank loan demand has been rising considerably—at an annual rate of 15.4 percent in January, 14.4 percent in February, 13.3 percent each in March and April, and 7.3 percent in May.

Moreover, the Federal Reserve's slight boost of the Federal funds rate to about 5.375 percent reflected not only this increased loan demand, but also an effort to slow the growth of supply. The OMB Director's preference could be realized if the proposed \$57 to \$65 billion deficit in fiscal year 1978, up from \$48 billion in fiscal year 1977, were reduced to make room for more expansive monetary policy and lower interest rates.

Frankly speaking, I would think the policy mix between monetary and fiscal policy is apt not to be idle, that it would be better to have a more expansive monetary policy and a more restrictive fiscal policy.

The President's energy plan would reduce the level of investment by \$12 billion by 1985 from levels otherwise expected from existing policies. As an aside, the energy plan would cost a \$350 loss of income for each American over what would have occurred with existing policy. In contrast, a real increase in crude oil of only 6 percent per year would improve our national energy situation by 4.2 million barrels per day and cause far less inflation and income loss.

Employment would increase because investment would be encouraged. Investment is discouraged because the administration's energy plan emphasizes primarily conservation while a 6-percent increase in the real price of crude oil and natural gas would encourage both conservation and production.

I would be pleased to share the testimony I gave 2 days ago on that topic.

Representative BOLLING. I would like to have that included in our record.

Mr. CARLSON. I would be pleased to do it.¹

Now, continuing, I would refer to the summary effect. I show this by State in attachment 1. Under the administration's program, you would expect real dollars from the average consumer in the State of Missouri to go down—or I should say, the taxes to go up by \$277; under this balanced approach, you expect producers' receipts to go up \$87, considerably less.

The energy improvement would be higher for your State. Inflation would be 4.2 with the administration's proposal, only 0.9 with a slow deregulation of prices. Employment would be down 43,000 with the administration's program. It would be up 8,000 for your State with the balanced program.

In terms of real per-capita disposable income, it would be down \$316 per person. With a 6-percent release of real crude oil and natural gas prices, it would almost balance out. There would be some slight loss in 1985 and gains in future years.

The President's social security reform would discourage investment by placing most of the increased tax on employers instead of placing it equally on both employer and employee.

The President's environmental message discourages investment through endorsing amendments to the Clean Air Act (for example, nonattainment and nondegradation) that may prohibit the completion of 70 fossil-fueled electric plants needed for 35 million American electric power users.

We asked the administration to see, in fact, if that would be the result from those amendments now being considered in the House.

The Federal Government is considering an increase in the minimum wage which will require business to make otherwise unnecessary investments to substitute for the arbitrarily increased price of unskilled labor.

The administration is considering a Government-run common fund to support world-traded commodities and thus set up a Government mechanism to maintain higher prices, thereby forcing additional investment to find substitutes.

The Congress is considering a Consumer Protection Agency that promises to add another layer of Government bureaucracy with resulting delays, higher cost and, thus, a slowdown in investment.

So, while the Federal Government may serve other desirable objectives, in the instances just cited, its actions and potential actions have uniformly been anti-investment. Moreover, from tax reform discussions it appears less likely that tax reform legislation will stimulate investment. The likelihood of higher tax rates for capital gains may offset a decrease in the double taxation of corporate incomes.

In any case, anti-investment policies are likely to discourage investment more than encourage investment, even including tax reform. Thus, a low rate of investment is likely to plague the economy for the foreseeable future.

Except for inflation and inadequate growth of investment during the next 18 months, the economy will be performing well. However,

¹ See "The Economic Impact of the Administration's Energy Plan," statement before the Senate Finance Committee, June 6, 1977, p. 19.

some geographical areas will experience more growth than others. For example, the 26 States with about one-half of the population which are loosely described as the sun belt States will create 2.7 million jobs while the other States identified as snow belt States will create only 1 million jobs during 1977 and 1978. [See attachment 2.]

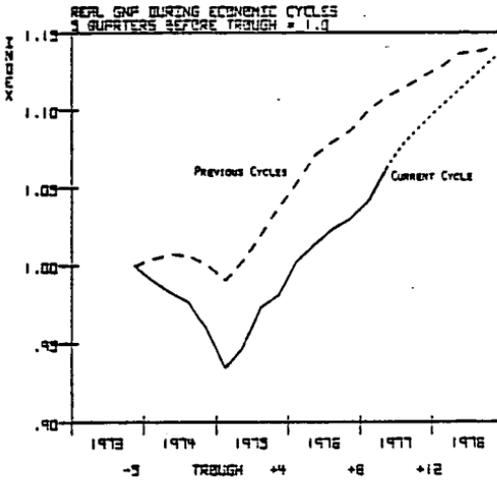
The 10 regions of the country likewise will grow at different rates. The Mountain States, western south-central and Pacific regions will create jobs at a much faster pace than the mid-Atlantic, Northeast and East-North Central States. [See attachment 3.]

The difference among States is most significant, with Idaho, Wyoming, Nevada, Arizona, and Utah as the fastest growing areas for jobs and New York, Pennsylvania, New Jersey, Illinois, Massachusetts, and Ohio as the slower growing States. However, the slower growing States contain the largest concentration of industry and will continue to experience higher levels of per capita income. [See attachment 4.]

This completes my statement. I would be pleased to respond to any questions.

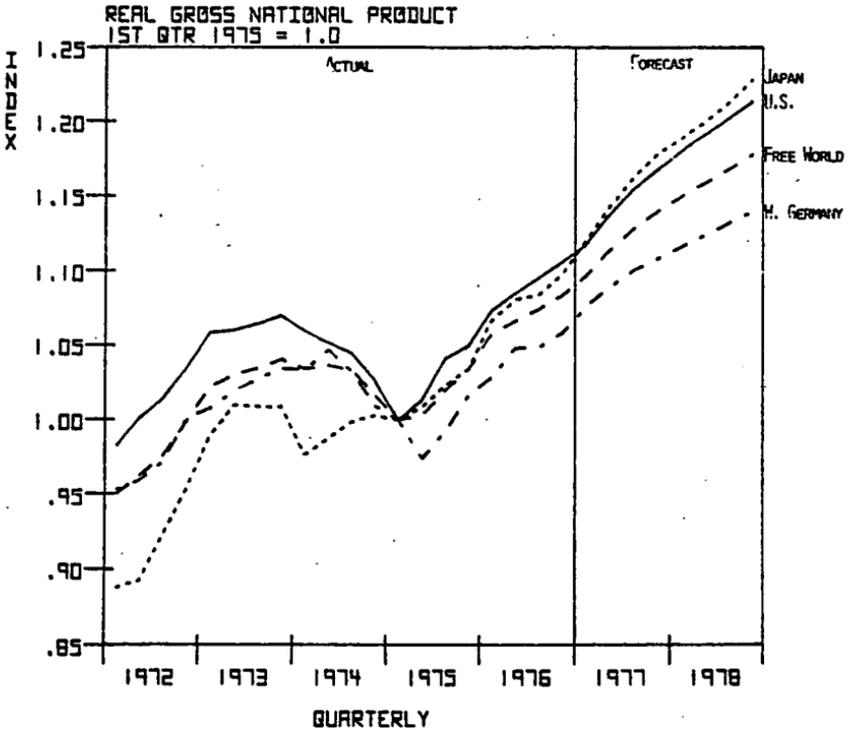
[The charts and attachments attached to Mr. Carlson's statement, together with the statement referred to for insertion in the record follow:]

CHART 1



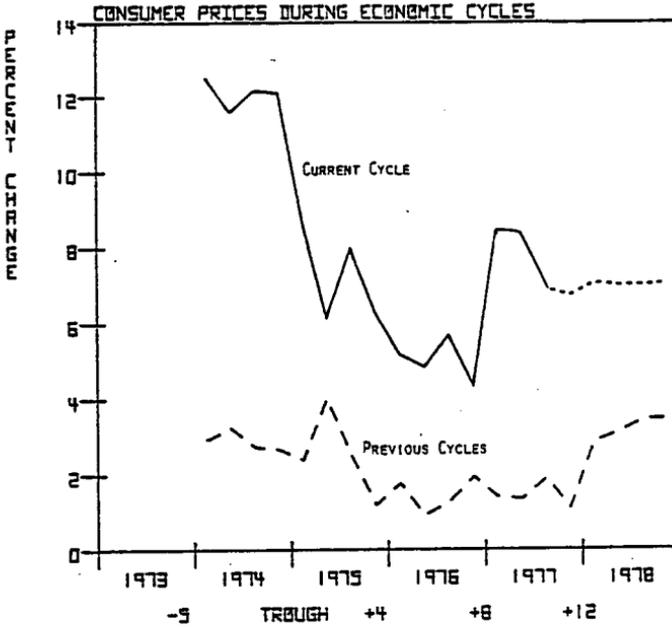
Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics Macro Modelling and Data.

CHART 2



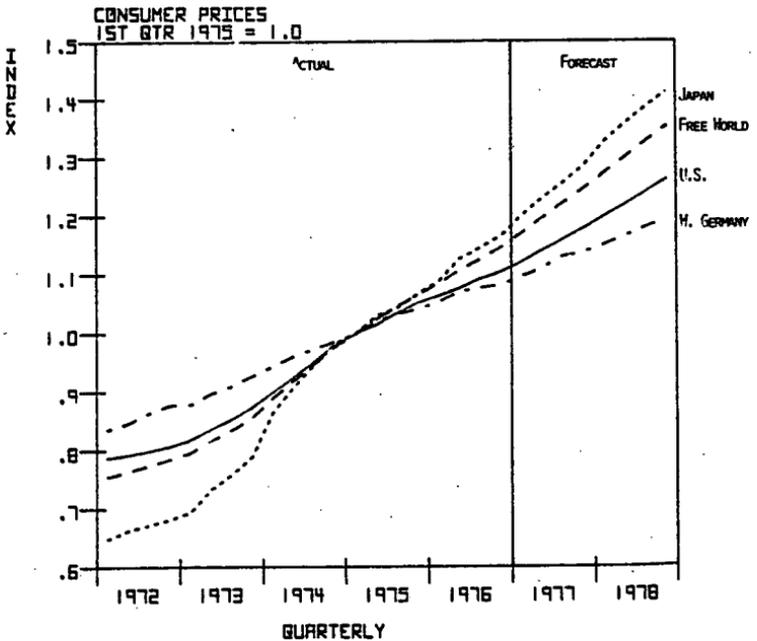
Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics International Modelling and Data.

CHART 3



Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics Macro Modelling and Data.

CHART 4



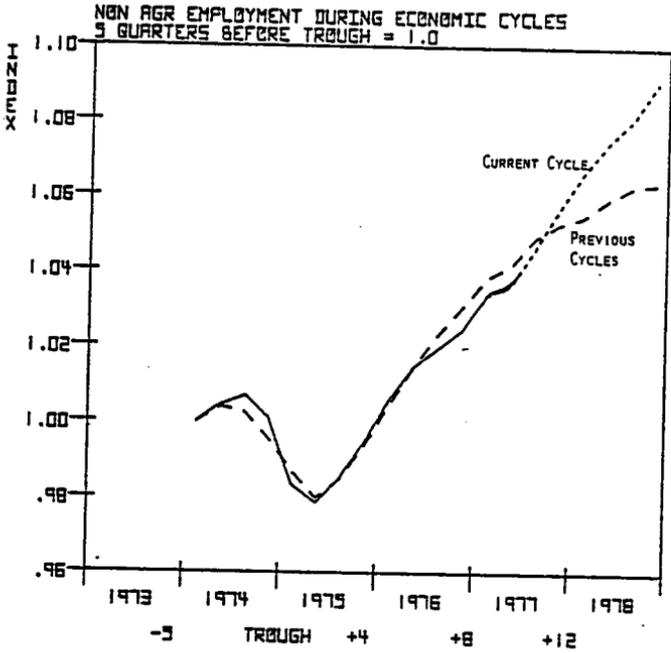
Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics International Modelling and Data.

ATTACHMENT 1

COMPARISON OF THE ADMINISTRATION'S ENERGY CONSERVATION PLAN
AND A BALANCED CONSERVATION AND PRODUCTION APPROACH ON EACH STATE BY 1985

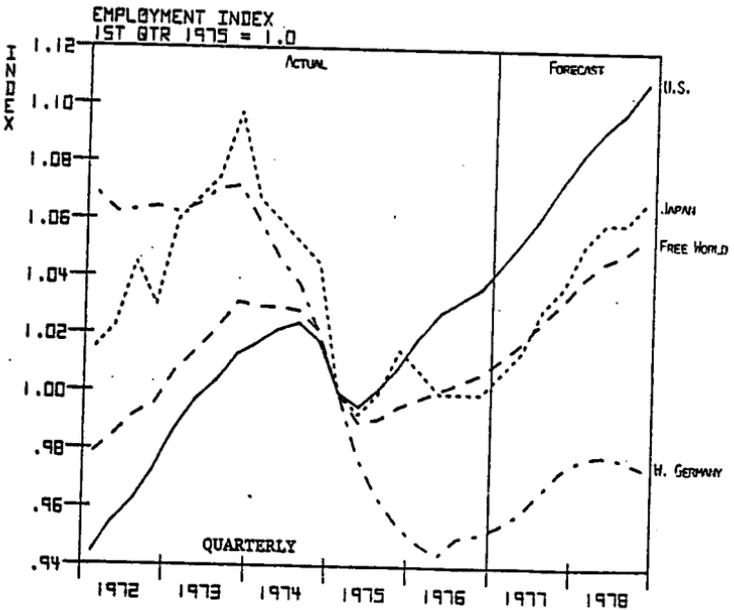
STATES	REAL DOLLARS FROM AVERAGE CONSUMER AS: Fed. Producer Taxes Receipts		ENERGY IMPROVEMENT (1,000 barrels per day)		INFLATION (Percent change in level of prices)		EMPLOYMENT (1,000's of Jobs)		REAL PER CAPITA DISPOSABLE INCOME (1977 dollars)	
	ADM	BAL	ADM	BAL	ADM	BAL	ADM	BAL	ADM	BAL
	ALABAMA	302	95	56	65	3.0	1.2	-26	5	-267	-53
ALASKA	752	237	14	17	3.2	1.3	-4	8	-571	1818
ARIZONA	329	104	37	43	2.4	1.0	-17	3	-438	-88
ARKANSAS	378	119	39	46	3.3	1.3	-14	3	-473	-79
CALIFORNIA	309	96	341	398	2.1	0.8	-177	64	-357	45
COLORADO	296	93	38	44	2.2	0.9	-23	5	-383	0
CONNECTICUT	415	75	69	80	2.7	1.1	-28	5	-298	-89
DELAWARE	601	189	19	22	4.0	1.6	-5	1	-317	0
DIST. OF COLUMBIA	291	92	10	12	1.8	0.8	-9	2	-429	-71
FLORIDA	393	104	173	202	3.1	1.2	-61	9	-336	-34
GEORGIA	293	92	75	87	2.5	1.0	-40	7	-388	-58
HAWAII	610	192	27	31	2.4	1.0	-7	1	-338	0
IDAHO	360	113	15	17	3.2	1.3	-7	1	-277	0
ILLINOIS	286	90	171	199	1.9	0.8	-99	19	-414	-33
INDIANA	310	98	88	103	2.5	1.0	-43	8	-346	-52
IOWA	297	94	43	50	2.1	0.8	-23	5	-344	-69
KANSAS	342	108	39	45	2.4	1.0	-10	7	-431	43
KENTUCKY	239	75	43	50	2.2	0.9	-24	6	-277	-55
LOUISIANA	424	130	78	91	3.5	1.4	-28	32	-286	312
MAINE	540	170	29	33	4.8	1.9	-9	2	-280	0
MARYLAND	325	102	72	84	2.3	0.9	-33	7	-447	-45
MASSACHUSETTS	474	174	147	171	3.5	1.4	-50	8	-335	-48
MICHIGAN	275	87	132	154	1.9	0.8	-71	12	-411	-31
MINNESOTA	314	99	64	75	2.4	1.0	-33	6	-340	-49
MISSISSIPPI	357	112	41	48	3.6	1.5	-16	3	-424	0
MISSOURI	277	87	69	81	2.2	0.9	-43	8	-316	-39
MONTANA	408	129	15	18	3.2	1.3	-5	3	-264	265
NEBRASKA	323	102	25	29	2.4	1.0	-12	2	-443	-64
NEVADA	432	136	13	15	3.1	1.2	-61	11	-371	-32
NEW HAMPSHIRE	437	138	18	21	3.0	1.2	-7	1	-357	-30
NEW JERSEY	368	116	147	171	2.5	1.0	-59	10	-359	-37
NEW MEXICO	366	115	21	25	3.6	1.4	-9	4	-257	171
NEW YORK	352	111	336	391	2.4	1.0	-149	20	-362	-83
NORTH CAROLINA	270	85	77	89	2.3	0.9	-45	9	-296	-35
NORTH DAKOTA	385	120	13	16	3.2	1.3	-5	3	-270	0
OHIO	220	70	130	151	1.8	0.7	-90	16	-343	-17
OKLAHOMA	305	95	42	49	2.6	1.1	-21	9	-360	144
OREGON	300	90	34	40	2.2	0.9	-19	4	-426	-128
PENNSYLVANIA	260	80	166	194	3.2	1.3	-99	20	-332	-47
RHODE ISLAND	308	97	17	20	3.0	1.2	-9	2	-291	-15
SOUTH CAROLINA	283	89	41	47	2.4	1.0	-23	4	-350	-105
SOUTH DAKOTA	384	121	13	16	3.2	1.3	-5	1	-290	-15
TENNESSEE	240	76	54	64	2.3	0.9	-35	7	-263	-44
TEXAS	370	116	230	268	2.8	1.1	-100	45	-328	80
UTAH	346	109	22	26	2.9	1.2	-10	5	-326	163
VERMONT	350	110	9	10	2.4	1.0	-4	1	-417	-30
VIRGINIA	441	139	118	137	3.4	1.4	-38	8	-377	-75
WASHINGTON	314	102	57	67	2.1	0.9	-28	5	-394	-56
WEST VIRGINIA	214	67	19	23	1.7	0.7	-12	3	-446	0
WISCONSIN	265	83	63	73	1.9	0.8	-38	7	-423	-42
WYOMING	625	197	12	14	1.6	0.7	-4	2	-510	510
U. S.	330	105	3600	4200	2.4	1.0	-1730	430	-350	-18

CHART 5



Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics Macro Modelling and Data.

CHART 6



Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics International Modelling and Data.

CHART 7

REAL NON RES INV DURING ECONOMIC CYCLES
5 QUARTERS BEFORE TROUGH = 1.0

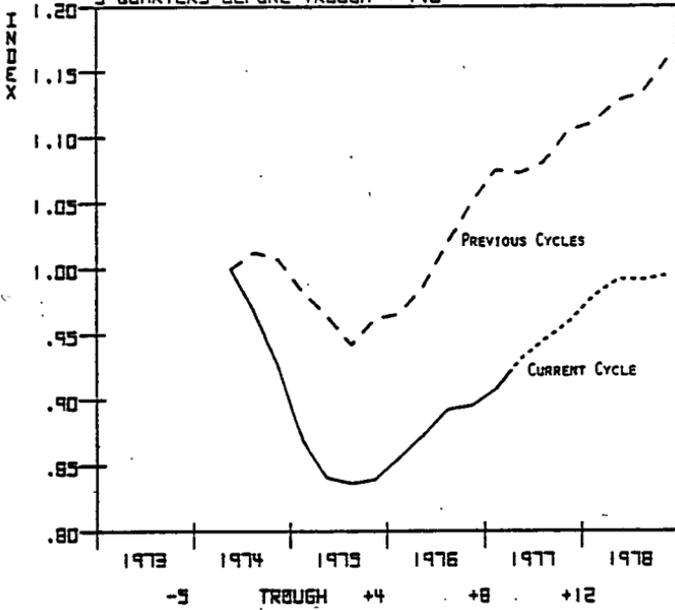
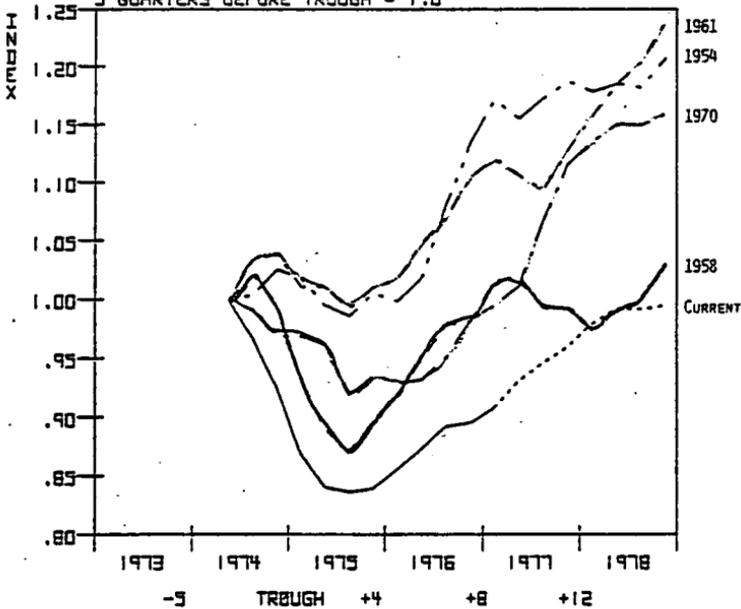


CHART 8

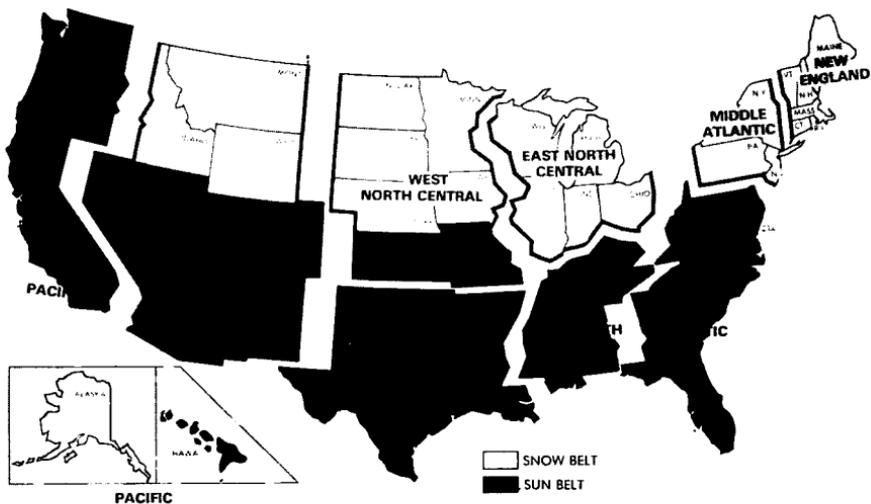
REAL NON RES INV DURING ECONOMIC CYCLES
5 QUARTERS BEFORE TROUGH = 1.0



Source: National Chamber Forecasting Center, Data Resources, Inc. and Chase Econometrics Macro Modelling and Data.

ATTACHMENT 2

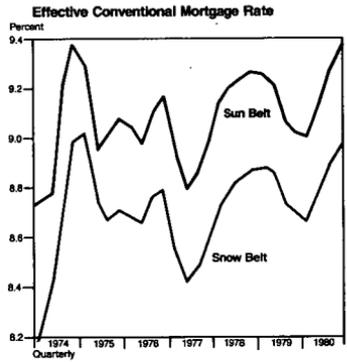
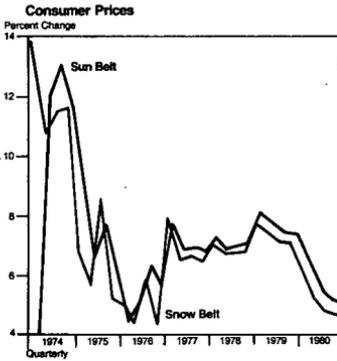
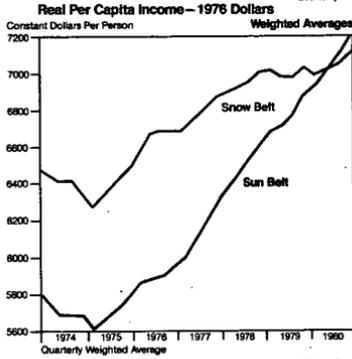
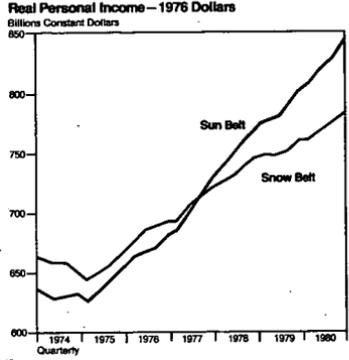
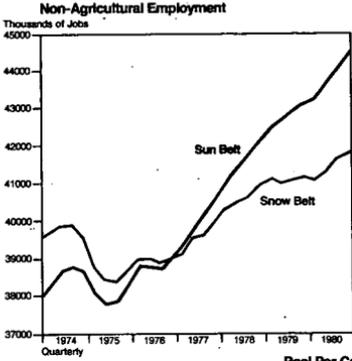
THE GREAT SHIFT SOUTH AND WEST FOR JOBS



by
The Forecasting Center
Economic Policy Division
Chamber of Commerce of the United States of America
1615 H St. N.W. Washington D.C. 20062
May 1977

Price: \$1.00

SUN BELT VERSUS SNOW BELT



COMMENTARY

One of the most significant economic developments in the history of the United States occurred last year with virtually no fanfare.

During the fourth quarter of 1976, total nonagricultural employment in the South and West passed that of the rest of the nation.

The nation's economic growth center has gradually been shifting southward and westward for several decades, but last year's landmark event in employment patterns demonstrates how the trend has intensified in recent years.

More than 50 percent of national output of goods and services soon will be provided by what may loosely be called the sunbelt—26 states that have mild and attractive climates (see map on front cover). The other 24 states may be called the snowbelt states, and in general they are lagging behind the sunbelt in growth of jobs and incomes.

A comparison of the sunbelt and snowbelt regions shows these economic trends:

Employment

Sunbelt employment is expected to grow by five million jobs by 1980, against only 1.9 million new jobs in the snowbelt states. These figures reflect a sunbelt employment growth rate of 3.2 percent, which is in sharp contrast to a growth rate of only 1.5 percent expected in the snowbelt.

Income

Real personal income is also growing faster in the sunbelt. Total personal income in the South and West is increasing at a rate that will bring it up to the level of snowbelt income during the fourth quarter of this year. By the middle of 1980, per capita income will also be on a par.

These changes reflect a real per capita income growth rate of 4.9 percent in the sunbelt, against 1.5 per cent in the other states.

Inflation

As is typical for rapidly expanding areas, the sunbelt will likely experience a slightly higher rate of inflation than the snowbelt through 1980.

Home mortgage rates will also be somewhat higher, reflecting rapid expansion of the economy and increasing demand for housing.

Economic Stability

The sunbelt appears to weather economic recessions better. For example, in the 1974-75 recession, employment declined by two percent in the sunbelt, four percent in the snowbelt. Slow growth forecast for 1979 will be felt more in the snowbelt states. This is understandable because heavy investment is disproportionately located in northern states, and industrial activity tied to the automobile industry fluctuates widely.

The sunbelt states, with a more diversified industrial mix including many service-oriented industries, feel the effects of an economic slowdown much less. Consequently, mild recessions in the future will add to the differences between sunbelt and snowbelt areas.

Political Impact

More jobs mean not only more workers, but also more families of workers. Population shifts to the South and West will have a marked impact on the political, social, and cultural activities of those regions. These changes will, in turn, affect the nation as a whole over the next century.

Since 1940, for example, the number of members of the House of Representatives from the sunbelt states has increased from 198 to 218—a bare majority of the total membership of the House. The sunbelt is expected to gain even more representatives on the basis of the 1980 census, further reducing the delegations from the longtime political power centers of the Northeast.

SUN BELT VERSUS SNOW BELT

Years	Non Agricultural Employment			Personal Income					Consumer ¹ Prices			Effective ¹ Mortgage Rates
	Jobs (1000's)	Increase (1000's)	Chng (%)	Current (\$ bil)	Chng (%)	Constant (\$ bil 76)	Chng (%)	Real per ¹ Capita (\$ 76)	Chng (%)	Chng (%)	Index (67=1.0)	(%)
Sun Belt												
1976	39382	829	2.2	682.1	10.2	669.9	4.8	5893	3.5	5.8	1.687	9.1
1977	40544	1162	3.0	758.7	11.2	703.7	5.1	6143	4.3	6.8	1.802	8.9
1978	42109	1505	3.9	858.7	13.1	748.2	6.3	6490	5.6	7.1	1.929	9.0
1979	43345	1236	2.9	964.1	12.3	783.5	4.7	6764	4.2	7.5	2.073	8.8
1980	44396	1051	2.4	1071.3	11.1	819.8	4.6	7055	4.3	6.4	2.206	8.9
Snow Belt												
1976	38457	387	1.0	700.8	9.8	688.3	4.6	6667	4.4	5.6	1.702	8.7
1977	39041	584	1.5	764.7	9.1	709.3	3.1	6795	1.9	6.4	1.810	8.6
1978	40006	465	1.2	845.6	10.6	736.9	3.8	6962	2.4	6.9	1.935	8.6
1979	40499	493	1.2	928.6	9.8	754.8	2.4	7016	0.8	7.4	2.078	8.5
1980	40820	321	0.8	1010.0	8.8	773.0	2.4	7054	0.5	6.3	2.208	8.5
United States⁴												
1976	77839	1213	1.6	1382.8	10.0	1358.2	4.7	6265	3.9	5.7	1.705	8.9
1977	79585	1746	2.2	1523.3	10.2	1413.0	4.0	6457	3.1	6.5	1.816	8.8
1978	82115	2530	3.2	1704.2	11.9	1485.0	5.1	6718	4.0	7.0	1.943	9.0
1979	83844	1729	2.1	1892.6	11.1	1538.3	3.6	6887	2.5	7.4	2.087	9.0
1980	85216	1372	1.6	2081.2	10.1	1592.7	3.5	7054	2.4	6.4	2.220	9.1

¹ Population weighted averages.

² Sun Belt consumer prices represent the average of the following SMSA's: Atlanta, Baltimore, Washington, D.C., Kansas City, St. Louis, Dallas, Houston, Honolulu, Los Angeles-Long Beach, Portland, San Diego, San Francisco-Oakland, and Seattle-Everett.

³ Snow Belt consumer prices represent the average of the following SMSA's: Boston, Buffalo, New York, Philadelphia, Pittsburgh, Scranton, Chicago, Cincinnati, Cleveland, Detroit, Milwaukee, and Minneapolis-St. Paul.

⁴ Sun Belt mortgage rates represent the average of the following SMSA's: Atlanta, Baltimore, Miami, Dallas, Houston, Denver, Los Angeles-Long Beach, San Francisco-Oakland, and Seattle-Everett.

⁵ Snow Belt mortgage rates represent the average of the following SMSA's: Boston, New York, Philadelphia, Chicago, Cleveland, Detroit, and Minneapolis-St. Paul.

⁶ Details may not add to totals due to rounding.

ATTACHMENT 3

Economic forecast through 1980

Benefits from economy vary by regions

By Dr. Jack Carlson
Chief Economist

Chamber of Commerce of the United States

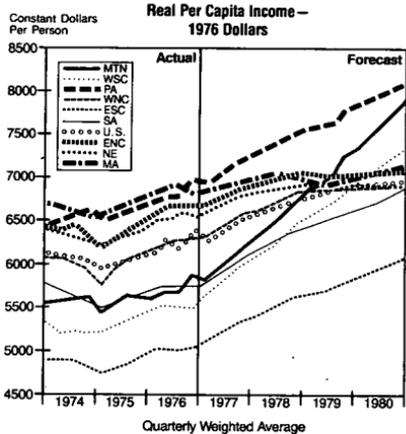
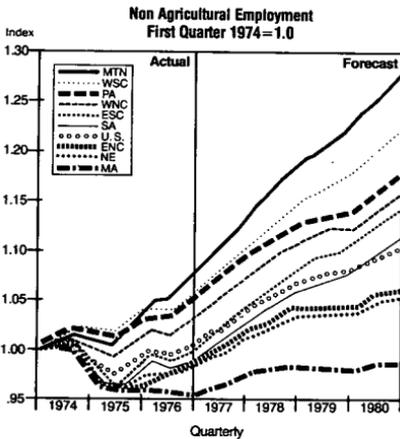
■ The U.S. economy is forecast to grow at rates above average for 1977 and 1978 and then below average for 1979 and 1980. However, the benefits of national growth are not shared equally for each region. Job growth will be twice the national growth in the mountain states (see accompanying map, graphs, and table). Employment will climb rapidly for all states west of the Mississippi, and slightly above average for the East South Central and South Atlantic regions.

Unfortunately the Middle Atlantic states of Pennsylvania, New Jersey and New York can promise only a small rate of growth in jobs. Also, the New England and East North Central states are forecasted to grow below

This analysis is based on the National Chamber's new capability to forecast national, regional, and state economic conditions. For sun belt—snow belt forecast, see NATION'S BUSINESS, May 1977. More detailed forecasts of particular regions or states are available at \$1.00 each by writing: George Tresnak, Forecasting Center, Chamber of Commerce of the United States, 1615 H St. N.W., Washington, D.C. 20062.

tral regions—which include the industrial heartland of the U.S.

Much of the variations in regional growth can be explained by the development of energy sources and the



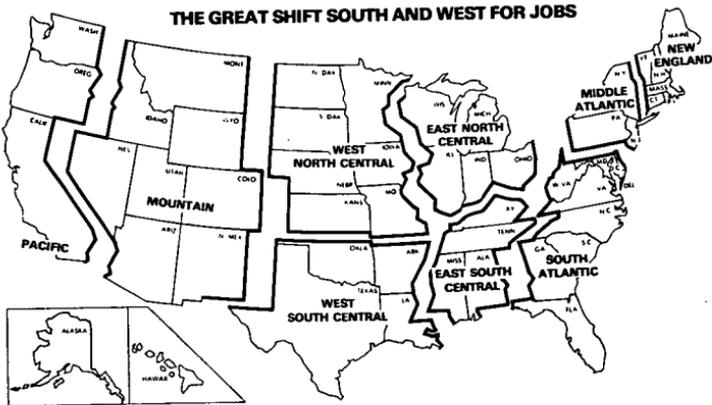
the national average. These three regions suffer most during periods of slow growth such as projected during 1979 and 1980.

The pattern is similar with growth in income. The regions west of the Mississippi and south of the Mason-Dixon line are forecast to grow considerably faster than the New England, Middle Atlantic and East North Cen-

milder climate attraction to tourists and retirees. Also, longer term trends reveal that manufacturing and service industries are shifting to milder climates for the benefit of their employees, lower wages, lower cost of land and lower taxes. However, many of the current cost advantages of regions with milder climate are forecast to disappear within a decade.

Jobs, personal income by regions

Non Agricultural Employment	U.S.	New England	Middle Atlantic	South Atlantic	East North Central	East South Central	West North Central	West South Central	Mountain	Pacific
Jobs (1000's)										
1976	77839	4707	13794	12053	15363	4450	6079	7286	3528	10579
1977	79585	4802	13850	12331	15646	4568	6252	7523	3695	10919
1978	82115	4927	14088	12793	16058	4753	6478	7848	3879	11292
1979	83144	4493	14161	13144	16261	4896	6649	8126	4040	11574
1980	85216	5041	14143	13436	16420	5024	6787	8377	4182	11807
Increase (1000's)										
1976	1213	59	-81	204	278	94	135	166	134	228
1977	1746	95	55	279	283	118	172	237	167	340
1978	2530	126	238	462	412	185	226	325	184	373
1979	1729	65	73	351	204	143	172	278	161	282
1980	1372	49	-18	292	159	128	137	251	142	232
Percent Chg (%)										
1976	1.6	1.3	-0.6	1.7	1.8	2.2	2.3	2.3	3.9	2.2
1977	2.2	2.0	0.4	2.3	1.8	2.7	2.8	3.3	4.7	3.2
1978	3.2	2.6	1.7	3.7	2.6	4.1	3.6	4.3	5.0	3.4
1979	2.1	1.3	0.5	2.7	1.3	3.0	2.7	3.5	4.2	2.5
1980	1.6	1.0	-0.1	2.2	1.0	2.6	2.1	3.1	3.5	2.0
Personal Income Real Per Capita (\$ Bil 76 per person)										
1976	6265	6557	6840	5743	6640	5026	6240	5498	5727	6829
1977	6457	6717	6935	5978	6776	5221	6384	5823	6023	7078
1978	6718	6870	7015	6286	6971	5516	6655	6266	6525	7415
1979	6887	6901	6987	6508	7034	5725	6849	6672	7035	7671
1980	7054	6920	6930	6736	7081	5938	7052	7129	7620	7936
Percent Chg (%)										
1976	3.9	4.2	3.6	3.2	5.1	4.0	4.6	3.5	3.0	3.4
1977	3.1	2.4	1.4	4.1	2.1	3.9	2.3	5.9	5.2	3.6
1978	4.0	2.3	1.1	5.2	2.9	5.6	4.2	7.6	8.3	4.8
1979	2.5	0.5	-0.4	3.5	0.9	3.8	2.9	6.5	7.8	3.4
1980	2.4	0.3	-0.8	3.5	0.7	3.7	3.0	6.8	8.3	3.5



ATTACHMENT 4

STATES	EMPLOYMENT						REAL PER CAPITA INCOME			
	Jobs (1000's)		Increase (1000's)		Change (%)		\$1976		Change (%)	
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978
ALABAMA	1216	1263	35	46	3.0	3.8	5137	5461	3.3	5.9
ALASKA	171	183	-3	12	-1.6	7.1	11118	12738	9.5	14.6
ARIZONA	779	823	34	44	4.6	5.7	5295	6483	4.7	8.1
ARKANSAS	668	698	25	31	3.9	4.6	4446	4687	4.1	5.4
CALIFORNIA	8210	8475	246	264	3.1	3.2	7231	7521	3.2	4.0
COLORADO	1009	1054	34	44	3.5	4.4	6565	7060	4.0	7.5
CONNECTICUT	1250	1282	22	31	1.8	2.5	7585	7793	2.7	2.7
DELAWARE	236	243	5	7	2.1	3.1	7265	7426	0.8	2.2
DIST. OF COLUMBIA	595	620	13	25	2.2	4.2	8665	9034	5.7	4.3
FLORIDA	2782	2909	65	127	2.4	4.6	6220	6619	4.7	6.4
GEORGIA	1798	1858	40	60	2.3	3.4	5656	5972	4.0	5.6
HAWAII	349	359	7	10	2.2	2.8	6100	6675	3.7	6.1
IDAHO	305	321	22	16	7.8	5.2	5871	6353	6.1	8.2
ILLINOIS	4491	4570	58	79	1.3	1.8	7411	7578	1.4	2.3
INDIANA	2024	2081	45	56	2.3	2.8	6252	6436	2.5	2.9
IOWA	1039	1076	25	37	2.5	3.5	6655	6825	1.9	2.6
KANSAS	854	896	28	42	3.4	5.0	6661	7093	2.4	6.5
KENTUCKY	1092	1133	27	41	2.6	3.8	5461	5719	4.5	4.7
LOUISIANA	1235	1281	27	46	2.3	3.7	4737	5086	4.9	7.4
MAINE	377	388	11	11	3.0	2.9	5569	5939	5.9	6.6
MARYLAND	1485	1529	39	44	2.7	2.9	7068	7313	2.8	3.5
MASSACHUSETTS	2327	2385	34	58	1.5	2.5	6666	6720	1.0	0.8
MICHIGAN	3276	3374	78	98	2.4	3.0	7032	7272	3.2	3.4
MINNESOTA	1549	1604	43	56	2.9	3.6	6430	6714	2.8	4.4
MISSISSIPPI	701	733	17	32	2.5	4.6	4568	4910	3.7	7.5
MISSOURI	1787	1839	40	52	2.3	2.9	6136	6338	3.2	3.3
MONTANA	254	265	11	11	4.4	4.5	5017	5364	1.9	6.9
NEBRASKA	583	604	20	21	3.6	3.7	6616	6948	1.2	5.0
NEVADA	293	310	16	16	5.7	5.5	6449	6867	5.4	6.5
NEW HAMPSHIRE	322	333	12	11	3.8	3.4	6100	6429	6.1	5.4
NEW JERSEY	2696	2751	29	55	1.1	2.0	7236	7330	1.1	1.3
NEW MEXICO	399	419	15	20	4.0	4.9	5438	5943	7.5	9.3
NEW YORK	6712	6799	2	87	0.0	1.3	7132	7160	1.4	0.4
NORTH CAROLINA	2039	2124	37	85	1.9	4.2	5596	5863	4.3	4.8
NORTH DAKOTA	219	228	9	9	4.4	4.1	6224	6712	-0.5	6.1
OHIO	4118	4242	65	124	1.6	3.0	6347	6500	1.1	2.4
O'LAHOMA	945	982	35	37	3.9	3.9	5889	6295	6.2	6.9
OREGON	904	941	39	37	4.5	4.1	5605	5968	5.4	6.5
PENNSYLVANIA	4442	4538	25	97	0.6	2.2	6447	6595	1.5	2.3
RHODE ISLAND	358	366	10	9	2.9	2.4	6529	6599	2.8	1.1
SOUTH CAROLINA	1048	1086	29	38	2.9	3.6	5279	5606	5.7	6.2
SOUTH DAKOTA	221	230	7	9	3.2	3.9	5338	5673	-0.2	6.3
TENNESSEE	1559	1624	39	66	2.6	4.2	5441	5723	3.9	5.2
TEXAS	4675	4887	149	212	3.3	4.5	6374	6889	6.3	8.1
UTAH	488	510	24	21	5.1	4.4	5659	6173	6.8	9.1
VERMONT	168	174	5	6	3.2	3.4	5575	5872	4.1	5.2
VIRGINIA	1766	1826	38	60	2.2	3.4	5478	5726	3.7	4.5
WASHINGTON	1284	1334	50	50	4.1	3.9	6932	7403	4.6	6.8
WEST VIRGINIA	581	597	11	16	1.9	2.7	5299	5648	2.6	4.6
WISCONSIN	1736	1790	38	54	2.2	3.1	6320	6611	3.3	4.6
WYOMING	168	178	11	10	6.9	6.3	7034	8052	7.2	14.5
U. S.	79585	82115	1746	2530	2.2	3.2	6265	6457	3.1	4.0

STATEMENT
on
THE ECONOMIC IMPACT OF THE ADMINISTRATION'S ENERGY PLAN
before the
SENATE FINANCE COMMITTEE
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
Dr. Jack Carlson
June 6, 1977

I appreciate the opportunity to share with you the National Chamber's assessment of the Administration's Energy Plan. Having served as Assistant Secretary of Interior for Energy and Minerals, Assistant Director of the U.S. Bureau of the Budget and Office of Management and Budget and with the Council of Economic Advisers, I have been concerned with energy and economic policy for more than a decade. I am no less concerned today as Vice President and Chief Economist of the National Chamber.

SUPPORT ADMINISTRATION'S OBJECTIVES

The National Chamber supports the President's objective of reduced dependency on high price and interruptible sources of oil supply from abroad. We appreciate the President's efforts to bring this to the attention of the American people. We look forward to working with the Administration and the Congress to develop a wise energy policy. In particular we will work to develop a program that will achieve the President's objective without needlessly disrupting the American economy, causing unemployment, inflation and loss of income. Also such a program should restrain Federal taxes, regulations and red tape, and enhance freedom of choice for all Americans.

ADMINISTRATION PROGRAM OF CONSERVATION

The Administration proposes to reduce dependence on foreign oil by primary emphasis on conservation, through higher taxes, prices, and more

regulations. The additional taxes can potentially total \$783 billion from 1978 through 1990 or about \$13,000 for each American family (see Table 1). Without the gasoline and gas guzzler taxes, new tax receipts could total \$285 billion or nearly \$5,000 per family through 1990 (see Table 2). ^{1/}

The proposed tax and spending increases are the largest in the peacetime history of the United States. By 1985, if the rest of the Federal taxes and spending were to remain at 21% of GNP and grow at the same rate as the nation's income and output, the proposed taxes and spending would increase the size of the Federal government to 25% of GNP (see Table 4).

The taxes would be disproportionately drawn from lower income households. The lower half of household income receivers would pay two-thirds of the increased taxes while the top 50% of household income receivers would pay only one-third. The taxes proposed by the Administration would be the most regressive Federal taxes (see Table 15).

The tax increases are intended to increase consumer prices for oil and natural gas but the way they are structured they will decrease prices for producers. Limiting intra-state real natural gas prices to \$1.75 per 1,000 cubic feet will effectively roll back natural gas prices now and in future years. Replacement of the 10% adjustment in crude oil prices with adjustment for only inflation will be a rollback of crude oil prices during the next decade (see Table 5).

Based on reasonable estimates of the reactions of American consumers and producers to price increases or decreases (see Table 6) and a forecast of energy

^{1/} Uranium and coal producers could expect some increase in revenues while oil and gas producers would suffer a loss of receipts because of rollbacks in prices they would otherwise receive under existing policies (see Table 3).

consumption (see Table 7), an estimate can be made of the energy improvement likely from the Administration's Energy Plan (see Table 8). The potential for additional production is large: conservatively estimated at 40 years of current U.S. consumption from domestic sources. Although differently derived, the total energy improvement estimate for 1985 is the same as estimated by the Congressional Budget Office: an improvement of 3.6 million barrels of oil per day.

This generously assumes that all of the approximately 250 fossil fuel fired electric generating plants under construction for use between now and 1985 will satisfy the more stringent provisions of the final amendments to the Clean Air Act, whether similar to H.R. 4151, S.252 or S.253. Apparently, at least 41 of the electric power plants required to serve the electricity needs of 23 million Americans may fail to meet non-attainment requirements and at least 30 other plants required to serve 15 million other Americans may fail to meet non-degradation requirements. The Administration has been asked to assess whether these plants will meet the more stringent requirements being considered by the Congress. Ignorance can cause electric power users to pay unnecessarily higher utility bills and could reduce the reliability of the electric power grid causing brown-outs and black-outs in the 1980's and 1990's. Unfortunately the Administration is slow in responding and making these vital assessments on a timely basis.

The Administration's Energy Plan shows a slowing in the growth of energy consumption from 3.3% otherwise expected to 2.4%. However, the Administration's Plan turns sour after 1985 and leads to less improvement until 1990 when existing policy would be better than the Plan (see Table 8).

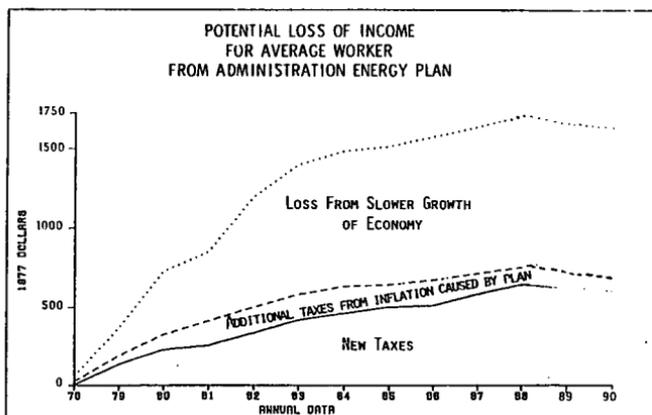
ECONOMIC IMPACT OF ADMINISTRATION'S ENERGY PLAN

The Administration's Plan assures a significant impact on the U.S. economy. Although the Administration has yet to propose a specific rebate and/or spending program, an assumption can be made as to its likely distribution (see Table 9). Full implementation of the Administration's Program would cause:

- 2½% to 3% higher consumer prices
- a loss of 1,700,000 jobs by 1985
- family disposable incomes to be \$1,300 lower than with existing energy policies
- GNP to be 2½% lower
- business fixed investment to be 4% or \$12 billion lower (see Table 10).

The average worker can appreciate the impact of the Administration's Energy Plan by observing that he risks losing 10% of his spendable income by 1985. This would be equivalent to a real loss of about \$1,600 in 1985 from what would have been his income with existing Federal energy policies. He takes little consolation from a promise of a rebate in one form or another. (see Chart 1 and also Table 11).

CHART 1



If the gasoline and gas guzzler taxes are not included the economic consequences are somewhat reduced (see Charts 2-7 on pages A18-20).

FEDERAL LOCKUP OF ENERGY RESOURCES

While the Federal government asks for major sacrifices of Americans, it proposes no effort to use Federal resources. Half of the nation's fossil fuel endowment is held by the Federal government, but in 1976 it produced less than 10% of the nation's output. Seventy-five percent of the on-land Federal domain is now withdrawn from or seriously restricted for energy and mineral leasing and even more restrictions are being considered by the Congress, particularly in Alaska (e.g. H.R.39 and H.R.1652). These additional restrictions being considered this year could effectively withhold as much as 20% of the additional production of crude oil in the future. No more than 4% of the Federal offshore holdings on the continental shelf have been developed for oil and gas and nearly all of that is off the producing states of Louisiana and Texas. Even very modest schedules for exploration in only a few of the OCS provinces are continuously delayed by the Administration.

In the case of particular fuels, 40% of total U.S. coal reserves are under Federal lands; more than 70% of the low-sulfur, low-cost coal reserves of the West are under government land, of which 25% in turn is under restriction not to be used for energy purposes. Most of the remainder is not now available and has not been available for half of a decade because of an ill-timed moratorium on Federal coal leasing. Seventy-two percent of oil shale is on Federal lands and 85% of tar sands where excessive Federal regulations and restrictions hamper development. Fifteen percent of developed and discovered oil reserves and resources and perhaps a third of undiscovered oil resources are on Federal lands. Twenty percent of discovered natural gas reserves and resources are on Federal lands.

The fact that only 10% of domestic production is generated from 50% of the nation's fossil fuel endowment which is located on Federal lands is clear evidence that the Federal government is withholding America's energy resources. While we fight an energy crisis, "the moral equivalent to war", the Federal government embargoes our resources. At least foreign supplies allow us to purchase energy although at high prices; the Federal government won't even allow access at any price.

Federal land-use policies must be brought in line with the President's energy objectives. Americans should not be asked to sacrifice more than is truly necessary.

BALANCED PROGRAM OF BOTH CONSERVATION AND PRODUCTION

Far simpler, safer, less painful, less government approaches are available. For example, the Federal government need only allow crude oil and natural gas prices to increase slowly to match or exceed the improvement in energy proposed by the Administration. For example, if real crude oil and natural gas prices were allowed to increase only 6% per year until 1985, energy improvement from both conservation and production would be 4.2 million barrels a day (MBPD) compared to only 3.6 MBPD under the Administration's Conservation Program (see Table 12).

By 1990, the Administration's Plan will have dissipated and actually be worse than existing policy. A balanced plan would exceed 5MBPD and increase in subsequent years. Such a balanced program would greatly reduce inflation, job loss, loss of income, and lower investment (also see Table 13).

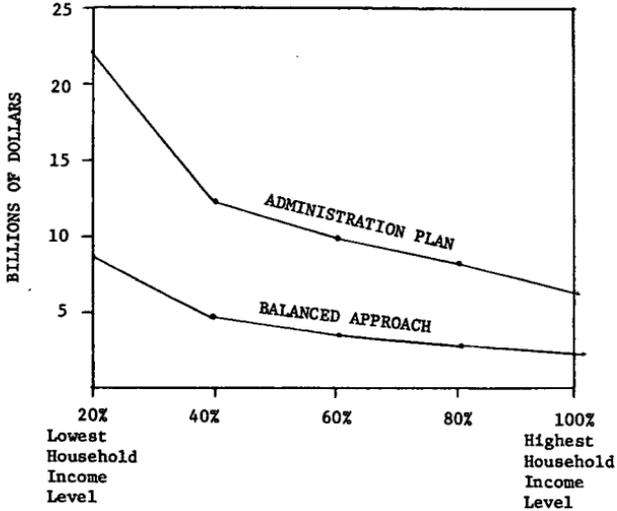
- 7 -

<u>By 1985:</u>	<u>Administration's Conservation Plan</u>	<u>Balanced Conservation and Production Plan</u>
Inflation	2.4%	1%
Jobs	1.7 million lost	0.4 million <u>gained</u>
Spendable Family Income	\$1,300 lower	Only \$67 lower (positive after 1987)
Investment	\$12 billion less	\$12 billion <u>more</u>

These improvements would be reflected in every state in the Union. Every state is better off with a balanced program in contrast to the Administration's Conservation Plan. Some states benefit more or suffer less because they tend to use less energy per person, per dollar of income or per worker than others. Also producer states benefit from new jobs when output is increased (see Table 14).

Such a balanced approach would also greatly reduce the burden on low income households. The Administration's Conservation Plan would impose \$234 billion of taxes on the lower one-fifth of household income receivers through 1990 while only \$78 billion of additional sales receipts would come from this income class with a balanced program. Moreover, the additional receipts to producers would provide the funds for job-creating investment necessary for the larger work force in the future (see Chart 8 on next page and Table 15).

CHART 8



CONCLUSION

I recommend the Congress accept the President's energy objectives by selecting a balanced approach that encourages both conservation and production. Such an approach could be small increases in the price of crude oil and natural gas. Analyses show that just a 6% real increase in crude oil and natural gas prices above that allowed under existing policy can achieve the President's objectives for energy improvement at far less stress on Americans or without a large expansion of government taxes, regulations and red tape. This kind of approach is far better than the Administration's Energy Conservation Plan.

ATTACHMENT

BACKGROUND INFORMATION
ON THE ENERGY AND ECONOMIC IMPACT
OF THE
ADMINISTRATION'S ENERGY CONSERVATION PLAN
AND A
BALANCED PLAN OF BOTH CONSERVATION AND PRODUCTION

- A1 -

TABLE 1

 ADMINISTRATION'S PROPOSED ENERGY TAX INCREASES
 (Billions of 1977 dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1978- 1990 Total
Crude Oil	\$5	\$9	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$146
Industrial	-	3	4	4	5	5	6	6	6	5	4	4	4	56
Utility	-	-	-	-	-	2	2	2	2	2	2	2	2	16
Gasoline	-	5	10	15	20	25	30	35	40	45	50	50	50	375
Auto Efficiency	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>20</u>						
TOTAL DIRECT TAXES	6	18	27	32	38	45	52	57	62	66	70	70	70	613
Additional Federal Taxes from inflation caused by Energy Taxes (e.g. Federal Personal Income Tax Receipts increase 1.4% for each 1% of inflation)	<u>2</u>	<u>5</u>	<u>9</u>	<u>13</u>	<u>16</u>	<u>19</u>	<u>18</u>	<u>16</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>14</u>	<u>13</u>	<u>170</u>
TOTAL DIRECT AND INDIRECT TAXES	8	23	36	45	54	64	70	73	77	81	85	84	83	783

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

- A2 -

TABLE 2

ADMINISTRATION'S PROPOSED ENERGY TAX INCREASES
 (EXCLUDING GASOLINE AND AUTOMOBILE TAXES)
 (Billions of 1977 dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1978- 1990 Total
Crude Oil	\$5	\$9	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$146
Industrial	-	3	4	4	5	5	6	6	6	5	4	4	4	56
Utility	-	-	-	-	-	2	2	2	2	2	2	2	2	16
TOTAL DIRECT TAXES	5	12	16	16	17	19	20	20	20	19	18	18	18	218
Additional Federal Taxes from inflation caused by Energy Taxes (e.g. Federal Personal Income Tax Receipts increase 1.4% for each 1% of inflation)	0	4	5	7	8	9	8	6	5	4	4	4	3	67
TOTAL DIRECT AND INDIRECT TAXES	5	16	21	23	25	28	28	26	25	23	22	22	21	285

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

- A3 -

TABLE 3

CHANGES IN FUNDS FLOWING TO PRODUCERS
 CAUSED BY ADMINISTRATION'S PROPOSED TAX INCREASES
 (Billions of 1977 dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1978- 1990 Total</u>
Coal and Uranium Producers	-	2	3	4	5	6	8	11	13	14	15	16	17	114
Oil and Gas Producers	<u>-2</u>	<u>-4</u>	<u>-6</u>	<u>-7</u>	-7	-7	-7	-7	-7	-7	-7	-7	-7	<u>-82</u>
TOTAL PRODUCER RECEIPTS	-2	-2	-3	-3	-2	-1	1	4	6	7	8	9	10	32

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

- A4 -

TABLE 4

ADMINISTRATION'S ENERGY PLAN AND INCREASE IN TAXES
 FASTER THAN THE GROWTH OF THE ECONOMY
 (Percent of GNP)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Administration's Objective -- Federal Taxes as a percentage of GNP	21	21	21	21	21	21	21	21	21	21	21	21	21
Additional Federal Taxes in the Energy Plan as a percentage of GNP	<u>0.5</u>	<u>1.9</u>	<u>2.4</u>	<u>3.1</u>	<u>3.4</u>	<u>3.7</u>	<u>3.9</u>	<u>4.0</u>	<u>4.1</u>	<u>4.2</u>	<u>4.3</u>	<u>4.3</u>	<u>4.3</u>
Resulting Federal Taxes as a percentage of GNP	21.5	22.9	23.4	24.1	24.4	24.7	24.9	25.0	25.1	25.2	25.3	25.3	25.3

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

- A5 -

TABLE 5
REAL PRICE CHANGES PROPOSED IN THE ADMINISTRATION'S ENERGY PLAN
(Percent)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<u>Demand</u>													
Crude Oil 1)													
Annual	15	11	6	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Total	15	30	45	40	35	30	25	20	15	10	5	0	-5
Industrial Oil													
Annual	0	9	2	2	2	2	2	2	0	0	0	0	0
Total	0	9	11	13	15	17	19	21	21	21	21	21	21
Industrial Natural Gas													
Annual	0	20	5	5	5	5	5	5	0	0	0	0	0
Total	0	20	25	30	35	40	45	50	50	50	50	50	50
Utility Oil & Gas													
Annual	0	0	0	0	0	11	0	0	0	0	0	0	0
Total	0	0	0	0	0	11	11	11	11	11	11	11	11
Motor Gasoline													
Annual	8	8	7	7	6	6	6	5	5	5	0	0	0
Total	8	17	25	33	42	50	58	67	75	83	83	83	83
Coal 1)													
Annual	5	5	10	10	5	-5	-5	-5	-5	-5	-5	-5	-5
Total	5	10	20	30	35	30	25	20	15	10	5	0	-5
<u>Supply</u>													
Crude Oil 1)													
Annual	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	0
Total	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-60
Natural Gas 2)													
Annual	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	0
Total	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-60
Coal 1)													
Annual	5	5	10	10	5	-5	-5	-5	-5	-5	-5	-5	-5
Total	5	10	20	30	35	30	25	20	15	10	5	0	-5

1) Reflects the fact that the Administration's Energy Plan would disallow 10% increase in crude oil prices now allowed under existing law; 5 percentage points of the adjustment was assumed for inflation and 5% for real price increases.

2) Reflects the fact that the Federal Power Commission would not be allowed to set rates according to traditional cost of production techniques under the Administration's Energy Plan.

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

- A6 -

TABLE 6

IMPACT OF A ONE PERCENT CHANGE IN PRICE
ON THE QUANTITY CONSERVED OR PRODUCED IN PERCENT
(DEMAND AND SUPPLY ELASTICITIES)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<u>Demand</u>													
<u>Elasticities</u>													
Crude Oil ¹⁾	-0.20	-0.20	-0.24	-0.27	-0.30	-0.33	-0.37	-0.40	-0.41	-0.42	-0.43	-0.44	-0.45
Industrial Oil and Gas 1)	-0.20	-0.20	-0.20	-0.24	-0.28	-0.32	-0.36	-0.40	-0.41	-0.42	-0.43	-0.44	-0.45
Utility Oil and Gas 1)						-0.15	-0.20	-0.25	-0.30	-0.35	-0.40	-0.43	-0.45
Gasoline ²⁾	-0.10	-0.10	-0.11	-0.12	-0.14	-0.16	-0.18	-0.20	-0.22	-0.24	-0.26	-0.28	-0.30
Coal ^{1) 5)}	-0.20	-0.22	-0.24	-0.26	-0.28	-0.30	-0.32	-0.34	-0.36	-0.38	-0.40	-0.42	-0.44
Natural Gas	-0.20	-0.22	-0.24	-0.26	-0.28	-0.30	-0.32	-0.34	-0.36	-0.38	-0.40	-0.42	-0.44
<u>Supply</u>													
<u>Elasticities</u>													
Crude Oil	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.31	0.32
Natural Gas 3) 4)	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.31	0.32
Coal 3) 5)	0.30	0.33	0.36	0.39	0.42	0.45	0.48	0.51	0.54	0.57	0.60	0.60	0.60

Explanations:

- (1) Calculated from: Federal Energy Administration, 1977 National Energy Outlook (Draft: January 15, 1977), Appendix D, tables D-3, D-4, D-5.
- (2) Calculated from: Dale W. Jorgenson, ed., Econometric Studies of U.S. Energy Policy, Data Resources Series, Vol. 1, 1976, Chapter 4.
- (3) Calculated from various FEA publications.
- (4) Assume current proved reserves of natural gas. If new reserves are discovered and developed, elasticity could be as high as 3.5 in 1985.
- (5) Assumes environmental laws will not impede production.

Source: National Chamber Forecasting Center.

- A7 -

TABLE 7

CONSUMPTION OF ENERGY BY TYPE
(Millions of Barrels of Crude Oil equivalents)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Crude Oil	19.0	19.8	20.6	21.1	21.6	22.2	22.7	23.3	23.6	24.1	24.6	25.0	25.4
Coal	8.0	8.4	8.7	9.1	9.4	9.8	10.2	10.5	10.8	11.2	11.5	11.8	12.0
Natural Gas	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.4	9.2	9.1	9.0	9.0	9.0
Uranium	<u>1.5</u>	<u>2.0</u>	<u>2.5</u>	<u>3.2</u>	<u>3.9</u>	<u>4.7</u>	<u>5.5</u>	<u>6.2</u>	<u>6.7</u>	<u>7.4</u>	<u>8.1</u>	<u>8.6</u>	<u>9.1</u>
TOTAL IN MBPD	39	40	42	43	45	46	48	50	51	52	53	54	55
<hr/>													
TOTAL IN QUADRILLION BTU'S	79	81	84	86	90	93	95	100	102	104	107	109	111
<hr/>													
Addendum:													
Industrial Oil and Natural Gas	8.4	8.8	9.2	9.6	9.9	10.3	10.7	11.0	11.3	11.6	11.9	12.2	12.5
Utility Oil and Gas	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.8	2.7	2.6
Gasoline	6.7	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

Source: National Chamber Forecasting Center; Calculations based upon data from Federal Energy Administration, U.S. Bureau of Mines, and "The National Energy Plan".

- A8 -

TABLE 8

GAINS AND LOSSES IN CONSERVATION (DEMAND)
AND PRODUCTION (SUPPLY) FROM ADMINISTRATION'S ENERGY TAXES
(Millions of Barrels of Crude Oil per day)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
<u>Direct Conservation</u>													
Crude Oil Tax	0.3	0.5	0.8	0.9	0.7	0.7	0.6	0.5	0.4	0.3	0.1	0	0.1
Industrial Oil and Natural Gas Tax	0	0.2	0.3	0.4	0.7	0.9	1.2	1.5	1.5	1.5	1.5	1.5	1.5
Utility Oil and Natural Gas Tax	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gasoline Tax	<u>0.1</u>	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.6</u>	<u>0.7</u>	<u>0.9</u>	<u>1.0</u>	<u>1.1</u>	<u>1.2</u>	<u>1.3</u>	<u>1.3</u>
TOTAL GAINS	0.4	0.9	1.3	1.6	1.8	2.3	2.6	3.0	3.0	3.0	2.9	2.9	2.8
Losses from lower natural gas prices:													
Conservation	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5
Production	<u>-0.1</u>	<u>-0.1</u>	<u>-0.2</u>	<u>-0.3</u>	<u>-0.4</u>	<u>-0.6</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-1.1</u>	<u>-1.3</u>	<u>-1.5</u>	<u>-1.7</u>	<u>-2.0</u>
NET DIRECT GAIN IN CONSERVATION	0.2	0.6	0.9	1.1	1.2	1.5	1.4	1.8	1.8	1.7	1.4	0.8	0.3
<u>Indirect Energy Improvements from Higher Coal and Uranium Prices:</u>													
Conservation	0.1	0.2	0.4	0.7	0.9	0.9	0.8	0.7	0.6	0.4	0.2	0	-0.2
Production	<u>0.1</u>	<u>0.3</u>	<u>0.5</u>	<u>1.2</u>	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>	<u>1.1</u>	<u>0.9</u>	<u>0.6</u>	<u>0.3</u>	<u>0</u>	<u>-0.3</u>
TOTAL INDIRECT	0.2	0.5	0.9	1.9	2.3	2.2	2.0	1.8	1.5	1.0	0.5	0	-0.5
TOTAL DIRECT AND INDIRECT	0.4	1.1	1.8	3.0	3.5	3.7	3.6	3.6	3.5	2.7	1.9	0.8	-0.2

Source: National Chamber Forecasting Center; Calculations based upon data from Federal Energy Administration, U.S. Bureau of Mines, and "The National Energy Plan".

TABLE 9
DISTRIBUTION OF TAXES AND RECEIPTS
(Billions of 1977 dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1978- 1990 Total	Percent Distri- bution
Individuals (per capita rebates, Autos, Home Insulation, etc.)	4	12	18	20	23	27	31	33	35	36	37	37	37	350	54%
State and Local Governments	1	3	4	5	6	7	8	9	10	11	12	12	12	100	16%
Business	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>9</u>	<u>11</u>	<u>13</u>	<u>15</u>	<u>17</u>	<u>19</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>163</u>	<u>25%</u>
TOTAL TAX REBATES	6	18	27	32	38	45	52	57	62	66	70	70	70	613	95%
Producers of Coal, Uranium and Other	-	2	3	4	5	6	8	11	13	14	15	16	17	114	18%
Producers of Oil and Natural Gas	<u>-2</u>	<u>-4</u>	<u>-6</u>	-7	-7	-7	-7	-7	-7	-7	-7	-7	<u>-7</u>	<u>-82</u>	<u>-13%</u>
TOTAL PRODUCERS RECEIPTS	<u>-2</u>	<u>-2</u>	<u>-3</u>	<u>-3</u>	<u>-2</u>	<u>-1</u>	<u>1</u>	<u>4</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>32</u>	<u>5%</u>
TOTAL TAX REBATES AND PRODUCERS RECEIPTS	4	16	24	29	36	44	53	61	68	73	78	79	80	645	100%

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

TABLE 10

IMPACT OF THE ADMINISTRATION'S ENERGY CONSERVATION PLAN ON THE U.S. ECONOMY
(CHANGE IN LEVELS OF ECONOMIC ACTIVITY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
REAL GNP (%)	-0.2	-0.4	-1.3	-1.9	-2.1	-2.3	-2.5	-2.5	-2.3	-2.1	-2.0	-1.9	-1.8
Billions of 1977 dollars	-\$4	-\$8	-\$26	-\$40	-\$46	-\$53	-\$60	-\$63	-\$60	-\$57	-\$53	-\$50	-\$45
REAL PER CAPITA DISPOSABLE INCOME (%)	-0.4	-1.5	-2.7	-3.5	-4.0	-4.4	-4.7	-4.9	-4.8	-4.7	-4.6	-4.4	-4.2
REAL PERSONAL INCOME													
Billions of 1977 dollars	-\$32	-\$15	-\$33	-\$47	-\$55	-\$64	-\$70	-\$75	-\$77	-\$79	-\$81	-\$82	-\$84
Average loss per family in 1977 dollars	-57	-263	-586	-632	-998	-1146	-1263	-1346	-1380	-1420	-1450	-1470	-1500
SAVINGS	-0.2	-0.6	-1.0	-1.1	-1.2	-1.3	-1.5	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3
EMPLOYMENT (%)	0.0	-0.2	-0.6	-1.1	-1.4	-1.5	-1.7	-1.7	-1.7	-1.7	-1.7	-1.6	-1.5
Thousands of Jobs	-20	-150	-620	-1100	-1350	-1530	-1650	-1730	-1650	-1600	-1650	-1700	-1700
UNEMPLOYMENT (%)	0.0	0.1	0.4	0.7	0.9	1.1	1.2	1.2	1.1	1.0	0.9	0.8	0.7
Thousands of Jobs lost	30	100	420	730	910	1060	1160	1240	1200	1150	1100	1050	1000
CONSUMER PRICES (%)	0.4	1.0	1.7	2.3	2.7	3.0	2.7	2.4	2.2	2.1	2.0	1.9	1.8
GNP DEFLATOR (%)	0.3	0.8	1.3	1.9	2.4	2.5	2.4	2.0	1.9	1.8	1.7	1.7	1.7
REAL BUSINESS FIXED INVESTMENT (%)	-0.2	-0.8	-1.9	-3.0	-4.0	-4.5	-4.5	-4.0	-4.0	-3.8	-3.5	3.2	3.0
Billions of 1977 dollars	-\$1	-\$2	-\$4	-\$7	-\$10	-\$11	-\$12	-\$12	-\$12	-\$12	-\$12	-\$12	-\$12
CAPACITY UTILIZATION (%)	-0.3	-1.1	-2.3	-3.1	-3.4	-3.7	-3.9	-4.0	-4.1	-4.2	-4.3	-4.2	-4.1
INDUSTRIAL PRODUCTION (%)	-0.3	-1.2	-2.4	-3.1	-3.4	-3.6	-3.9	-4.0	-4.1	-4.0	-4.0	-3.8	-3.6
AUTO SALES (%)	-2	-7	-10	-10	-10	-11	-11	-12	-12	-13	-13	-11	-10
Thousands of Cars	-200	-700	-1100	-1200	-1200	-1300	-1400	-1400	-1400	-1500	-1500	-1400	-1300
HOUSING STARTS (%)	-2	-5	-7	-6	-5	-4	-3	-2	-1	0	0	0	0
Thousands of Units	40	100	140	120	100	80	60	40	20	0	0	0	0
EXPORTS In													
Billions of 1977 dollars	-0.4	-1.0	-2.4	-3.4	-3.8	-3.8	-3.7	-3.7	-3.6	-3.5	-3.1	-2.1	-1.1
IMPORTS In													
Billions of 1977 dollars	-1.8	-4.0	-6.8	-9.3	-12.7	-18.1	-20.1	-20.8	-20.1	-13.0	-10.0	-5.0	-3.1
NET EXPORTS In													
Billions of 1977 dollars	1.4	3.0	4.4	5.9	8.9	14.3	16.4	17.1	16.5	9.5	6.9	2.9	2.0

Source: National Chamber Forecasting Center Models and Computations, Federal Energy Administration and U.S. Bureau of Mines data, "The National Energy Plan", DRI and Chase Econometrics modelling and data.

- All -

TABLE 11

THE LOSS IN SPENDABLE INCOME (DISPOSABLE INCOME)
PER AVERAGE WORKER FROM FULL IMPLEMENTATION OF
ADMINISTRATION'S ENERGY TAX PLAN
(1977 dollars)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1978- 1990 Total</u>
New Higher Taxes	68	195	285	310	390	470	510	550	560	630	690	670	650	5,978
Additional Taxes from Energy Plan - generated inflation	22	55	95	160	160	170	170	160	150	140	130	120	110	1,642
Lower Income because of slower growing economy	<u>30</u>	<u>170</u>	<u>390</u>	<u>420</u>	<u>680</u>	<u>800</u>	<u>830</u>	<u>850</u>	<u>840</u>	<u>830</u>	<u>820</u>	<u>810</u>	<u>800</u>	<u>8,270</u>
Total Loss in Spendable Income per worker	120	420	770	890	1230	1440	1510	1560	1550	1600	1640	1600	1560	15,890
Loss as a percent of real disposable income per worker	1	3	6	7	9	10	11	11	10	9	8	7	6	

Source: National Chamber Forecasting Center Models and Computations, DRI and Chase Econometric Modelling and Data, based upon Administration's Energy Proposals as outlined in "The National Energy Plan" and "National Energy Act".

TABLE 12

BALANCED PROGRAM TO ENCOURAGE BOTH CONSERVATION AND PRODUCTION^{1/}
 (Allow crude oil price to increase to real market price by 1985)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Price Change for Crude Oil													
Annual	6	6	6	6	6	6	6	6	0	0	0	0	0
Total	6	12	19	26	34	42	50	59	59	59	59	59	59
Demand Elasticity	-0.20	-0.20	-0.24	-0.27	-0.30	-0.33	-0.37	-0.40	-0.41	-0.42	-0.43	-0.44	-0.45
Supply Elasticity	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.30	0.30
U.S. Consumption of Crude Oil under existing policy (MBPD)	19.0	19.8	20.6	21.1	21.6	22.2	22.7	23.3	23.6	24.1	24.6	25.0	25.4
Conservation from domestic oil	0.1	0.3	0.5	0.8	1.1	1.5	2.0	2.6	2.7	2.8	2.9	3.0	3.1
Additional Domestic Production	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.5</u>	<u>0.7</u>	<u>0.9</u>	<u>1.2</u>	<u>1.6</u>	<u>1.7</u>	<u>1.8</u>	<u>1.9</u>	<u>2.0</u>	<u>2.1</u>
Total Improvement from Balanced Approach	0.2	0.5	0.8	1.3	1.8	2.4	3.2	4.2	4.4	4.6	4.8	5.0	5.2
in comparison with Administration's Conservation Plan	0.4	1.1	1.8	3.0	3.5	3.7	3.6	3.6	3.5	2.7	1.9	0.8	-0.2

^{1/} Although the analysis is done for crude oil, a similar result would occur with only natural gas (see Table 6). Also if corporate profit taxes are not adjusted to allow depreciation allowances to be more closely tied to replacement costs and corporate profit taxes withdraw some of the gross receipts from investment, then a 6% increase in real natural gas prices would offset the tax withdrawal and provide comparable results. If both real crude oil and natural gas prices are allowed to increase by 6% and corporate profit taxes draw off only a small proportion, then the improvement in energy could be faster than shown in this table.

Source: National Chamber Forecasting Center; Calculations based upon data from Federal Energy Administration, U.S. Bureau of Mines, and "The National Energy Plan".

TABLE 13

IMPACT OF A BALANCED ENERGY CONSERVATION AND PRODUCTION PLAN ON THE U.S. ECONOMY
(CHANGE IN LEVELS OF ECONOMIC ACTIVITY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
REAL GNP (%)	-0.1	-0.2	-0.3	-0.3	-0.2	-0.1	0.0	0.1	0.2	0.3	0.3	0.4	0.4
Billions of 1977 dollars	-1	-2	-4	-4	-3	-2	0	1	2	4	4	5	6
REAL PER CAPITA DISPOSABLE INCOME (%)	-0.2	-0.5	-0.7	-0.9	-1.0	-1.0	-0.9	-0.6	-0.4	-0.2	0	0.2	0.4
REAL DISPOSABLE PERSONAL INCOME													
Billions of 1977 dollars	-2	-4	-5	-6	-7	-7	-6	-4	-2	-1	0	0.1	0.3
Average loss per family in 1977 dollars	-33	-67	-83	-100	-117	-117	-100	-67	-33	-17	0	17	50
PERSONAL SAVINGS	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0	0.1
EMPLOYMENT (%)	0	-0.1	-0.1	-0.1	-0.1	0	0.2	0.4	0.5	0.6	0.7	0.8	0.9
Thousands of Jobs	-10	-60	-100	-110	-60	40	200	430	550	600	710	825	940
UNEMPLOYMENT (%)	0.2	0.6	1.1	1.2	0.8	-0.4	-2.4	-5.7	-8.2	-8.6	-9.0	-9.2	-9.4
Thousands of Jobs lost	10	50	80	80	50	-20	-140	-310	-390	-400	-420	-430	-450
CONSUMER PRICES (%)	0.1	0.3	0.5	0.7	0.8	0.9	1.0	1.0	0.9	0.9	0.8	0.7	0.5
GNP DEFLATOR (%)	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.5
REAL BUSINESS FIXED INVESTMENT (%)	0.6	1.2	1.7	3.0	4.2	5.7	7.6	10.0	9.8	9.6	9.4	9.2	9.0
Billions of 1977 dollars	1	2	3	4	6	8	10	12	12	12	13	13	14
CAPACITY UTILIZATION (%)	-0.1	-0.2	-0.3	-0.2	-0.1	0	0.2	0.4	0.6	0.8	1.0	1.2	1.4
INDUSTRIAL PRODUCTION (%)	0	0.1	0.2	0.3	0.4	0.6	1.0	2.0	2.0	1.8	1.7	1.6	1.5
AUTO SALES (%)	-1.2	-1.6	-2.0	-1.8	-1.6	-1.3	-1.0	-0.8	-0.6	-0.4	-0.3	-0.2	0
Thousands of Cars	-130	-180	-240	-220	-200	-170	-150	-130	-110	-100	80	50	0
HOUSING STARTS (%)	0	-1.2	-1.6	-1.8	-2.0	-2.2	-2.2	-2.2	-2.0	-1.8	-1.6	-1.4	-1.0
Thousands of Units	0	-20	-30	-34	-39	-42	-44	-46	-45	-43	-38	-32	-22
EXPORTS In													
Billions of 1977 dollars	-0.1	-0.4	-0.8	-1.1	-1.4	-1.7	-1.9	-2.3	-2.8	-3.2	-3.5	-3.9	-4.2
IMPORTS In													
Billions of 1977 dollars	-0.9	-1.6	-2.9	-4.4	-6.3	-12.0	-20.0	-24.0	-25.0	-25.5	-25.9	-26.4	-27.0
NET EXPORTS In													
Billions of 1977 dollars	0.8	1.2	2.1	3.3	4.9	10.3	18.1	21.7	22.2	22.3	22.4	22.5	22.8

Source: National Chamber Forecasting Center Models and Computations, Federal Energy Administration and U.S. Bureau of Mines data, "The National Energy Plan", DRI and Chase Econometrics modelling and data.

COMPARISON OF THE ADMINISTRATION'S ENERGY CONSERVATION PLAN
AND A BALANCED CONSERVATION AND PRODUCTION APPROACH ON EACH STATE BY 1985^{1/}

STATES	REAL DOLLARS FROM AVERAGE CONSUMER AS: 2/ Fed. Producer Taxes Receipts		ENERGY IMPROVEMENT ^{3/} (1,000 barrels per day)		INFLATION ^{4/} (Percent change in level of prices)		EMPLOYMENT ^{5/} (1,000's of Jobs)		REAL PER CAPITA DISPOSABLE INCOME ^{6/} (1977 dollars)	
	ADM	BAL	ADM	BAL	ADM	BAL	ADM	BAL	ADM	BAL
ALABAMA	302	95	56	65	3.0	1.2	-26	5	-267	-53
ALASKA	752	237	14	17	3.2	1.3	-4	8	-571	1818
ARIZONA	329	104	37	43	2.4	1.0	-17	3	-438	-88
ARKANSAS	378	119	39	46	3.3	1.3	-14	3	-473	-79
CALIFORNIA	309	96	341	398	2.1	0.8	-177	64	-357	45
COLORADO	296	93	38	44	2.2	0.9	-23	5	-383	0
CONNECTICUT	415	75	69	80	2.7	1.1	-28	5	-298	-89
DELAWARE	601	189	19	22	4.0	1.6	-5	1	-317	0
DIST. OF COLUMBIA	291	92	10	12	1.8	0.8	-9	2	-429	0
FLORIDA	393	104	173	202	3.1	1.2	-61	9	-336	-34
GEORGIA	293	92	75	87	2.5	1.0	-40	7	-388	-58
HAWAII	610	192	27	31	2.4	1.0	-7	1	-338	0
IDAHO	360	113	15	17	3.2	1.3	-7	1	-277	0
ILLINOIS	286	90	171	199	1.9	0.8	-99	19	-414	-33
INDIANA	310	98	88	103	2.5	1.0	-43	8	-346	-52
IOWA	297	94	43	50	2.1	0.8	-23	5	-344	-69
KANSAS	342	108	39	45	2.4	1.0	-10	7	-431	43
KENTUCKY	239	75	43	50	2.2	0.9	-24	6	-277	-55
LOUISIANA	424	130	78	91	3.5	1.4	-28	32	-286	312
MAINE	540	170	29	33	4.8	1.9	-9	2	-280	0
MARYLAND	325	102	72	84	2.3	0.9	-33	7	-447	-45
MASSACHUSETTS	474	174	147	171	3.5	1.4	-50	8	-335	-48
MICHIGAN	275	87	132	154	1.9	0.8	-71	12	-411	-31
MINNESOTA	314	99	64	75	2.4	1.0	-33	6	-340	-49
MISSISSIPPI	357	112	41	48	3.6	1.5	-16	3	-424	0
MISSOURI	277	87	69	81	2.2	0.9	-43	8	-316	-39
MONTANA	408	129	15	18	3.2	1.3	-5	3	-264	265
NEBRASKA	323	102	25	29	2.4	1.0	-12	2	-443	-64
NEVADA	432	136	13	15	3.1	1.2	-61	11	-371	-32
NEW HAMPSHIRE	437	138	18	21	3.0	1.2	-7	1	-357	-30
NEW JERSEY	368	116	147	171	2.5	1.0	-59	10	-359	-37
NEW MEXICO	366	115	21	25	3.6	1.4	-9	4	-257	171
NEW YORK	352	111	336	391	2.4	1.0	-149	20	-362	-83
NORTH CAROLINA	270	85	77	89	2.3	0.9	-45	9	-296	-35
NORTH DAKOTA	385	120	13	16	3.2	1.3	-5	3	-270	0
OHIO	220	70	130	151	1.8	0.7	-90	16	-343	-17
OKLAHOMA	305	95	42	49	2.6	1.1	-21	9	-360	144
OREGON	300	90	34	40	2.2	0.9	-19	4	-426	-128
PENNSYLVANIA	260	80	166	194	3.2	1.3	-99	20	-332	-47
RHODE ISLAND	308	97	17	20	3.0	1.2	-9	2	-291	-15
SOUTH CAROLINA	283	89	41	47	2.4	1.0	-23	4	-350	-105
SOUTH DAKOTA	384	121	13	16	3.2	1.3	-5	1	-290	-15
TENNESSEE	240	76	54	64	2.3	0.9	-35	7	-263	-44
TEXAS	370	116	230	268	2.8	1.1	-100	45	-328	80
UTAH	346	109	22	26	2.9	1.2	-10	5	-326	163
VERMONT	350	110	9	10	2.4	1.0	-4	1	-417	-30
VIRGINIA	441	139	118	137	3.4	1.4	-38	8	-377	-75
WASHINGTON	314	102	57	67	2.1	0.9	-28	5	-394	-56
WEST VIRGINIA	214	67	19	23	1.7	0.7	-12	3	-446	0
WISCONSIN	265	83	63	73	1.9	0.8	-38	7	-423	-42
WYOMING	625	197	12	14	1.6	0.7	-4	2	-510	510
U.S.	330	105	3600	4200	2.4	1.0	-1730	430	-350	-18

TABLE 14 - EXPLANATIONS

1/ Details may not add to totals due to rounding.

2/ State and U.S. crude oil consumption in 1975 calculated from Bureau of Mines consumption data for diesel oil, distillate fuel oil, motor gasoline, jet fuel, kerosine, liquid petroleum gas, and residual fuel oil. Population data from Bureau of Economic Analysis.

$$\text{ADMFND}_{i t} = (w * \text{ADMFND}_{us t}) / \text{NR}_i$$

$$\text{CHMFND}_{i t} = (w * \text{CHMFND}_{us t}) / \text{NR}_i$$

where:

i = state
 t = 1985
 us = United States
 t' = 1975
 w = $\text{CCO}_{i t'} / \text{CCO}_{us t'}$
 CCO = Crude Oil Consumption
 ADMFND = Real dollars taken from consumers as Federal Taxes
 CHMFND = Real dollars taken from consumers as Producer Receipts
 NR = Population

3/ State and U.S. crude oil consumption in 1975 calculated from Bureau of Mines consumption data for diesel oil, distillate fuel oil, motor gasoline, jet fuel, kerosine, liquid petroleum gas, and residual fuel oil.

$$\text{ADMEI}_{i t} = w * \text{ADMEI}_{us t}$$

$$\text{CHMEI}_{i t} = w * \text{CHMEI}_{us t}$$

where:

ADMEI = Energy Improvement because of the Administration's Energy Proposals
 CHMEI = Energy Improvements because of Balanced Program

TABLE 14 - EXPLANATIONS

4/ State and U.S. real income data obtained from Data Resources, Inc.

$$\text{ADMCPPI}_{i t} = r * \text{ADMCPPI}_{us t}$$

$$\text{CHMCPPI}_{i t} = r * \text{CHMCPPI}_{us t}$$

where:

ADMCPPI = Consumer Price Change because of Administration's Energy Proposals

CHMCPPI = Consumer Price Change because of Balanced Program

$$r = ((Y_{i t'} / Y_{us t'}) / w$$

Y = Real Income (\$1977)

t' = 1976

5/ State and U.S. employment data obtained from Data Resources, Inc.

$$\text{ADMEMP}_{i t} = q * \text{ADMEMP}_{us t}$$

$$\text{CHMEMP}_{i t} = q * \text{CHMEMP}_{us t}$$

where:

ADMEMP = Employment Change because of Administration's Energy Proposals

CHMEMP = Employment Change because of Balanced Program

$$q = \text{EMP}_{i t'} / \text{EMP}_{us t'}$$

EMP = Number Employed

6/ State and U.S. income data obtained from Data Resources, Inc.
State and U.S. population data obtained from the Bureau of Economic Analysis.

$$\text{ADMYNR}_{i t} = z * \text{ADMYNR}_{us t}$$

$$\text{CHMYNR}_{i t} = z * \text{CHMYNR}_{us t}$$

where:

ADMYNR = Real Per Capita Income change because of Administration's Energy Proposals

CHMYNR = Real Per Capita Income change because of Balanced Program

$$z = ((Y_{i t'} / \text{NR}_{i t'}) / (Y_{us t'} / \text{NR}_{us t'}))$$

NR = Population

TABLE 15
COMPARISON OF ADMINISTRATION'S AND BALANCED PROGRAM'S IMPACT ON INCOME DISTRIBUTION
(Billions of 1977 dollars)

<u>Income Levels</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>Total 1978- 1990</u>
<u>Lowest Fifth</u>														
Administration Taxes	2.7	7.8	11.4	13.0	15.0	17.6	20.2	21.8	23.4	24.5	25.6	25.6	25.6	234.2
Balanced Program Receipts	<u>0.4</u>	<u>1.0</u>	<u>1.6</u>	<u>2.6</u>	<u>3.7</u>	<u>4.8</u>	<u>6.5</u>	<u>8.5</u>	<u>8.9</u>	<u>9.3</u>	<u>9.7</u>	<u>10.1</u>	<u>10.5</u>	<u>77.6</u>
Savings	2.3	6.8	9.8	11.6	11.3	12.8	13.7	13.3	14.5	15.2	15.9	15.5	15.1	156.6
<u>Second Fifth</u>														
Administration Taxes	1.2	3.7	5.6	6.7	8.0	9.5	11.0	12.1	13.2	14.1	15.0	15.0	15.0	130.1
Balanced Program Receipts	<u>0.2</u>	<u>0.5</u>	<u>0.8</u>	<u>1.3</u>	<u>1.9</u>	<u>2.5</u>	<u>3.3</u>	<u>4.4</u>	<u>4.6</u>	<u>4.8</u>	<u>5.0</u>	<u>5.2</u>	<u>5.4</u>	<u>39.9</u>
Savings	1.0	3.2	4.8	5.4	6.1	7.0	7.7	7.7	8.6	9.3	10.0	10.2	9.6	90.2
<u>Third Fifth</u>														
Administration Taxes	0.9	2.7	4.1	5.1	6.1	7.4	8.6	9.6	10.5	11.3	12.1	12.1	12.1	102.6
Balanced Program Receipts	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>	<u>1.0</u>	<u>1.4</u>	<u>1.9</u>	<u>2.5</u>	<u>3.3</u>	<u>3.5</u>	<u>3.6</u>	<u>3.8</u>	<u>3.9</u>	<u>4.1</u>	<u>30.2</u>
Savings	0.7	2.3	3.5	4.1	4.7	5.5	6.1	6.3	7.0	7.7	8.3	8.2	8.0	72.4
<u>Fourth Fifth</u>														
Administration Taxes	0.8	2.2	3.5	4.3	5.2	6.2	7.2	8.0	8.8	9.5	10.2	10.2	10.2	85.9
Balanced Program Receipts	<u>0.1</u>	<u>0.3</u>	<u>0.5</u>	<u>0.8</u>	<u>1.2</u>	<u>1.5</u>	<u>2.1</u>	<u>2.7</u>	<u>2.8</u>	<u>3.0</u>	<u>3.1</u>	<u>3.2</u>	<u>3.3</u>	<u>24.6</u>
Savings	0.7	1.9	3.0	3.5	4.0	4.7	5.1	5.3	6.0	6.5	7.1	7.0	6.9	61.3
<u>Highest Fifth</u>														
Administration Taxes	0.5	1.6	2.5	3.1	3.6	4.4	5.1	5.7	6.2	6.7	7.1	7.1	7.1	60.7
Balanced Program Receipts	<u>0.1</u>	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>	<u>0.8</u>	<u>1.1</u>	<u>1.4</u>	<u>1.9</u>	<u>2.0</u>	<u>2.0</u>	<u>2.1</u>	<u>2.2</u>	<u>2.3</u>	<u>17.1</u>
Savings	0.4	1.4	2.1	2.5	2.8	3.3	3.7	3.8	4.2	4.7	5.0	4.9	4.8	43.6
<u>Total</u>														
Administration Taxes	6.0	18.0	27.0	32.0	38.0	45.0	52.0	57.0	62.0	66.0	70.0	70.0	70.0	613.5
Balanced Program Receipts	<u>1.0</u>	<u>2.5</u>	<u>3.9</u>	<u>6.4</u>	<u>8.9</u>	<u>11.8</u>	<u>15.8</u>	<u>20.7</u>	<u>21.7</u>	<u>22.7</u>	<u>23.7</u>	<u>24.6</u>	<u>25.6</u>	<u>189.4</u>
Savings	5.0	15.5	23.1	25.6	29.1	33.2	46.2	36.3	40.3	43.3	46.3	45.4	44.4	424.1

Source: National Chamber Forecasting Center.

Chart 2

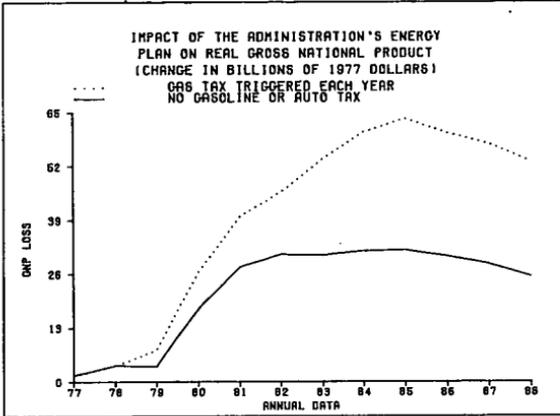


Chart 3

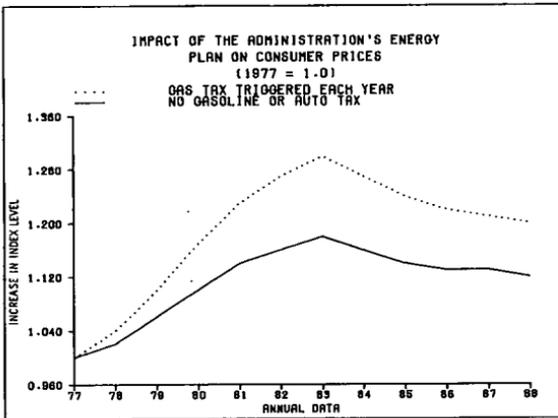


Chart 4

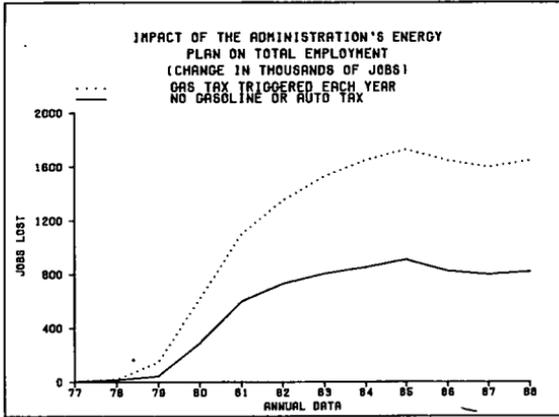


Chart 5

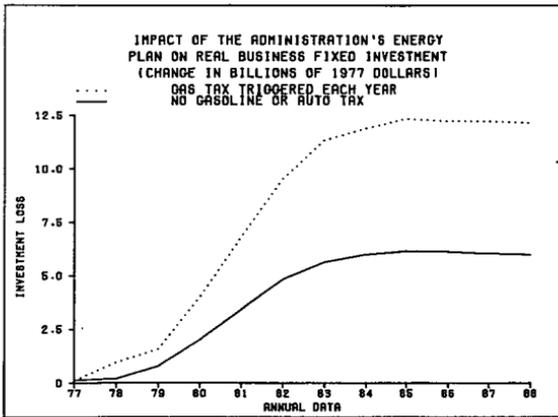


Chart 6

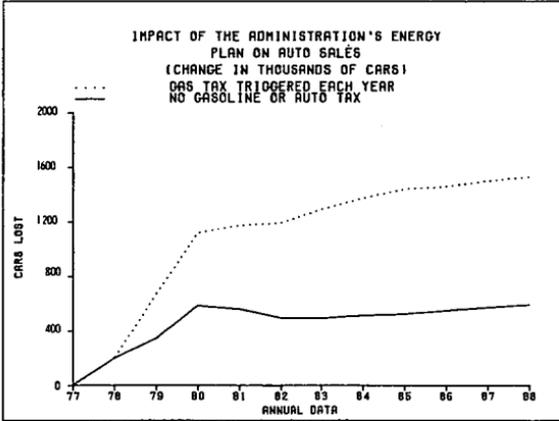
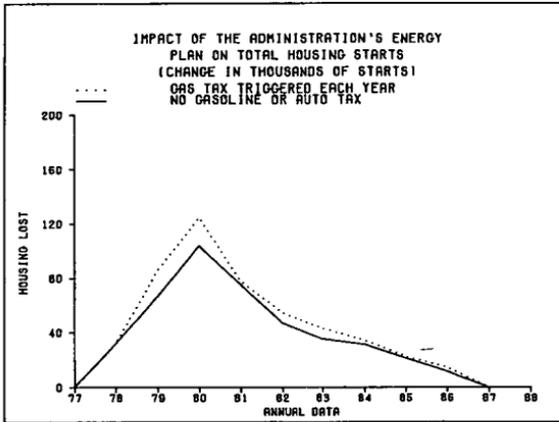


Chart 7



Representative BOLLING. Thank you very much.
Mr. Karchere.

STATEMENT OF ALVIN J. KARCHERE, DIRECTOR OF ECONOMIC RESEARCH, IBM CORP.¹

Mr. KARCHERE. Thank you for the opportunity to testify before the Joint Economic Committee.

I am, of course, here in a personal capacity and do not speak for anyone else. In response to your invitation, I will give you my views on the economic outlook and on the economic policies appropriate to deal with it.

In outline, the forecast of economic activity in the United States, as I see it, is as follows: For the next four quarters there is sufficient momentum in the private sector of the economy for the GNP to advance at a rate in excess of 5 percent. However, there will be a marked slowdown in the rate of growth in the last three quarters of 1978 to about 2.5 percent at an annual rate.

In my judgment a rate as low as 2.5 percent is unsatisfactory for two reasons: First, it provides too little margin for forecast error, in other words, unforeseen events could turn 2.5 percent growth into recession; second, even if the forecast of 2.5 percent turns out to be correct, the growth would be too slow to provide any further reduction in the unemployment rate.

The outlook for the next four quarters can be covered in summary fashion. The inventory sales ratio has been declining since the first quarter of 1975 and now is low enough to support a continued high level of inventory investment. Residential housing starts and permits have been moving up strongly since the summer of 1976 and promise to support rising volumes of construction through 1977.

We have had a remarkable increase in corporate profits in this cyclical recovery, considerably stronger than in any of the previous World War II recoveries. Corporate profits after tax plus depreciation allowances, that is, corporate cash flow, as a ratio to national income is at its highest level in 25 years. As a consequence, orders for capital goods in constant prices have been rising strongly since the first quarter of 1976, after a slow start because of excess capacity.

Expenditure on producers' durable equipment showed a strong surge in the first quarter of 1977 and because of the strength in orders should continue to increase at a good rate. Residential construction and demand by the business enterprise sector are now the sources of momentum in the economy.

The major area where there will be a significant slowdown in the rate of growth is consumer spending. During the last four quarters it grew by almost 5.5 percent in constant prices. That rate will slow to 4 percent in the next four quarters and slow further to 2.5 percent in the last three quarters of 1978.

Consumption is determined by the savings rate, the number of people employed, and real disposable income per person employed. The fundamental source of the expected weakness in consumer spending is real disposable income per person employed. It has been a cas-

¹ Affiliation given for identification purposes only; the views expressed in this statement are wholly personal.

uality of the inflation. It reached a peak in the first quarter of 1973 and declined continuously throughout 1973 and 1974.

As a result, the volume of retail sales turned down in 1973 and continued down during 1973 and 1974. This was the principal cause of the recession of 1974-75.

Real disposable income per person employed has not yet returned to its peak and by the fourth quarter of 1978 will be less than 1 percent over its peak. This is so despite the tax cuts of 1975 and 1977. Never before in recent U.S. economic history has individual purchasing power declined as much as in the 1973-74 period, or recovered as slowly as in the current recovery.

The increase in civilian employment has been rapid during the period of recovery, particularly relative to the growth of the GNP. The rapid growth in employment may continue for another quarter or so, but it is bound to slow down in 1978, and this will tend to reduce the growth in disposable income and, therefore, consumption. Over the last three quarters of 1978 increases in real disposable income will be less than 2 percent at an annual rate, a result of the slower growth of employment and negligible increase in real disposable income per person employed.

The third factor that will influence consumption, particularly over the next four quarters, is the savings rate. Since 1970 we have had two recessions and the last one was the worst we have had since the thirties. Also we have suffered through the most serious inflation since World War II.

It is not surprising that the savings rate during this period averaged almost 7.5 percent. With a renewal of confidence in the economy, the savings rate declined during 1976 and dropped very sharply during last winter. In the first quarter of 1977 it stood at 4.8 percent. That rate, however, is too low to be sustainable; it was caused by a number of temporary factors.

The provisions of the tax reform law of 1976, as they related to gift taxes, had the effect of increasing tax payments by \$6 billion at an annual rate in the first quarter of 1977 and probably had little effect on consumption, thus tending to reduce the savings rate. The hard winter caused a \$9 billion increase in consumer expenditure on energy with probably little offsetting decrease elsewhere.

The administration proposal of the gas-guzzler tax raised sales of the larger automobile models to unsustainable levels. And, finally, the public's expectations of the elusive tax rebate may have encouraged expenditure that would not have taken place otherwise.

The decrease in the saving rate from the first quarter of 1976 to the first quarter of 1977 increased the rate of growth of real consumer spending by over 2 percent. The return to a more normal saving rate over the next four quarters will tend to reduce the growth in consumption by 1 percent.

The other significant weakness in the economy in the last three quarters of 1978 will be residential construction. We are assuming that the Federal Reserve Board will be following a policy of moderate restraint throughout 1977 and that by the first quarter of 1978 the bill rate will be 6 percent, with a continuing modest increase during 1978. Under those assumptions mortgage rates will increase. These credit conditions will exert downward pressure on residential construction, and expenditure in constant prices will decline modestly from the first quarter of 1978, reversing the direction of 1977.

The forecast of economic activity I have just discussed raises serious questions about the outlook for 1979. With the slowdown in economic growth in 1978, corporate profits will flatten out and turn down in the last half of 1978. Although fixed investment will continue to increase in 1978, the slow growth in consumption and the declining trend in profits bodes no good for investment in 1979.

This outlook is based on the programs included in the first concurrent resolution on the budget. However, if we take into account recent experience of slippage in spending and going rates of expenditures, unified budget expenditures of \$453 billion is a more realistic estimate than the \$461 billion of the first concurrent resolution. I believe there is a need for a more expansionary economic policy to avoid a slowdown in 1978 and a risk of recession in 1979.

Inflation and the balance of payments are the reasons usually given for not following a policy of expansion. Recent developments have been discouraging. The whole price index has been increasing at an annual rate of 11 percent over the last 3 months and consumer prices have increased by 10 percent. These high numbers, however, are a consequence of the unusually harsh winter and the drought in California. If food and energy prices are excluded from the index, the rate of increase for both indexes falls to about 6-7 percent, and that is a better indication of the underlying rate of inflation in the economy.

The basic rate of inflation could accelerate for either or both of two reasons, excess demand or cost push. Excess demand arises when supply cannot keep up with demand because of shortages of plant capacity or shortages of labor. Neither factor of production will be in scarce supply on a widespread basis in 1977 or 1978. My calculations indicate that capacity utilization in total manufacturing and in the primary processing industries will remain, throughout 1978, substantially below the 90 percent level that would give the economy inflationary trouble. The unemployment rate in the fourth quarter of 1978 will be 6.2 percent; scarcely an indication of labor shortage.

I do expect greater increases in wages in 1977 and 1978 than we had in 1976. Private annual earnings will increase by about 8 percent in both years. The rapid increase in employment this year, relative to the rise in GNP, suggests to me that business is hiring in preparation for future increases in production. As a consequence, the rise in productivity this year will be no more than 2.5 percent. Next year, the slowdown in the growth rate for GNP will hold productivity down to about the same figure. Therefore, unit labor costs in both years will rise about 6.5-7 percent. Consequently, I expect the Consumer Price Index will increase by about 6.5 percent in each year. The effects of additional expansion would have very little effect on wage rates, but it would tend to increase productivity and thus reduce unit labor costs and therefore, cost-push inflationary pressures. A recession would have opposite effects, a sharp drop in productivity and an increase in unit labor costs.

In present circumstances, therefore, economic policy could be more expansionary without causing a significant increase in inflation arising from either excess demand or cost push.

The balance of payments constitutes a more serious limitation on our ability to pursue expansionary policies. The United States will have a deficit on current account of \$11 billion in 1977. By 1979 that deficit

could be in the \$15-\$20 billion range. Oil imports in 1979 will approach \$50 billion. As long as there is confidence in the dollar, the major oil exporters that are accumulating large surpluses, such as Saudi Arabia, will invest large proportions of their funds in the United States and residents of other countries will be glad to hold dollars.

Confidence in the dollar, however, will weaken if it becomes apparent that the United States does not have the will to adopt an energy program that will hold U.S. imports of petroleum down to levels that do not threaten its balance of payments. Without an effective energy program the United States, like many of the major European countries, will find that it no longer has the freedom to pursue a policy of economic expansion because of the deficit in its balance of payments.

In conclusion, the slow growth in real disposable income per person employed is holding down the increase in consumption so that the economy has a tendency to run out of steam. This will become evidence in 1978. Additional moderate expansion does not threaten us with runaway inflation. We must, however, take action to reduce petroleum imports so our balance-of-payments deficit does not limit our ability to pursue expansionary policies.

[The tables attached to Mr. Karchere's statement follow:]

	1977:1	1977:2	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4
Gross national product, current dollars.....	1,796.1	1,861.5	1,914.3	1,970.1	2,026.9	2,073.9	2,113.4	2,160.6
Personal consumption expenditures.....	1,159.1	1,197.5	1,224.0	1,254.3	1,289.1	1,318.5	1,344.7	1,375.9
Durable goods.....	174.0	180.1	180.7	184.3	189.8	192.7	194.4	197.7
Nondurable goods.....	464.7	481.6	492.6	504.2	516.9	528.1	538.1	549.3
Services.....	520.4	535.8	550.7	565.7	582.4	597.7	612.2	629.0
Gross private domestic investment.....	267.8	280.8	291.3	300.0	311.1	320.1	325.6	329.5
Fixed investment.....	254.2	264.7	275.3	284.5	293.9	302.0	307.7	311.9
Nonresidential.....	174.0	178.0	184.1	189.1	195.0	201.0	205.7	209.2
Structures.....	56.6	57.9	59.2	60.4	61.8	63.1	64.4	65.7
Production, durable equipment.....	117.4	120.2	124.9	128.7	133.2	137.8	141.3	143.5
Residential structures.....	80.2	86.6	91.2	95.4	98.9	101.1	102.0	102.7
Change in business inventories.....	13.6	16.2	16.0	15.5	17.2	18.1	17.9	17.6
Net exports of goods and services.....	-9.3	-8.0	-4.5	-2.0	-3.0	-4.5	-5.8	-6.8
Exports.....	170.5	173.0	181.4	189.7	194.2	197.0	200.0	203.2
Imports.....	179.8	181.0	185.9	191.7	197.2	201.5	205.8	210.0
Government purchases of goods and services.....	378.5	391.3	403.6	417.9	429.7	439.7	448.9	462.0
Federal.....	138.2	142.7	146.6	153.0	156.1	159.2	161.9	168.2
National defense.....	91.5	93.7	96.1	100.0	101.6	103.6	105.2	109.0
Other.....	46.7	49.0	50.5	53.0	54.5	55.6	56.7	59.2
State and local.....	240.3	248.5	257.0	264.9	273.5	280.5	287.0	293.8
Gross national product, 1972 prices.....	1,300.3	1,320.5	1,336.1	1,351.7	1,369.2	1,379.9	1,385.8	1,394.3
Personal consumption expenditures.....	843.8	854.6	860.2	867.9	877.9	884.0	887.9	895.3
Durable goods.....	134.9	137.9	137.3	139.0	141.8	142.7	142.9	144.2
Non-durable goods.....	326.8	331.4	333.8	335.9	338.8	340.6	341.8	344.0
Services.....	382.1	385.4	389.2	392.9	397.4	400.6	403.2	407.1
Gross private domestic investment.....	183.1	188.0	191.4	193.8	197.5	200.3	200.7	200.0
Fixed investment.....	173.9	177.8	181.6	184.4	187.4	189.8	190.5	190.1
Nonresidential.....	122.3	123.4	125.8	127.5	129.8	132.4	134.0	134.7
Structures.....	37.8	38.0	38.3	38.6	38.9	39.3	39.7	40.0
Production, durable equipment.....	84.5	85.3	87.5	88.9	90.9	93.1	94.3	94.8
Residential structures.....	51.6	54.4	55.8	56.9	57.6	57.4	56.5	55.4
Change in business inventories.....	9.2	10.2	9.8	9.3	10.2	10.5	10.2	9.9

	1977:1	1977:2	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4
Net exports of goods and services	10.9	11.0	13.2	15.0	15.2	14.4	13.8	13.4
Exports.....	97.8	97.1	100.1	103.4	104.1	103.9	104.0	104.2
Imports.....	86.9	86.1	86.9	88.4	88.9	89.5	90.1	90.8
Government purchases of goods and services	262.4	266.9	271.3	275.0	278.5	281.2	283.3	285.7
Federal.....	96.4	97.9	99.5	100.8	101.5	102.3	102.9	103.7
State and local.....	166.0	169.1	171.8	174.3	177.1	178.9	180.4	182.0
GNP price deflator (1972=100), industrial wholesale prices (1967=100)	138.1	141.0	143.3	145.7	148.0	150.3	152.5	155.0
Consumer price index (1967=100)	190.0	195.0	197.3	199.3	202.9	205.8	208.2	210.6
Gross national product	1,796.1	1,861.5	1,914.3	1,970.1	2,026.9	2,073.9	2,113.4	2,160.6
Less:								
Depreciation (CCA).....	192.2	196.4	200.8	205.5	210.4	215.5	220.7	225.8
Indirect business taxes.....	158.8	163.6	167.0	170.9	179.5	183.6	187.3	191.3
Business transfers.....	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1
Statistical discrepancy.....	9.2	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Plus: Subsidies less surplus.....	3.1	3.3	3.8	4.1	4.5	5.1	5.6	6.1
Equals national income.....	1,431.4	1,487.9	1,533.2	1,580.5	1,623.9	1,662.2	1,693.2	1,731.5
Less:								
Corp profits, IVA and CCA....	116.2	126.8	136.3	143.8	144.1	148.1	145.6	143.7
Net interest.....	88.9	92.8	96.5	100.5	103.7	106.3	108.5	111.5
Contributions for social security.....	134.4	138.0	140.5	142.8	155.3	157.9	160.4	162.9
Wage accruals.....	0	0	0	0	0	0	0	0
Plus:								
Government transfers.....	195.2	195.8	201.1	205.0	210.1	213.2	219.2	222.5
Personal interest income.....	131.6	136.9	141.5	146.4	151.2	155.6	159.4	164.0
Dividends.....	37.6	38.5	39.2	40.0	40.8	41.5	42.1	42.6
Business transfers.....	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1
Equals personal income.....	1,464.0	1,509.4	1,549.8	1,593.1	1,631.4	1,668.9	1,708.4	1,751.6
Less: Personal income taxes	218.2	218.2	222.6	230.7	224.3	230.8	247.9	255.7
Equals disposable personal income.....	1,245.8	1,291.2	1,327.2	1,362.5	1,407.1	1,438.1	1,460.5	1,495.9
Savings ratio (percent of disposable income)	4.9	5.2	5.7	5.8	6.2	6.1	5.7	5.8
Consumption ratio (percent)	93.0	92.7	92.2	92.1	91.6	91.7	92.1	92.0
Private annual earnings (thousands of dollars)	12.65	12.92	13.18	13.43	13.70	13.95	14.21	14.49
Private hourly earnings (dollars)	6.63	6.76	6.90	7.04	7.19	7.33	7.48	7.63
Private output per man-hour, (1972=100)	107.3	107.5	108.6	109.5	110.3	110.7	110.9	111.1
Unit labor cost (1972=100)	137.3	140.1	142.0	143.9	146.7	149.2	152.1	154.9
Civilian labor force (millions)	96.1	96.9	97.4	97.8	98.2	98.5	98.9	99.2
Civilian employment (millions)	89.0	90.2	90.8	91.3	91.8	92.3	92.7	93.1
Unemployment rate (percent of labor force)	7.4	6.9	6.7	6.7	6.5	6.4	6.3	6.2
National income	1,431.4	1,487.9	1,533.2	1,580.5	1,623.9	1,662.2	1,693.2	1,731.5
Compensation of employees	1,097.7	1,133.6	1,160.8	1,193.0	1,231.2	1,260.6	1,289.5	1,323.7
Wages and salaries.....	947.2	978.7	1,002.5	1,031.4	1,059.2	1,085.1	1,110.3	1,140.9
Private.....	747.1	775.6	794.9	815.5	838.6	860.6	881.9	904.0
Military.....	24.6	24.6	24.7	26.2	26.2	26.3	26.4	27.9
Civilian government.....	175.5	178.5	182.8	189.7	194.3	198.2	202.1	209.1
Supplements.....	150.5	154.8	158.3	161.5	172.0	175.6	179.2	182.7
Rent, interest, proprietors income	217.6	227.6	236.1	243.8	248.6	253.4	258.0	264.1
Corporate profits plus IVA and CCA	116.2	126.8	136.3	143.8	144.1	148.1	145.6	143.7
Profits before tax.....	156.3	171.9	169.6	174.8	182.5	184.6	182.3	180.6
Profits tax liability.....	68.6	74.8	73.9	76.1	79.4	80.3	79.3	78.6
Profits after tax.....	87.7	97.0	95.8	98.7	103.1	104.3	103.0	102.0
Dividends.....	37.6	38.5	39.2	40.0	40.8	41.5	42.1	42.6
Undistributed profits.....	50.1	58.5	56.5	58.7	62.3	62.7	60.8	59.4
Inventory valuation adjustment	-23.1	-27.4	-14.9	-11.9	-18.6	-16.0	-15.5	-15.0
Capital consumption adjustment	-17.0	-17.7	-18.4	-19.1	-19.8	-20.5	-21.2	-21.9
Memo: New orders, machinery and equipment	175.4	179.5	183.8	189.9	197.5	202.5	204.9	207.0
Federal government:								
Receipts.....	366.3	373.3	377.6	388.0	399.5	408.1	425.4	433.5
Expenditures.....	407.6	418.6	431.2	444.1	455.6	464.9	476.3	487.9
Surplus of deficit.....	-41.3	-45.3	-53.5	-56.1	-56.1	-56.8	-50.8	-54.5

	1977:1	1977:2	1977:3	1977:4	1978:1	1978:2	1978:3	1978:4
State and local government:								
Receipts.....	275.1	288.3	296.5	305.4	314.4	322.1	328.9	336.1
Expenditures.....	255.0	263.5	272.5	280.9	289.8	297.2	304.3	311.6
Surplus or deficit.....	20.1	24.8	24.0	24.5	24.6	24.8	24.6	24.5
			1973	1974	1975	1976	1977	1978
Gross national product current dollars.....	1,306.6	1,413.2	1,516.3	1,691.6	1,885.5	2,093.7		
Personal consumption expenditures.....	809.9	887.5	973.2	1,079.7	1,208.7	1,332.1		
Durable goods.....	123.7	121.6	131.7	156.5	179.8	193.7		
Nondurable goods.....	333.8	376.2	409.1	440.4	485.8	533.1		
Services.....	352.3	389.6	432.3	482.8	543.1	605.3		
Gross private domestic investment.....	220.0	215.0	183.7	239.6	285.0	321.6		
Fixed investment.....	202.1	204.3	198.3	227.7	269.7	303.9		
Nonresidential.....	136.0	149.2	147.1	160.0	181.3	202.7		
Structures.....	49.0	54.1	52.0	55.3	58.5	63.8		
Production, durable equipment.....	86.9	95.1	95.1	104.7	122.8	139.0		
Residential structures.....	66.1	55.1	51.2	67.7	88.3	101.2		
Change in business inventories.....	17.9	10.7	-14.6	11.9	15.3	17.7		
Net exports of goods and services.....	7.2	7.5	20.5	6.6	-6.0	-5.0		
Exports.....	101.6	144.4	148.1	162.6	178.7	198.6		
Imports.....	94.4	136.9	127.6	156.0	184.6	203.6		
Government purchases of goods and services.....	269.5	303.3	339.0	365.6	397.8	445.1		
Federal.....	102.2	111.6	124.4	133.4	145.1	161.3		
National defense.....	73.5	77.3	84.3	88.2	95.3	104.8		
Other.....	28.7	34.4	40.1	45.2	49.8	56.5		
State and local.....	167.3	191.6	214.5	232.2	252.7	283.7		
Gross national product, 1972 prices.....	1,234.9	1,213.9	1,191.7	1,264.7	1,327.1	1,382.3		
Personal consumption expenditures.....	767.7	759.1	770.3	813.7	856.6	886.3		
Durable goods.....	121.8	112.3	111.9	125.8	137.3	142.9		
Nondurable goods.....	309.3	303.4	306.0	319.2	332.0	341.3		
Services.....	336.6	343.4	352.4	368.6	387.4	402.1		
Gross private domestic investment.....	207.2	182.0	137.8	170.9	189.1	199.6		
Fixed investment.....	190.7	173.6	149.8	162.8	179.4	189.4		
Nonresidential.....	131.0	128.5	111.4	115.7	124.7	132.7		
Structures.....	45.4	42.1	36.7	38.1	38.2	39.5		
Production, durable equipment.....	85.5	86.5	74.7	77.7	86.6	93.3		
Residential structures.....	59.7	45.0	38.4	47.1	54.7	56.7		
Change in business inventories.....	16.5	8.5	-12.0	8.1	9.6	10.2		
Net exports of goods and services.....	7.6	16.5	22.6	16.0	12.5	14.2		
Exports.....	87.4	97.2	90.6	96.1	99.6	104.0		
Imports.....	79.8	80.7	68.1	80.1	87.1	89.8		
Government purchases of goods and services.....	252.5	256.4	260.9	264.1	268.9	282.2		
Federal.....	96.6	95.3	95.7	96.7	98.6	102.6		
State and local.....	155.9	161.1	165.2	167.4	170.3	179.6		
GNP price deflator (1972=100).....	105.8	116.5	127.2	133.7	142.0	151.4		
Industrial wholesale prices (1967=100).....	125.9	153.8	171.5	182.4	194.5	206.9		
Consumer Price Index (1967=100).....	133.1	147.7	161.2	170.5	181.8	194.1		
Gross national product.....	1,306.6	1,413.2	1,516.3	1,691.6	1,885.5	2,093.7		
Less:								
Depreciation (CCA).....	117.6	137.7	161.4	179.8	198.7	218.1		
Indirect business taxes.....	120.2	128.4	138.7	149.7	165.1	185.4		
Business transfers.....	5.4	5.6	6.3	7.1	8.0	8.8		
Statistical discrepancy.....	2.6	6.6	4.4	7.7	9.0	9.0		
Plus:								
Subsidies less surplus.....	3.9	0.8	2.0	1.2	3.6	5.3		
Equals national income.....	1,064.6	1,135.7	1,207.6	1,348.5	1,508.3	1,677.7		
Less:								
Corporate profits, IVA and CCA.....	99.1	84.8	91.6	117.8	130.8	145.4		
Net interest.....	52.3	67.1	74.6	82.0	94.7	107.5		
Contributions for social security.....	91.5	103.4	109.6	122.8	138.9	159.1		
Wage accruals.....	-0.1	-0.5	0	0	0	0		
Plus:								
Government transfers.....	113.5	134.6	168.9	184.2	199.3	216.3		
Personal interest income.....	84.0	101.4	110.6	123.0	139.1	157.6		
Dividends.....	27.8	30.8	32.1	35.1	38.8	41.8		
Business transfers.....	5.4	5.6	6.3	7.1	8.0	8.8		
Equals personal income.....	1,052.4	1,153.3	1,249.6	1,375.2	1,529.1	1,609.1		
Less:								
Personal income taxes.....	150.8	170.4	168.8	193.6	222.4	239.7		
Equals disposable personal income.....	901.6	982.9	1,080.8	1,181.7	1,306.7	1,450.4		
Savings ratio (percent of disposable income).....	7.9	7.5	7.8	6.6	5.4	6.0		
Consumption ratio (percent).....	89.8	90.3	90.1	91.4	92.5	91.8		
Private annual earnings (thousands of dollars).....	9.64	10.37	11.24	12.07	13.05	14.09		
Private hourly earnings (dollars).....	4.94	5.37	5.88	6.31	6.83	7.41		
Private output per man-hour (1972=100).....	102.0	99.4	101.4	105.4	108.2	110.8		
Unit labor cost (1972=100).....	106.8	118.7	127.3	132.0	140.8	150.7		
Civilian labor force (millions).....	88.7	91.0	92.6	94.8	97.0	98.7		
Civilian employment (millions).....	84.4	85.9	84.8	87.5	90.3	92.5		
Unemployment rate (percent of labor force).....	4.8	5.6	8.5	7.7	6.9	6.3		
National income.....	1,064.6	1,135.7	1,207.6	1,348.5	1,508.3	1,677.7		

	1973	1974	1975	1976	1977	1978
Compensation of employees.....	799.2	875.8	928.8	1,028.4	1,146.2	1,276.3
Wages and salaries.....	701.2	764.5	806.6	890.3	990.0	1,098.9
Private.....	552.6	604.1	630.8	699.6	783.3	871.3
Military.....	22.1	22.5	23.3	23.9	25.0	26.7
Civilian government.....	126.5	137.9	152.6	166.8	181.6	200.9
Supplements.....	98.0	111.3	122.1	138.0	156.3	177.4
Rent, interest, proprietors income.....	166.3	175.0	187.1	202.2	231.2	256.0
Corporate profits plus IVA and CCA.....	99.1	84.8	91.6	117.8	130.8	145.4
Profits before tax.....	115.8	127.6	114.5	147.9	168.1	182.5
Profits tax liability.....	48.7	52.4	49.3	64.3	73.3	79.4
Profits after tax.....	67.1	75.2	65.3	83.6	94.8	103.1
Dividends.....	27.8	30.8	32.1	35.1	38.8	41.8
Undistributed profits.....	39.3	44.4	33.2	48.4	56.0	61.3
Inventory valuation adjustment.....	-18.6	-39.8	-11.4	-14.6	-19.3	-16.3
Capital consumption adjustment.....	1.9	-3.0	-11.5	-15.5	-18.0	-20.8
Memo: New orders, machinery and equipment.....	133.9	151.9	130.9	154.7	182.1	203.0
Federal Government:						
Receipts.....	258.3	288.2	286.5	330.3	376.3	416.6
Expenditures.....	265.0	299.7	357.7	388.9	425.4	471.2
Surplus or deficit.....	-6.7	-11.5	-71.3	-58.6	-49.1	-54.5
State and local government:						
Receipts.....	193.5	210.2	234.3	260.4	291.3	325.4
Expenditures.....	180.5	203.0	227.5	246.4	268.0	300.7
Surplus or deficit.....	13.0	7.3	6.8	14.0	23.3	24.6

Representative BOLLING. Thank you very much.
Mr. Teigen.

STATEMENT OF RONALD L. TEIGEN, PROFESSOR OF ECONOMICS, UNIVERSITY OF MICHIGAN

Mr. TEIGEN. Mr. Chairman, I am very pleased to be here to testify today on the condition of the economy. I have provided the committee with the full text of my prepared statement and will just summarize its main points.

Representative BOLLING. The full text of all statements will be included in the record.

Mr. TEIGEN. In the first part of 1977, real GNP grew at a rate of 6.4 percent relative to the fourth quarter of 1976. This rapid growth rate has led some observers to believe the economy is on a vigorous recovery track and no further stimulus is needed. However, if the first quarter figures are examined within the context of growth patterns over the last several quarters, it appears we are really on the same 4.5 percent growth track we have been following for the past year or more. The 6.4 percent spurt of output growth in the first quarter of 1977 over the last quarter of 1976 follows a 2.6 percent growth rate for that quarter over the third quarter. But if you base the first quarter growth rate calculations on 1976's first, second, or third quarters so short-term variations are averaged somewhat, real output in 1977 first quarter will be seen to be growing at about 4.5 percent.

What is really happening is that in the last quarter of 1976, real output growth fell below its level in previous quarters. In 1977, first quarter, it moved back toward its more typical pattern. In doing so, it showed a temporary acceleration of growth when the calculations are made on a quarter-by-quarter basis.

Real final sales—that is real GNP less the more transitory inventory change component—show a related pattern. They also have grown at a rate near 4.5 percent over the last several quarters; and in the fourth quarter of 1976, real final sales accelerated to a 5.7 percent

growth rate and fell off in the first quarter of 1977 to 3.7 percent. This pattern is more or less a mirror image of the movements of real output.

I see no reason to believe that these recent squiggles in the growth paths are anything other than short-term aberrations. Rather than having a return to a vigorous recovery track, the economy instead seems to be continuing along a growth path in the 4 to 4.5 percent range, a path which is not likely to reduce the unemployment rate much or to move us substantially toward the administration's balanced budget goal. Rather than being optimistic about our performance, we should be wondering whether the economy may be heading toward another slow-down since we are already in the 27th month of the present expansion while during peacetime the average length of the expansion phase of the business cycle has been 34 months.

The shape of the near-term future depends upon the strength of demand for output by firms, households, Government units and foreign buyers. Let us first consider households. While consumption spending will probably continue to rise with income, the household saving rate is presently at its lowest level—4.8 percent—in about 14 years; and it seems implausible that this rate will decrease any further as would be required for consumption to provide any substantial autonomous impetus to output growth. If anything, the saving rate probably will rise because some households spent in anticipation of the unrealized tax rebate and will now be compensating for that while others will be trying to reduce the high level of household debt now outstanding.

We at Michigan are forecasting that the household saving rate will rise within the next four quarters to about 5.8 percent from its present level of about 4.8 percent.

Total Government sector purchases of goods and services in real terms have been essentially stationary since mid-1975, and while some elements of the President's stimulus package recently have been passed, they amount to only about a 4-percent expansion of Government purchases in nominal dollar terms during fiscal year 1977 and something less than that in real terms. No major spending thrust in the Government sector during the next several quarters presently is expected. In terms of our foreign trade, the economies of many of our trading partners are expanding even more slowly than we are and furthermore, they are more dependent on energy imports than we.

Our own demands for imported energy remain high. So only a very slow growth in United States real exports is expected while imports in real terms will likely continue to grow rather rapidly.

Putting these facts together means that real net exports probably will be declining during the next several quarters. Therefore, it would appear that investment is the only sector likely to provide the impetus needed to pick up the economy's growth rate. Real business fixed investment has been growing at about 8.5 percent in the last year; and real outlays on residential structures have been growing at about 18 percent. Inventory investment has been more variable. It dropped sharply at the end of 1976, but recovered to nearly its former level in the past quarter.

Some of the surveys of the investment intentions that have been taken regularly indicate that real outlays by businesses on plant and equipment could be as much as 11 percent higher in 1977 than 1976. Others are not quite so optimistic. As has already been mentioned, the Commerce Department's survey, which was reported yesterday, is considerably less optimistic than that. The University of Michigan's research seminar on quantitative economics has provided a quarterly forecast of the economy through the end of calendar year 1978 using the Michigan Quarterly Econometric Model of the U.S. economy. In this model, investment is one of the internally determined variables along with real output, prices, employment, and so on.

Our model predicts that real business fixed investment will grow by 9.0 percent in 1977 over 1976; not as high as McGraw-Hill's prediction of 11 percent but much higher than the 3.9 percent realized in 1976 over 1975 and also higher than is predicted by the Commerce Department's survey.

For 1978, the model predicts real business fixed investment will grow at a 7.4-percent rate. So on this basis—that is investment growing by 9 percent in real terms—we predict that GNP in real terms will grow only at a 4.8-percent rate in 1977 over 1976; and at a 4.3-percent rate in 1978 over 1977. These growth rate predictions are consistent with my earlier comments about the first quarter's performance. If you look at the quarter-by-quarter details, we foresee real output growth peaking in the third quarter of this calendar year; but then falling to less than 3 percent by the 1978 fourth quarter.

The average unemployment rate is predicted to be 6.7 percent in 1977 and 6 percent in 1978. Inflation, as measured by the GNP deflator, is expected to be 5.7 percent and 6.4 percent in the next 2 years, respectively.

I should have mentioned earlier that our forecast contains as inputs the spending and taxing plans from the First Concurrent Budget Resolution for fiscal 1978 as well as those parts of the President's stimulus package already passed which will be part of fiscal 1977, and also monetary growth which is consistent with the current targets announced by the Federal Reserve System.

I am led by all of this to conclude that present policy is inadequate not only because it will fail to return the economy to full employment or indeed even to avert another slowdown, but also because it fails to address serious longer run problems of inadequate growth in productivity and of full employment potential output growth.

Further stimulus definitely is needed in my opinion, and my analysis suggests that both shorter run and longer run ends can best be served by policy changes which will increase the growth rate of real business fixed investment. Desirable measures in this context are those which will make more funds available to businesses and which will reduce the user cost of capital. On the fiscal policy side, the cost of capital could be lowered by reducing the investment tax credit. The amount of internal funds available could be increased by lowering the corporate tax rate. Since larger firms have access to the capital markets so their financing needs can be addressed to some degree through monetary policy, the desired effect might be achieved with a minimal

revenue loss by lowering the rates which apply only to the first \$50,000 of taxable corporate income while leaving the rate on profits in excess of \$50,000 unchanged.

Such a change, in other words, would be aimed particularly at encouraging investment by smaller firms, firms which do not have the access to the capital markets that larger firms do.

As I have already indicated, monetary policy can stimulate investment if it is aimed at making credit available to those firms desiring to finance investment projects by borrowing and if it is aimed at keeping interest rates low. Under our forecast, and as Mr. Karchere said also is true of the IBM forecast, interest rates creep upward. In particular, the bill rate goes up by 200 basis points by the end of 1978. We also predict that the corporate bond rate will rise by around 50 basis points under current policy, assuming the other things that I incorporated in our forecast.

These specific measures might be augmented by some further personal tax reduction and expenditure increase if these appear necessary to attain high employment. Even if firms have low-cost funds available, the inducement to invest is small if plants are idle, if unemployment is high, and if the economy is stagnating.

There are those who argue against fiscal stimulus on grounds it will be crowded out unless accommodated by monetary expansion and who argue further that monetary expansion will generate more inflation. However, at present we still have a substantial number of unemployed resources, both labor and capital. Most economists would agree that under such circumstances the effect of expansionary policy, whether monetary or fiscal policy, are likely to be mostly on real output rather than prices. As we move toward full employment, of course, this balance changes and further policy adjustments would be needed to assure that the economy will end up moving along the full economy growth path instead of generating unnecessary instability and inflation.

That concludes my summary.

[The prepared statement of Mr. Teigen follows:]

PREPARED STATEMENT OF RONALD L. TEIGEN

THE PRESENT SITUATION

Much is being made of the fact that the economy performed strongly in the first quarter of 1977 in terms of real output growth. Constant-dollar GNP (seasonally adjusted) advanced at a 6.4 percent annual rate as compared to rates of 2.6 percent in 1976:4, 3.9 percent in 1976:3, and 4.5 percent in 1976:2. President Carter has cited the economy's current strength as grounds for withdrawing his tax rebate proposal, and statements to the effect that "cyclical momentum has been re-established" and "the need for additional stimulus clearly is obviated" have been appearing in the business press.

Yet the evidence from 1977's first quarter is not as uniformly encouraging as the summary GNP numbers or the above quotations suggest. While the real output growth rate jumped from 2.6 percent in 1976:4 to 6.4 percent in 1977:1, the growth rate of final sales—real GNP less its more transitory inventory change component—declined, going from 5.7 percent in 1976:4 to 3.7 percent in 1977:1. By contrast, when growth rates are calculated over periods longer than just one quarter, so that short-run movements are averaged somewhat, a comparison between GNP growth and final demand growth suggests that the first quarter's performance is an extension of the pattern shown by the previous several quarters. Table 1 shows the growth rates of real GNP and real final sales calculated over various periods, all ending in 1977:1.

TABLE 1.—ANNUAL GROWTH RATES OF REAL GNP AND REAL FINAL SALES,
FROM VARIOUS BASE PERIODS TO 1977:1

[In percent]

	Growth rate of—	
	Real GNP	Real final sale
1975:1 (cyclical trough) to 1977:1	5.8	4.5
1976:1 to 1977:1	4.3	4.5
1976:2 to 1977:1	4.3	4.5
1976:3 to 1977:1	4.5	4.7
1976:4 to 1977:1	6.4	3.7

Over the period 1976:3 to 1977:1, for example, real GNP grew at a 4.5 percent rate while the growth rate of real final sales was 4.7 percent. Almost the same growth rates are found if a base of 1976:1 or 1976:2 is used instead of 1976:3. Putting these facts together with the short-run movements makes clear what has happened. In 1976:4, real GNP growth fell below its longer-run average value: in 1977:1, it moved back toward that more typical value, and in doing so showed a temporary acceleration of growth. Similarly, real final sales grew somewhat faster than its longer-run pattern in 1976:4: in moving back to this pattern in 1977:1, a transitory deceleration in its growth rate occurred.

Therefore it seems improbable that last quarter's sharp increase in real GNP represents a shift to a vigorous recovery track. The data in Table 1 suggest that the economy may instead merely be continuing to move along a recovery path with output growth in the 4.0 to 4.5 percent range—a path recently characterized by the Congressional Budget Office as "the disappointing recovery."¹ This level of growth is not likely to reduce the unemployment rate very rapidly, nor is it high enough to move us substantially toward the Administration's budget balance goal if maintained. And since the present quarter is the ninth in the current expansion, it is natural to wonder whether growth rates even as high as 4.5 percent or thereabouts can be maintained very long, or whether the economy instead might experience a cyclical deceleration within the coming three or four quarters.²

The shape of the near-term future obviously depends most directly on the strength of demand by households, businesses, and government and the net demand for our output by foreign buyers. Neither household nor government spending appears likely to be strong enough to provide the basis for continuing high output growth. The household saving rate has fallen steadily since 1976:2, from a value of 7.1 percent to its present level of 4.8 percent. This is its lowest value in many years; at the same time, consumer debt outstanding has risen substantially. While consumption spending probably will continue to rise with income, it seems improbable that the saving ratio will decrease any further as would be required for consumption to provide any substantial autonomous impetus to output growth. If anything, some increase in the saving rate (i.e., some reduction in spending relative to disposable income) might be anticipated, since some households probably made expenditures in anticipation of the tax rebate, and some will act to reduce the high level of household debt outstanding. Regarding the outlook for household spending, the University of Michigan's Survey Research Center says, "The implications of . . . survey findings for consumer spending during the balance of 1977 are relatively optimistic. Nothing in these data suggests, however, that consumer spending is likely to rise faster than disposable income. The current outlook thus stands in sharp contrast to the forecast made a year earlier, when consumer spending was expected to rise substantially faster than income, producing a decline in the rate of personal saving. No such presumption applies in 1977 . . ."³ The findings of other consumer-confidence surveys—those conducted by the Conference Board, and Sindlinger & Company—have been less positive as regards consumer confidence than the Survey Research Center's findings.

Total government purchases in real terms have been essentially stationary since 1975:3 and thus have contributed nothing to the expansion of demand.

¹ Congressional Budget Office, *The Disappointing Recovery* (Washington, D.C.: U.S. Government Printing Office, January 1977).

² During peacetime over the period since World War II, the average length of the expansion phase of the business cycle has been 34 months. See *Business Conditions Digest*, February 1977, p. 105.

³ Richard T. Curtin, "Consumer Confidence Weathers Storm," *Economic Outlook, U.S.A.*, Survey Research Center, University of Michigan, Spring 1977, p. 24.

Recently passed legislation provides some \$14 billion of new funds in fiscal year 1977 for public service employment, public works jobs programs, and training, mostly at the state and local government level, but this amounts to only about a 4 percent expansion of government purchases in current-dollar terms. No major spending thrust from this sector during the next several quarters is presently anticipated. Real gross exports likewise have been almost stationary during the past few quarters, while real imports have been rising at a rate of about 12 percent per year. These trends are expected to continue, due to such factors as the present and anticipated low rates of expansion in other countries, persistently high domestic demands for energy, and therefore for fuel imports, etc. As a consequence, net exports of goods and services in real terms probably will decline somewhat during the coming several quarters.

Therefore any substantial impetus to the economy will have to come from investment. Growth rates for various components of fixed investment, calculated in the same way as the growth rates given in Table 1, are shown in Table 2.

TABLE 2.—ANNUAL GROWTH RATES OF REAL FIXED INVESTMENT AND ITS COMPONENTS, FROM VARIOUS BASE PERIODS TO 1977:1

	Growth rate of—		
	Total fixed investment	Nonresidential fixed investment	Residential structures
1975 :1 (cyclical trough) to 1977:1.....	7.7	3.4	20.7
1976 :1 to 1977:1.....	11.0	8.6	17.0
1976 :2 to 1977:1.....	11.2	8.7	17.6
1976 :3 to 1977:1.....	11.1	8.3	18.5
1976 :4 to 1977:1.....	12.1	15.8	4.0

Real fixed investment has been growing steadily at a rate of 11 or 12 percent per year, with a slowdown in the residential category in 1977:1 offset by an acceleration in nonresidential investment, particularly in its equipment component. However, the latter appears to have consisted of a spurt in business spending on autos and trucks, possibly as a consequence of the Ford Motor Company strike in the autumn of 1976. Therefore the growth of nonresidential fixed investment will likely fall back towards its earlier level in future quarters.

Yet the outlook for real fixed investment does seem more positive than for the other expenditure categories discussed earlier. Surveys of investment intentions indicate that real plant and equipment investment in 1977 may rise as much as 11 percent over 1976.⁴ Real inventory investment bounced back almost to the level it had maintained during the first three quarters of 1976, after falling almost to zero in 1976:4. It is expected to continue at or above its current level.

THE OUTLOOK THROUGH 1978

A short-term forecast based on the considerations discussed above has just been produced by the University of Michigan's Research Seminar in Quantitative Economics, using the Michigan Quarterly Econometric Model of the United States economy. This forecast is consistent with the recently-passed legislation which includes parts of the President's stimulus package, and with present targets as regards growth rates of the monetary aggregates. Table 3 summarizes the predicted year-over-year growth rates of the real expenditure components discussed above.

According to the forecast, real output will rise at a 4.8 percent rate this year, and at a 4.3 percent rate in 1978. The average aggregate unemployment rate is predicted to be 6.7 percent in 1977, and 6.0 percent in 1978. Inflation, as measured by the GNP deflator, is expected to be 5.7 percent in 1977, a slight

⁴ This finding was reported in the McGraw-Hill survey early in May. A survey of business spending plans made by the Department of Commerce in late January and early February found that 1977 expenditures in current-dollar terms would be 12 percent above 1976, with probably a little more than half of this increase representing real new investment. An ASA-NBER survey of spending plans taken at about this time produced a finding similar to the Commerce Department's. The differences between the McGraw-Hill findings and the others probably is due to the fact that the economy strengthened somewhat between January and May.

acceleration over the present rate. In 1978, a further increase to 6.4 percent is predicted. On a quarter-by-quarter basis, the forecast suggests that the rate of real output increase will decline rapidly from the present quarter's expected 6.2 percent rate to 2.7 percent by 1978 :4.

TABLE 3.—PREDICTED YEAR-OVER-YEAR GROWTH RATES FOR AGGREGATE DEMAND CATEGORIES, IN REAL TERMS, BASED ON THE MICHIGAN QUARTERLY ECONOMETRIC MODEL

[In percent]

	Predicted annual growth rates—	
	1976-77	1977-78
Gross national product.....	4.8	4.3
Consumption expenditures.....	5.1	3.7
Government purchases (Federal, State and local).....	1.0	3.5
Net exports.....	-34.2	-5.4
Business fixed investment.....	9.0	7.4
Inventory change.....	32.3	34.2
Residential investment.....	19.5	5.8
Final sales.....	4.7	4.0

These numbers suggest that current policy is not adequate to return the economy to a vigorous recovery track or to keep it there. Though the unemployment rate is expected to fall, it will remain well above the 4.9 percent level now regarded by the Council of Economic Advisers as the full employment unemployment rate. And the consolidated deficit of the government sector (on a national income accounts basis), which was running at a \$21.2 billion annual rate in 1977 :1, is forecast to rise to an annual rate of \$24.0 billion by 1978 :4, suggesting little if any progress on this front.

WHAT SHOULD POLICY BE?

Present policy is inadequate not only because it will fail to return the economy to full employment or indeed to avert another slowdown, but also because it fails to address the longer-run problem of inadequate growth of productivity and hence full-employment potential output. Output per hour worked in the private nonfarm business sector has grown at an annual compounded rate of 2.3 percent in the period 1947-76, but is predicted by the Michigan Model to grow by only 1.4 percent in 1977. The Council of Economic Advisers recently has revised downwards rather substantially the estimated growth rate of potential GNP, from 3.9 percent per year to 3.5 percent. These phenomena affect not only our long-term well being, but have short-run effects as well: for instance, unit labor costs, which grew at annual rate of 3.4 percent between 1947 and 1976, are expected to rise 6.4 percent in 1977, and this will of course be a factor in determining this year's inflation rate.

Further stimulus is needed, and the preceding discussion suggests that both shorter-run and longer-run ends can be served by policy changes which will increase the rate of accumulation of fixed capital. Desirable measures in this context are those which will make more funds available to businesses and which reduce the user cost of capital. On the fiscal policy side, the cost of capital could be lowered by increasing the investment tax credit. The amount of internal funds available could be increased by lowering the corporate profit tax rate. Since larger firms have access to the capital markets as a source of funds to a much greater degree than smaller firms, the desired effect might be achieved with a minimum loss of tax revenues by lowering the rates which apply to the first \$50,000 of taxable income while leaving the rate on income over \$50,000 at its present level. This would channel most of the benefits of such a change toward smaller firms.

Monetary policy can stimulate investment if it is conducted in such a way as to keep interest rates low and credit available to those firms desiring to borrow in order to finance their projects. This goal suggests a somewhat more expansionary policy than at present.⁵ The effects of such policy would fall both on the cost of capital and on the availability of funds.

⁵ Under current policy, according to the Michigan forecast, the corporate Aaa bond rate will rise by about 50 basis points, and the 90-day Treasury bill rate will increase by about 200 basis points, by 1978 :4.

These specific measures might be augmented by some further permanent personal tax reduction and/or expenditure increase if they appear necessary to attain high employment, because a growing economy operating close to capacity probably is the best incentive to business managers to put new investment in place.

There will be those who would oppose such further stimulus on the grounds that the effects of fiscal shifts will be "crowded out" unless accommodated by monetary expansion, and that monetary accommodation will generate inflation. Most economists would agree, however, that the effects of expansionary policy, whether monetary or fiscal, are likely to be mostly on real output when, as at present, there remains a substantial margin of unemployed resources. As the economy approaches full employment, of course, new expansionary initiatives inevitably will result in greater and greater amounts of "crowding out" through both interest rate and price level changes. The "crowding out" phenomenon has long been recognized, but those who are currently stressing it seem to believe that fiscal impulses not accommodated by monetary expansion typically are fully crowded out within a short period of time, no matter what the level of resource use. I know of no persuasive empirical evidence which confirms this view. By nudging the economy toward its full employment potential output level, whether by fiscal or monetary policy measures, we will experience some acceleration in inflation. But such policy measures will also generate benefits in the form of more employment and output, an improved living standard, a higher growth rate, etc.⁶ As full employment is approached, of course, policy adjustments in the direction of restraint will be needed to assure that the economy will move along the full employment growth path instead of overshooting and generating unnecessary inflation and instability.

Given the current position of the economy, expansionary policy should have most of its effect on output rather than the price level. The Congressional Budget Office recently has published estimates of the effects on the current economic situation of various expansionary fiscal policy measures, all of them unaccommodated. These estimates indicate that if such measures were implemented in mid-1977, there would be negligible effects on the inflation rate until about 1980. Employment and output would be affected much more quickly, and for policy changes which are sustained (as opposed to e.g. a one-shot tax rebate) these effects increase in size as time passes; there is no evidence that a substantial amount of crowding out is occurring.⁷ If these measures were accompanied by a monetary expansion designed e.g. to keep interest rates constant, there presumably would be somewhat more inflation by 1980 as well as greater effects on employment and output in the near term, since this would be a more expansionary policy package than the options analyzed by the Congressional Budget Office.

In summary, the growth path presently being followed by the economy is inadequate, and the current growth rate seems most likely to decelerate rather than increase over the next few quarters. In addition, we face longer-run problems concerning the growth of productivity and of full-employment potential output, matters which also affect our present well-being. These problems all call for a more expansionary policy stance now, with emphasis on those elements which are most likely to stimulate business fixed investment. The likelihood that these measures would result mostly in an acceleration of inflation rather than an increase in employment, output, and growth, appears minimal given the existing margin of unused resources.

Representative BOLLING. Thank you very much. Thank you all for a very useful and helpful statement. I think the thing that impressed me most as I listened to all of them was that each of you perhaps from a slightly different point of view in not direct response to my opening statement was indicating from very different points of view,

⁶ This is not to say that the choice between and fiscal policy is a matter of indifference. Monetary and fiscal measures which have roughly the same effect on demand and aggregate output will have different effects on the allocation of that output between consumption and investment, between the private and government sectors, etc.

⁷ Congressional Budget Office, *The Disappointing Recovery*, January 1977, Chapter III. Among the alternatives examined are a one-time personal tax rebate, permanent reductions in personal and corporate income taxes, increases in counter-cyclical revenue sharing and public service employment, and an acceleration of public works programs.

with very different emphases, that the administration's stated long-range economic objectives are unlikely of achievement; and in fact, most unlikely of achievement unless there is a shift in the policy; that none of you would disagree with that, having listened to each other. Would you all agree that was a fair conclusion on each of the statements, each statement having a somewhat different approach to why that would be so?

Mr. CARLSON. I clearly feel the President's objectives are very good ones and that we should move toward them, though I do think with the policy track we have shown and the conditions in the economy, it would be very difficult to achieve any of them.

Representative BOLLING. There is no disagreement on that?

I think it is very interesting because one would hardly say each of you approached the matter from exactly the same point of view. I think that is going to be the question that we are going to be trying to deal with not only in this hearing but in the hearing tomorrow and then in some that we plan further after we have tried to make use of some of the available resources of other institutions with regard to models. At least one of our economists in a very excellent piece of work has suggested that the administration's long-range objectives are so unrealistic as to be preposterous. I think one of the functions of this committee is to examine, with a very cold-blooded eye, those objectives in relation to the policies. It would be a disastrous mistake for us to sit by and assume that everything is going to be all right when in fact, it may not be all right at all. I think the interesting thing about your statements is that from very different points of view, you all agree without in any way implying that you do not like the goals, that they are not going to be achieved.

I think I will yield now to Senator McClure for questioning.

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

One question I had maybe you elaborated in your presentation, Mr. Carlson. That is toward the end of your statement where it says, "* * * and cause 1.7 million new jobs * * *"

Mr. CARLSON. That was an error. It is supposed to be "cost."

Senator McCLURE. I assumed that was correct. I wanted to be sure I understood the point you were making, that if the energy plan is followed, your judgment is that there would be 1.7 million fewer new jobs created?

Mr. CARLSON. That is right. By 1985. I tried to show in the testimony before the Senate Finance Committee that if you went with a 6 percent increase in the real price of natural gas and crude oil, you can actually achieve more energy improvement and you can have a creation of jobs, not loss of jobs.

Senator McCLURE. Thank you.

Mr. Teigen, you say more stimulus is indicated. That is generally understood on the Hill or at least it is reported in the press to include more Government spending.

Mr. TEIGEN. I do not necessarily urge more Government spending, although in my testimony I say that the specific measures I recommend which pertain to business fixed investment may have to be supplemented by more general measures.

Senator McCLURE. So when you talk about stimulus, you are talking primarily on the capital investment side?

Mr. TEIGEN. Yes, I am thinking chiefly about tax policy focused on investment and supplemented by more expansionary monetary policy.

Senator McCLURE. It should not be understood to simply mean running more Federal deficit?

Mr. TEIGEN. Certainly not.

Senator McCLURE. In your forecasts in terms of capital investment, have you gentlemen looked at the greater energy demands for capital investment?

Mr. CARLSON. Yes, sir.

Senator McCLURE. Was that included in your long-range forecasts?

Mr. CARLSON. Unfortunately, I think our discussion is focused just on 1977 and 1978. I think that if you look over the longer run, given the technology we see in the future, you have to see business fixed investment moved from 9.5 percent of GNP up to 11.5 percent. If you went the President's planned route, I think you would have to add at least another percentage point on top of that, up to 12.5 percent of GNP for business fixed investment.

Senator McCLURE. The best forecast I have seen of capital investment requirements in the energy industry between now and 1985 range on the order of \$1,350 billion. Is that figure reflected in the figures you have just given me?

Mr. CARLSON. Clearly no one's extrapolations would include that much investment. Clearly energy would crowd out other sectors which would then become bottlenecks in our economy. There is not that much room in the economy at the present time with the incentives we have to take care of that large of an increase in investment between now and 1985.

Senator McCLURE. The reason I ask that question is when CBO was testifying before the Energy Committee in regard to the economic consequences of the President's energy package it was clear that neither Mrs. Rivlin nor her immediate advisers in the energy picture has contemplated anything like that kind of a capital investment requirement. As a matter of fact, I think all three of the witnesses, including Mrs. Rivlin, never even had heard that figure.

Yet, that is the figure that has been used in the energy community for the last several years. It has been revised. It was first 1,250 billion when the figure came out about 3 years ago for the 10-year period.

It was later revised because of inflationary forces to \$1,600 billion. It has since been reduced because the time span is now shorter back down to \$1,350 billion; but there is no one that I have seen yet who has attempted to refute the need for that capital investment if we are to meet our energy requirements in the western industrialized world.

The reason I ask that question is it seems to me we may be experiencing something new in the economies of the free world. That is something new imposed by the—I was going to use the term "sudden." I paused because I am not certain it is all that sudden. That is something new improved by the apparently sudden end of cheap resources. We have a great number of people who are telling us that the era of cheap energy is over; and as a result, we are going to have to replace that energy with much more costly energy, both costly per unit cost and more costly in terms of capital investment.

Do any of you three gentlemen have any reason to doubt that?

Mr. Teigen.

Mr. TEIGEN. I am not familiar with these numbers; and my testimony also focused on the short term. Do I understand that you are talking of 1,300 or 1,400 billion, by 1985?

Senator McCLURE. That is right.

Mr. TEIGEN. You are talking of more than \$160 billion of new investment a year over the next 8 years for this purpose. Business fixed investment presently is only totaling \$125 billion a year, in constant-dollar terms.

You are talking about more than doubling the current rate of business fixed investment. I would say drastic steps would have to be taken.

Senator McCLURE. What is the consequence if we do not take those steps and we do not have the energy that is required? What happens then in our economy?

Mr. TEIGEN. There would certainly be serious long-term consequences. I am simply saying that the physical task of addressing that problem, of putting that investment in place, is a staggering task.

Senator McCLURE. It is indeed staggering. That is the reason I mention it. It seems to me if those figures are correct—and I have not seen anybody in the energy community that yet has refuted them—that they must be taken into account in any economic policy that we make even in the short term.

Mr. CARLSON. Clearly, the implications of even moving in the direction of those large numbers is that as a society we should be encouraging more savings and investment in order to have at least some movement in the direction of reducing our dependency on Middle East oil that is required through such investment. Our policies so far this year, without exception—without exception—have been anti-investment.

Senator McCLURE. Just a final question. Then I will yield. I do not want to pursue this too long, but I think we have got to start thinking in those terms. I know from your background, Mr. Carlson, and your work as an Assistant Secretary of the Interior, that you have a profound knowledge of the minerals industry and the requirements of the minerals industry. There are a great many people—and I think you were among them—who have pointed to the fact we may be approaching a mineral crisis in much the same way we have gone into the energy crisis. I do not know that we are going to run out of oil and gas in 30 years or 60 years or what the figure may be; but there are widespread predictions that oil and natural gas will be inadequate for our energy needs by the end of this century or shortly into the next century at the very latest.

There are a lot of predictions also that the era of cheap mineral resources is ending in much the same way that the cheap energy era is ending. If that is true, then our fixed capital costs and the necessary capital investments in the entire resources area will approach the magnitude that I have mentioned in capital investment for replacement of energy.

If policy is to be formulated that is going to meet these goals, we cannot wait 2 years or 5 years or 10 years or 15 years to recognize that necessity. It seems to me we must start now if we are to avert a mineral crisis in exactly the same terms that we are now confronting an energy crisis.

I would hope that the people in the economic community begin addressing themselves to those questions. If indeed those are valid questions, then how do we marshal the capital investment that is necessary and what steps must we take to encourage the capital investment in the short term? They certainly are not going to be solved overnight. If \$160 billion a year investment is too much to contemplate, think what it will be if we wait half that period of time and it has to be \$320 billion a year in order to meet our needs.

I would welcome any comment that any of you might make.

Mr. CARLSON. I clearly support the contention that we need to encourage investment, and even on a broad basis. I personally feel that it would be very difficult in a high-employment economy to have enough plant equipment, or enough tools for the larger workforce to get the unemployment rate down anywhere near what most of us thought was full employment a few years ago. We must have encouragement of that investment. Every time the issue comes up for consideration, whether it is in the executive branch or legislative branch, we tend to back off from encouraging investment. I show as evidence the withdrawal of the investment tax credit as part of the stimulus package. It is important to realize that this stimulus package is the first one we have had in a couple of decades that has not had direct encouragement of investment. Yet, the need as you point out is greater now than it was at the time that those last stimuli packages were passed.

Representative BOLLING. Senator Javits.

Senator JAVITS. Gentlemen, I am sorry that I was not here when you testified. We have so many committee responsibilities it is almost impossible to be everywhere.

I just browsed through your presentation, and I notice you all look for a more stimulative policy.

It would be very important if we could get from you, Mr. Teigen, an idea as to what the business community would like to see us do which would establish a basis of more business confidence which would lead to greater capital investment. The lack of investment is a very serious deficiency which has surfaced. That is the first question.

The other question which I think would apply to all of you is that you all apparently believe there ought to be an increase in productivity. What do we do about that?

There have been various suggestions, one, for example, which I have made myself is labor-management public counselors to deal with labor peace, alcoholism, drug addiction, and interest in the workplace, decisions at the plant level.

Also there are perhaps possibilities of more profit-sharing, stock ownership on the part of workers. These are important.

I notice one of the papers suggests some tax reforms. That is yours, Mr. Teigen. The paper relates to the lowest levels of business income, also a new emphasis on residential construction, as a great deal of America's housing is obsolescent, and a reform of the energy program to deal with improving the incentives for new-discovery production.

I just wondered what are some practical approaches that could be recommended to us.

I, too, like you gentlemen, am very worried that this recovery is going

to run out of steam by the end of 1978 and that, because of the precarious condition of the world's monetary situation, that we could run into a depression or a recession in 1979 which would have a most awful social and political consequence.

So, pragmatic measures become very important because you seem to be in agreement on the relatively fragile recovery, and especially on the question of its durability. Would you care to comment?

Mr. KARCHERE. I would like to respond to that.

I think one of the things that really has gone almost unobserved is the movement of real disposable income per employee. From 1969 through 1976, it has increased only about 1 percent a year.

What has happened is that, because of the inflation, we have had a rapid movement of prices, and while we have had large increases in money wage rates, they have not kept up with the movement of prices.

So my analysis of the fundamental difficulty in the economy is that we have had very slow growth in consumers' income.

The weakness in investment that we perceive goes back to the extremely deep recession of 1974-75, the worst recession since the 1930's. It developed a great deal of excess capacity, with the consequence that new orders for investment in constant prices stayed absolutely flat for the first year of the recovery. That is all through 1975. They only began to pick up in 1976.

The consequence is what is concerning people now, and that is, if you compare the level of investment with what it was at the cyclical peak, it's very low; but its lowness, I think, is a result of the deepness of the recession, which fundamentally goes back to weak consumption, caused by weak consumer incomes.

It does very little good to stimulate investment through some taxation policy or another if the fundamental demand for the stuff that the investment is going to be used for isn't there.

That, I think, is what our fundamental problem is in the near term.

Senator JAVITS. Mr. Carlson.

Mr. CARLSON. I share with you, Senator Javits, concern about 1979, as I do with the members before you. Given what you see now, the dynamics in the economy, and given the historical perspective, you see that we only had one recovery period that lasted beyond the equivalent period of the end of 1978; 1979 is a high-risk year of slow growth or possible recession.

I do share the point that you must keep up fundamental demand, so in fact, by far the biggest stimulus toward investment you have is that the sales are there.

Also, in addition to that, you need some assistance directly for investment to encourage it.

I supported not the removal of the tax rebate, but to take it out of the roller-coaster category and have a smooth, but continuous, stimulus, especially going into next year and 1979 rather than withdrawing. I think that that was a mistake.

On the business confidence side, I do think that you need to have policies that encourage investments. As I was mentioning in my testimony, we haven't had any this year that encouraged investment other than maybe indirectly through having an impact on aggregate demand.

On the tax side, there has been discussion about the removal of double taxation of corporate earnings. There has also been discussion of the removal of the capital gains tax. The net effect may be no stimulus for investment. Depreciation is not now covering replacement costs.

Senator JAVITS. That is very important.

Mr. CARLSON. Yes, sir.

Senator JAVITS. You know we had a big powwow around here; there was a rubric attached to it about the new depreciation schedules. A lot of my colleagues thought they were trying to swipe the Capitol. What evidence do you have, Mr. Carlson, for that statement, with which, by the way, I thoroughly agree?

Mr. CARLSON. I don't have for the last 2 years the cost of the items now. That is not covered by the allowances that we have had in the past.

This naturally would happen during a period of higher price increases.

Senator JAVITS. Also, if you have the figures, or if Mr. Teigen does, would you compare it to the depreciation policies of other developed countries?

Mr. CARLSON. I also agree with the point made earlier about the tax rate being reduced. I would support a lowering of the tax rate reduction; and an investment tax credit, though it doesn't cover structures, would have been helpful for capital, though not covering all of capital.

On your concern about productivity, clearly investment, more up-to-date investment, more technology, newer technology embodied in new investment would add to total productivity in the economy and certainly to workers working with the better tools they then have to work with.

Having been a member of the productivity councils of the past, I am aware of your recommendation in that area. I happen to support the view that, if labor and management can get together and find some obsolete work practices that can be removed in a way that allows for transition, and the benefits of the removal to go both to labor and management, that can be very useful.

I think we saw some examples during that period of the Productivity Council.

The last point I would like to make is we have inconsistent Federal policy. We have the Federal Government moving to withhold perhaps more energy than potentially the Middle Eastern countries can withhold by the withdrawal of public lands.

The biggest increase in withdrawal may well be in Alaska under the Alaskan Native Claims Act. You could withdraw more potential production by that decision than you can get with the administration's entire energy plan.

The evidence is very profound when you look at 10 percent of our energy production is coming from lands that have 50 percent of the energy resource endowment.

Clearly, public policy on public lands is strangling our own efforts to have additional energy and other minerals.

Senator JAVITS. Thank you.

Mr. Teigen.

Mr. TEIGEN. I don't have very much to add to what my colleagues have already said. The burden of my testimony was that, looking at the different sectors of the economy realistically, investment is the only place we can presently seem to hope to get any real action. That does not mean that impulses from the consumption and Government areas would be ineffective in stimulating demand.

With the very low saving rate, knowing what the shape of the Government budget is for the next fiscal year through the first concurrent resolution, being realistic about the foreign sector, the investment area is the only place where we seem even to be likely to get any action in the near term. That is why I focused on investment.

In terms of consumption, we also are predicting disposal income to grow very slowly, and with the saving rate as low as it is, I think it is unrealistic to expect any autonomous impetus from that sector.

I had not intended to attach an exhaustive list of policies focused on stimulating investment. I just suggested one or two which merit considerations.

Finally, as to productivity, we do have a serious problem in the growth of productivity. It is growing currently at a rate of something like 1.5 percent a year as compared to a trend rate considerably higher than that. I don't have the numbers at my fingertips. They are in my testimony, in my full statement.

Productivity growth is a complex problem. The sources of productivity change are varied. They have to do not only with the amount of physical capital in place but also with the shifting between sectors and so on and so forth. Chances in the rate of productivity growth may, indeed, reflect social choices regarding output in the form of services versus tangible goods, and so on.

Yet I think the rate of productivity growth is far too low. It is reflected in rising unit labor costs. As I understand it, the most serious problem we have at the moment is the rapid growth of the labor force. We can't equip the labor force rapidly enough with capital. That is the most important reason why we are currently experiencing a low rate of productivity change. Here again, anything we can do, in the short run—and the longer run—to stimulate the rate of business fixed-investment growth will help improve our productivity.

My own proposals in my testimony were based on the premise that it would be undesirable to lose a large chunk of revenue by across-the-board corporate tax reduction.

Since we can address to some extent the needs of large companies for funds through expansion of our monetary policy, make funds available in capital markets, my suggestion was aimed at those companies that do not have such ready access to capital markets.

So I think that is it.

Senator JAVITS. Mr. Chairman, my time is up.

I would like to request of you, Mr. Teigen, if you have some figures on the inadequacy of depreciation rates, we might ask you to produce them.

Mr. TEIGEN. I think you are confusing me with Mr. Carlson. He is the chamber representative.

Senator JAVITS. Oh, I see.

Well, Mr. Carlson is our man, Good. Thank you.

I request, Mr. Chairman, before we go on, I was going to question the witnesses about what could be done by building up international markets. That's a subject I did want to mention.

Representative BOLLING. I would like to pursue a variety of different lines rather briefly.

I am, frankly, unable to explain to my own satisfaction why we had the kind of continuing inflation we have had. I know that one point of view says that it is all the fact that we have had unbalanced budgets. I don't happen to think that that is a good description of what has been happening, but we have had an increase in industrial prices of very substantial proportions over a period of severe recession.

The wholesale industrial prices outstripped other industrial prices in 1974, 1975, and 1976, and continue to rise at a surprising pace. This is especially true with steel, aluminum. The rate of aluminum has risen 16 percent in the past year and doubled since 1973, raising aluminum ingots to over \$1,000 per ton.

The industry already has telegraphed its intention to raise prices again. There have been increases in steel prices by 10 percent over the past year and 56 percent since 1973. There is no sign of abatement.

You know, it's really sort of startling when we know that we have had a very substantial overage of capacity in the economy generally.

It was brought out by one of the witnesses that the profit margins have been holding up remarkably well. Now, this committee recommended—or the majority of this committee recommended that we ought to strengthen the Council on Wage and Price Stability so that it could require prenotification of price increases from selective industries and delay for modest periods wage or price increases that could have serious inflationary effects.

The second step we said was for the President to place the full weight of his office behind the Council.

We have had what I think has been a rather unusual experience. It seems to me that, if we can't face up to this problem and analyze what is the real cause and come to some kind of agreement across lines of prejudice as to what the real causes are, that we face a very, very dismal future, because, if we can't contain inflation, we are not going to be able to deal with the problems of the current economy. We are not going to be able to come up with policies that have any overall satisfactory effect for the society as a whole.

I would be interested in a little discussion of what each of the members of the panel thinks is the reason for the inflation.

Somebody has called it momentum inflation; there have been all kinds of names. It surely hasn't been demand inflation, and surely it is a very special manifestation of cost-push inflation, if that is what it is.

Mr. KARCHERE. Can I try to take a crack at this?

Representative BOLLING. Right.

Mr. KARCHERE. I think fundamental in this is the notion of unit labor costs driving prices. If you are going to have wage rate increases on the order of 8 percent a year, and you are going to have productivity increases on the rate of 2.5 percent a year, you have unit labor cost increases of 6.5 percent, and they have to be covered.

Now, you have the other thing that Senator Javits was concerned about, and that is that as capital is replaced, even though it may be more efficient than the capital it replaces, it comes in at a very much higher price.

The Department of Commerce, incidentally, Senator, has made some estimates as to the underdepreciation in the economy. It comes on the order of \$15 to \$20 billion a year. It's not a small number. Those are the two fundamental things.

I think the other thing that has happened over this period is an improvement in profit margins. Profit margins were hurt very badly in the recession. There has been a recovery. Over this period we had these three factors that are a heritage of the inflation of 1973-74. I think we have a feeling that we should get out of those big inflationary movements a lot quicker than we have any chance of doing.

I think it will take a long time for us to make the adjustments to get the inflation down at a reasonable level.

Representative BOLLING. Before we go on to the other members of the panel, what you are, in effect, saying is that we are suffering today from the effects of some real economic situations that existed in 1973 and 1974?

Mr. KARCHERE. That's exactly right. I am reasonably confident, you see, that we will come out of it.

Representative BOLLING. But over what period of time?

Mr. KARCHERE. Oh, I think we are talking about a period of time stretching 3 or 4 years from now. What we have is unit labor costs driving prices and prices driving wage rates. There are some conditions which make this an explosive situation. In our country, it is not. Gradually that round-robin will tend to simmer down, but there's a great deal of pressure on wage rates because the real standard of living has not yet returned to where it was in 1973, so we are really dealing with a long-term process.

Representative BOLLING. Well, I have some figures here that I think are pretty interesting in the light of this. I will mention them, and then we will go on and you may comment as you wish.

The unit labor costs in nonfarm business sector; the implicit price deflator, nonfarm business sector; and wholesale prices, industrial commodities for the four quarters of 1976, read something like this: Unit labor costs, 3.4; implicit price deflator, 4.3; wholesale prices industrial commodities, 5.1; first quarter. Second quarter, unit labor, 3.2; implicit price deflator, 3.6; wholesale prices, 4.5.

Third quarter: Unit labor costs, 4.3; implicit price deflator, 5.8; wholesale prices, 8.2.

Fourth quarter: Unit labor costs, 8.2; implicit price deflator, 5.9; wholesale prices industrial commodities, 7.8.

Now, the relationships are very interesting.

Mr. KARCHERE. The last two quarters were heavily influenced, I think, by fuel prices and the very, very cold winter.

Representative BOLLING. That probably is correct, but isn't the indication that we are getting a markup?

Mr. KARCHERE. As I mentioned, I think we are getting an improvement in the profit margin.

Mr. CARLSON. Yes. In fact, you expect that on every business cycle. That has always been the case to have profit margins as well as profits increase as the recovery goes on.

Representative BOLLING. I don't want you to get the impression I object to profits. I am not one of the ones that does. I object to a situation in which it appears to me that our ability to deal with inflation is either out of the hands of the Government representing individuals and the society or the Government hasn't got the capacity to face up to it because this has been a unique situation that we have had since 1971.

I think I will put the right year on it. It was caused by things that happened in the 1960's, but 1971 is the key time in my opinion, because at that point the economy of the United States got to be thoroughly internationalized, whether anybody recognized it or not. I think we are having a different experience with inflation coming out of the recession than we have ever had.

Mr. CARLSON. I think if you look at previous business cycles, you will find profit cycles tend to go up.

Representative BOLLING. I am talking about continuing inflation. I am not talking about profits. I agree with that.

We have had a peculiar kind of inflation than we've ever had before, haven't we, over this period?

Mr. CARLSON. You are quite correct. It really started with our Vietnam buildup where we really ratched up to a base inflation rate of around 3 percent. Then we went into the 1970's. We had, as you indicated, floating exchange rates and a whole lot of other things that tended to put us under other kinds of pressures than we did in the past.

Then we went under wage and price controls. That, of course, drove down profit margins. For instance, one of the reasons you see the large increases in steel and aluminum has been because their profit margins were inadequate to attract capital under wage and price controls.

I know because I was a deputy member of the Cost-of-Living Council. The rates of return on them were below the inflation rate.

Consequently, you would expect prices to go up. It is interesting to note that you chose steel because the Wage and Price Stabilization Council said the price increases that they have looked at during the last year are cost-justified; however, their market probably would not sustain it. In terms of their need, and the need for capital expansion, the price increases were fully justified. I don't think you have an example of cost-push inflation coming through on the profits side.

Also, it is important to remember that profits in terms of the final pricing of an item is only 5½ percent profit after taxes. Labor costs, for example, are 70 percent. One ought to remember you are talking about a very small proportion of the actual total of "costs" of a final item that is sold to somebody. That is not apt to be much cost-push inflation during any period of the business cycle under normal conditions.

Let me make the other point on pre-notification and delays. Part of the problem, part of the hesitation of businessmen now is fear that the Government will impose wage and price controls and they can't fully recover their investment costs. Don't understate this.

The President says that he has no inclination to do that. The Congress says they have no inclination to do that. Yet everybody remembers another President and Members of the Congress said that in 1970-71. They imposed the most stringent wage and price controls.

Representative BOLLING. I happen to be one of the people that, although I ended up voting for the idiocy, I made it very clear that I expected the President would use it when he decided it was politically profitable. That's what turned out.

I don't think that it is fair to compare any other President to that particular one, just to be perfectly honest with you, because his view of the economy and his view of economics was, in my opinion, the most ruthless that I have ever seen. I am not defending him. Mr. Johnson's failure to have a tax increase in the 1960's was for political reasons.

I stated over and over again, I recognized that as the beginning of the downfall of a relatively effective functioning economy.

It isn't possible for me to believe that it is just the sins of the past that we are paying for today. It seems to me that there are other factors that we must come to recognize and deal with as a society. I am not talking about a party matter. I am talking about a problem that we have to come to some kind of conclusion on.

I would recognize, Mr. Carlson, that you are a very effective advocate of your point of view. That is one of the reasons you are here. We want your point of view represented, but it seems to me that we have to move beyond our classical positions to face up to what is a more complicated, different, and more intricate problem than we have ever had.

Mr. CARLSON. Fair enough. I just wanted to make the point that cost-push coming from the profit margins above some level that is necessary for attracting capital is not your problem right now. That is why I disagree with going toward prenotification.

Representative BOLLING. You may or may not be right. I am not going to argue with you.

Mr. Teigen.

Mr. TEIGEN. Well, as the one university representative on this panel, let me take a broader philosophic view of this problem.

I think that we will have inflation—persistent inflation—at some level as long as markets for labor and for goods are imperfect. Inflation ultimately is really the product of a struggle for income shares, for pieces of the pie among different groups in the economy.

Some of those groups have considerable market power and that results in prices and wages which are not determined in orderly, competitive free markets but which are set bilaterally with both parties possibly gaining at the expense of the general public.

I think these struggles have been intensifying at the same time that the public seems to be more and more tolerant of them; and the consequence of all of that, as I say, is persistent, lasting inflation at some level.

Representative BOLLING. Would you tell us why you think the public seems to be more and more tolerant? I am interested in that. From my point of view, I don't think they are.

Mr. TEIGEN. I only say that because you see more and more things like strikes of public employees and so on which you never used to experience, and you now have them regularly. Teachers and other such groups would be an example.

I just note the phenomenon as an observer.

Representative BOLLING. I agree with the phenomenon. I am not sure the public is tolerant of that.

Mr. TEIGEN. It occurs. The public can't do much about it or they haven't moved to prevent it.

At the same time that this is going on, we have been feeling the effects, as the other people here have mentioned, of the Vietnam buildup, of the food and fuel crises, of the early part of the 1970's. I think the working through of those effects from the oil price shifts and the food price changes has been largely completed, and we have observed a fall in the inflation rate from double digits down to 6 or 7 percent where it is now.

Now you mention the question of budget deficits and the common view that the Government and the budget deficit is the cause of inflation because a deficit means an increasing money supply and the money supply increase means an inflation increase.

I have never agreed with that viewpoint. It seems to me that the size of the public sector is as valid a question for discussion or debate as is the size of the private sector. The Government has a role to play in the economy. We ought to determine its size based upon the demands for public goods and services relative to private ones. It is also true that some sector in the economy must play a sort of balance wheel role.

Looking backward at the accounts for any period, if the private sector is in surplus, the public sector must be in deficit. That's an accounting requirement. The question really is which sector takes up the shocks in the economy. The Government sector seems to play this role in our system.

It is not deficits that cause inflation. That may be the symptom rather than the cause of the problem.

The monetary authorities are put under pressure to help finance deficits when they occur. It is true that more money will result in higher prices and, indeed, in a higher level of economic activity.

In my opinion, there is no direct casual link between budget deficit or surplus in the public sector and the money stock and inflation. Inflation is a product—as has been said several times today—of aggregate demand pressures, wherever they originate, and cost-push pressures.

Those pressures may originate in bad policy; they may originate in the fact that we have imperfect markets for goods and for labor. It is a fundamental problem. It is not a simplistic question that can be solved by ascribing everything to the budget deficit or to the money stock.

Representative BOLLING. Thank you.

My time is up.

Senator McClure.

Senator McClure. Thank you, Mr. Chairman.

First of all, let me state that I agree with what you said about the excesses of Government policy both under President Johnson and perhaps under President Nixon which leads me to the conclusion that having economic policy in the hands of Government is not a very stable place to have it. It may have led to more problems that it solved. The desire to manipulate the economy is not going to be insulated from political effects or political causes in the future, either; but aside from that—and our agreement that we are paying the price for both of those

manipulative or failure to manipulate in the past, also coincides with some other things.

I think that is the point you are trying to make, that inflation isn't purely and totally attributable to those causes, and perhaps we ought to analyze to see what there is also contributing to that problem now.

I am referring, of course, to not only the massive and very sudden increase in energy costs, which coincided in this period, but also the massive and increasing and relatively sudden costs of various governmental policies.

There have been a number of studies that attempt to put a price on the cost of Government regulation. I assume that each of you would agree that that is a phenomenon that has had some effect upon cost-push; is that correct?

Would any of you like to comment on the degree or the size or the importance of that factor?

Mr. CARLSON. Let me just comment on your first point because of the choice of having both guns and butter during the buildup of the Vietnam war.

That ratcheted up the inflation rate. The wage and price controls, we are still paying for some of the lingering effects on that, both the formal controls and the controls on some sectors. There is still catch-up ball being played.

One of the most disastrous Government policies we had that influenced our current situation is the very low price, the price controls on natural gas making us more dependent upon Middle Eastern oil than we would have otherwise been, and also causing us during the 1960's to have underemployment, poverty in Appalachia which led to the Great Society program to overcome it, something that was caused by another Government policy.

Certain Government regulations certainly have desirable objectives such as environmental quality. There are clearly some extremes such as the nonattainment provisions being considered in the Clean Air Act and the nondegradation provisions.

Also on the health and safety side, the extremes, the harassment, the harassments Ray Marshall, Secretary of Labor, points out he is trying to overcome in the case of OSHA. That would, in fact, discourage investment. It would make it so the economy could operate in a more healthy way.

By the way, I do agree with the philosophy that in the stabilization area the Government should work as the exception rather than the rule when it is trying to influence the economy and not to be so heavy-handed in trying to influence every little aberration in the economy.

Senator McCURE. Might I suggest in that regard before asking the other two gentlemen to comment that economists will suggest to us that economists should determine what that policy is and not politicians in order to insulate it from political manipulation which we have already described as being one of the problems for which we are paying a price now.

That reminds me a little bit of Freud saying only a psychiatrist was wise enough to be married, and he was too wise to get married.

Mr. CARLSON. The economic policy is too important to be left to an economist as is foreign policy, military policy, or anything else. You

are talking about the value systems of a total society. You need all of society's inputs.

Senator McCLURE. Would any of the rest of you care to comment on the questions of Government regulation as a factor in the current inflation rate?

Mr. TEIGEN. I have no expertise in this area. I know OSHA, for example, has been a problem for business; but I would just like to say one thing I neglected to say about inflation.

You asked how we can hope to reduce inflation or eliminate inflation from our system. I guess that my point of view leads to the conclusion that the only way we will be able to reduce inflation substantially below the current 4-, 5-, 6-percent level is to somehow arrive at a social compact among ourselves about income and wealth distribution.

Without a solution to that, we will struggle along.

Mr. KARCHERE. I have no doubt—let me respond to your first question about regulation.

I have no doubt that regulation adds to the cost of doing business, as a consequence adds to the prices charged. The thing I am puzzled about is whether there is a sufficiently great change in regulation from year to year to have an influence on the rate of inflation considered as an increase in prices from year to year.

I suspect if you look at it that way, that there has not been the massive change in regulatory policy over the past 5 years that would produce a significant effect on the rate of inflation. I think you really have to look elsewhere for that.

Senator McCLURE. Well, I will invite you to take a look at that and talk to some of your business friends and see if they agree there hasn't been a massive change in Government regulation in the last several years. I don't know the answer to that.

If my mail is any indication, they think there has been. I suspect the truth of the matter is that there has been.

Let me give one example. OSHA has been mentioned. That's only one. I think, too, as our society has grown more complex and the rate of consumption of the world's resources has increased, we have tended to defer some of those costs rather than measure them economically.

I think that is part of what we were doing in the environmental field, was to require that those costs be quantified in economic terms and ameliorated by action. That forced an end to the economic equation rather suddenly some things that hadn't been measured in the economic equation before.

That perhaps has changed the way in which we measure that cost and it shows up in the economic formula rather than in an environmental formula. That has been a relatively sudden change. I think a good one, personally. I think it was required; I think it was the right thing to do; but I think it has had a dramatic effect upon statistics, or the measurements.

Again I invite you to talk to some of your business friends.

Mr. KARCHERE. I have no doubt that there is an urgent feeling having to do with the burden of regulation. The point I am really making is when you try to translate that into an effect on the inflation rate, I think it is a very difficult translation to make.

Senator McCLURE. It is difficult to quantify in dollar terms, perhaps. If you will look, for example, at the installed capacity per

kilowatt hour of the utility industry, and the capital investment that is required just to meet environmental constraints, it gets up to about 25 percent of the capital requirement.

That's not hard to quantify. That's just one.

Mr. CARLSON. The Council on Environmental Quality, in effect, has recognized there has been some cost-push. I think their estimate is something around half of a percentage point. I think it is low.

Nonetheless, it indicates clearly we are paying a price for environmental quality. The issue is not about the objective to clearly support that, but we have ways of achieving that objective that causes additional costs that need not occur.

Senator McCLORE. These are in the direct sense costs that decrease unit productivity in the way we—compared to the way we measured unit productivity before and the way we measured costs before.

So there has been a radical change in the method of an accounting of those costs at least.

Mr. Karchere, you said that consumers' income, the slow recovery is the major reason for the economy's low growth. Would that lead you to support a reduction in personal income taxes in order to increase personal income?

Mr. KARCHERE. I think this is one of the things that might be done. There is need for stimulus in the economy which need not be directly addressed to consumers. This might be a package of monetary policy, taxation policy, and spending programs; but the—in terms of the aggregate need, the need is to offset the slow growth in real wages. Now I think it is important to do this for two reasons.

One reason is the need to keep the economy moving, which I think is important itself; and the other one—and this would have to do directly with providing taxation relief to consumers is to provide a substitute for wage increases.

We really need to keep wage increases down to a reasonable kind of level so that the inflation does begin to subside. If we have that objective in mind, it seems to me we are going to have to increase consumer income some place else.

Senator McCLORE. I am not going to ask which school of economic thought any one of you subscribes to; but I note widely discussed over the last several years in Washington is the concept of full employment budgets; full employment budgets in balance or surplus are not inflationary, but full employment budgets in deficit are inflationary.

The current budget before the Congress in the first concurrent resolution is a full employment budget in deficit. Does that cause you concern only on the inflation side?

Mr. TEIGEN. No, to give you a brief answer. It seems to me the budget ought to be designed with two things in mind:

One is a provision of public services, public goods, the level required or desired by the populace.

The other is stabilization needs. If the private economy is very weak, I think it is appropriate for the public economy to provide some strength. Whether or not the budget turns out to be balanced or unbalanced in terms of full employment is really of no consequence. That idea of full employment budget balance is an old idea, and has underneath it a lot of other implicit assumptions about monetary policy and so on. I think it is no longer an idea worth serious consideration.

Senator McCLURE. There is no magic in it? We ought to discard it?

Mr. TEIGEN. There is no magic in it.

Senator McCLURE. Do the rest of you agree with that?

Mr. CARLSON. If one realizes that as a very crude rule of thumb, like other rules of thumb that are crude, it can be useful to that degree.

However, as was pointed out, it depends upon the definition. The definition before was based on a concept of 4 percent unemployment as being the ideal for full employment. That was appropriate for 1955 when we had 4 percent unemployment, and an inflation rate of 2.8 percent. That was considered a reasonable tradeoff between the two.

The composition of the labor force has changed. There are many more teenagers and women who voluntarily go out into the labor force for other reasons. That could raise the ideal up to something around 5 percent.

If you look at a capital shortage of a fully employed economy, especially with the higher participation rates, people coming into the economy, we could see maybe with a capital shortage up to 6 percent, until you have a large increase in investment you are referring to, to make it possible to go from 6 percent to 5 percent.

Right now I think if you went to 6 percent with this growth in participation rate, you are going to have double-digit inflation until you have a large increase in investment.

As a rule of thumb, yes, it can be useful. If you had the right definition, and took in both the labor composition change and the capital composition change, and you were running a deficit, yes, that should raise a signal of concern. You have to go deeper to find out how much concern.

Mr. TEIGEN. I just wanted to add I understood the question to be: Is there something magical or extremely good about having a budget which would balance if we were at full employment?

I don't think there is anything essentially good or bad about that. I think it is useful to have that as a reference point.

For example, I recall that in fiscal 1976, when I was working at the Congressional Budget Office, we made calculations which indicated although the budget was running at a deficit of \$65 billion a year or something on that order, we calculated that if we had been at full employment, the deficit would have been less than \$10 billion. Using the full employment idea as a way of showing how much of an actual deficit is due to underemployment, I think, is a very useful thing.

Mr. CARLSON. If I can add about the pacing of the deficit, if you were thinking of an optimal fiscal policy, you prefer not to have the deficit with the declining unemployment rate and with approaching fuller utilization of your resources, to have the deficit jump up next year versus this year. The 48 to whatever it is, 46 to 64 for the next year is the wrong pacing of fiscal policy, I would think.

Of course, there is a question about mixing monetary and fiscal policy. I think Mr. Lance in his comments about bank interest rates is really saying he would prefer to have more monetary policy, having it less restrictive and consequently, implicitly, he is saying he would have fiscal policy more restrictive which he has a say in.

If he wants to bring about a better mix, maybe he could control spending and thereby the deficit and then allow more room for monetary policy to allow interest rates to stay down as opposed to going up, assuming they both have the same concept of price stability.

Senator McCLURE. Mr. Chairman, may I submit this question to all three of the witnesses for Senator Javits?

He wants to know how the development of foreign markets, especially those of developed countries, will aid in the continued expansion of U.S. recovery, if at all?

Mr. TEIGEN. Why don't I start? I will give a brief answer.

The world is becoming more and more interdependent as time passes. Strong markets abroad mean more exports for us; strengthening markets mean growing exports for us. Export growth is a stimulus to our own level of output and our production and employment here. So certainly that would be a favorable development for us.

Senator McCLURE. Mr. Carlson.

Mr. CARLSON. The fact that we are running a deficit on our trade account oddly enough does help the developing countries with their exports to our country and others.

However, the fact that the Japanese economy is running a very high surplus means that we are, in fact, taking more pain and suffering surplus means that we are, in fact, taking more pain and suffering than I think we need to in terms of helping these developing countries.

We want to encourage the Japanese to move from surplus more toward a balance so they don't drain open jobs to their country versus ours.

I think there is a very real concern about protectionism now with the different countries around the world trying to protect their exports of their particular items. I am pleased the administration is trying to move against it. These types of quantity controls that are being set up is a form of protectionism. I think that is something we should resist and not move in that direction.

Also, I am a little bit concerned about the north-south dialog results when they refer to a common fund for stabilizing world-traded commodities.

One has to worry about a government-run cartel of other commodities. We have already had a very bad experience with the oil cartel. I don't know why we are moving or flirting with the possibility of cartels in other commodities. I think we should resist that.

We should resist monopoly wherever we find it, in this country or abroad or Government-created. I think we should approach this common fund approach with great caution.

Senator McCLURE. Mr. Karchere.

Mr. KARCHERE. We are basically extremely fortunate in this country in terms of our internal economy. Many of the other countries in the world have very serious problems indeed.

My colleagues have alluded to the fact that there are three economies that are in reasonably good shape. That is the United States, Germany, and Japan. Even with a deficit of \$11 billion on current account this year, our deficit with the OPEC countries is considerably in excess of that; and as a result, we are in surplus with the rest of the world.

While I think it is desirable to have industry competitive in foreign areas, but to try to improve our balance of payments with the rest of the industrial world at this point probably would not do the world economy a service.

Senator McCLURE. Thank you.

Representative BOLLING. I think with that, I will thank you all for a very stimulating morning and recess the committee until tomorrow. [Whereupon, at 11:57 a.m., the committee recessed, to reconvene at 10 a.m., Thursday, June 9, 1977.] [The following information was subsequently supplied for the record:]

STATEMENT OF HON. MARK W. HANNAFORD, A U.S. REPRESENTATIVE IN CONGRESS
FROM THE 34TH CONGRESSIONAL DISTRICT OF THE STATE OF CALIFORNIA

Mr. Chairman, I appreciate the opportunity to submit testimony before the Joint Economic Committee at its hearings on the near-term economic outlook.

Recent statistics indicate that the U.S. economy is continuing to move ahead, with unemployment in May down to 6.9 percent. Although this still represents an historically high level of unemployment, the downturn from the 7.3 percent rate a year ago, and 9.0 percent rate in May of 1975 is an encouraging sign. In the State of California last month, the number of employed workers reached a record high, pointing to more hiring in the major industrial sectors. Figures released by the state Employment Development Department show that 9.2 million persons were employed, a gain of 123,000 since April. An increase of .2 percent in the unemployment rate was noted in the Los Angeles County area from 7.3 percent in April to 7.5 percent last month. On an overall basis, however, California's unemployment rate remained unchanged. I would like to add that many city administrators in my district have expressed that funding under the CETA program has been instrumental in increasing and maintaining the level of employment.

Further optimism in the condition of the nation's economy is seen in the All Commodities Wholesale Price Index, which rose by only .4 percent last month. In addition, recent figures on production indicate definite efforts on the part of producers and retailers to restock. It has also been emphasized that the recent decrease in the personal saving rate is in part a measure of greater consumer confidence in the state of the economy, meaning that consumers are unafraid of spending at this time.

Chief among the concerns of the constituents of my 34th District in the State of California is the need to fight inflation. In the last four months the rise in consumer prices has renewed fears of rekindling inflation. However, it seems that much of the bulge was created by the severe winter, and many economists feel that in the months ahead inflation will taper off in the area of 5 to 6 percent.

In my review of recent conditions, I am delighted to note that the federal deficit fell during the first quarter of this year by \$8.5 billion—from \$57.2 billion as of December 31, 1976, to \$48.7 billion as of March 31, 1977. This decrease is due partially to the Administration's wise decision to cancel the proposed tax rebate program. This cancellation and other spending underruns will reduce the Fiscal Year 1977 deficit by as much as \$20 billion from the projected \$65 billion level. What is interesting in this connection is that many economists are predicting a rise in the real GNP in spite of the decrease in the federal deficit.

Digressing for a moment, I would like to point out that the Domestic Monetary Policy Subcommittee of the House Banking, Finance and Urban Affairs Committee, of which I am a member, recently held hearings on the impact of the rebate program on fiscal and monetary policies. Representatives of the Federal Reserve Board and the Treasury Department agreed that the tax rebates would have made an insignificant change in the state of the economy since only a small fraction of the cash rebates would have been returned to the spending stream.

While I have briefly commented on the various economic indicators which assist us in evaluating the economy, the Federal Reserve System's monetary policy decisions play an equally important role in shaping our future economic prospects. As a study by the Domestic Monetary Policy Subcommittee reveals, sudden sharp increases or decreases in the growth of M-1 tend to fuel inflation/recession cycles with a lag of about two years. In this regard, it is important that the Federal Reserve continue to moderate the growth of M-1 "commensurate with the real growth potential of the economy" as recommended in House Concurrent Resolution 133, which Congress passed in 1975.

With respect to the future posture of our private enterprise system, much interest has been directed toward the need for greater capital accumulation. A CBO study entitled, "Sustaining a Balanced Expansion" discloses that growth

in private plant and equipment in the U.S. has tumbled from 4.3 percent per year during the 1965-70 period to 3.3 percent per year from 1970-75 and is expected to fall to 2.5 percent per year from 1975-77. With the expanding nature of our labor force, solution to the problems of capital accumulation are vital if we are to make real progress in our twin goals of reducing inflation and unemployment.

On June 7, I introduced H.R. 7641, a bill to declare a national policy on investment in the private sector of the United States economy, along with my distinguished colleagues Congressmen Moorhead of Pennsylvania and Patterson of California. Title II of this bill states:

"It is the policy and responsibility of the Federal Government, in cooperation with State and local governments, to use all practical means consistent with other essential considerations of national policy to provide sufficient incentives to assure maximum investment in private enterprise in order to increase the production of goods, the providing of services, the employment of workers, the opportunity for profit, and the payment of taxes."

So far this year, housing starts have rebounded at encouraging levels. During the first five months of this year, 751,900 units were started compared to 566,000 units during the first five months last year. Furthermore, the seasonally adjusted rate of 1.927 million units for May 1977 represents an increase of 34 percent over year-ago figures.

Disturbing activities, however, have recently been widely reported in Southern California's housing market. Specifically, a fair amount of housing speculation has driven up prices for single-family dwellings in particular, making it impossible for many families to purchase homes. While the San Francisco Federal Home Loan Bank and several savings and loan associations have initiated measures to curb this activity, further study may indicate that other steps may be taken. This speculative activity, which also appears to be spreading to other parts of the nation, is an area which deserves our full attention.

Mr. Chairman, in conclusion I would like to state that the available economic indicators point to a strengthening of our economy in terms of reduced unemployment and inflation. It is also my hope that throughout the balance of the year a similar economic uplifting will prevail.

INTERNATIONAL BUSINESS MACHINES CORP.,
Armonk, N.Y., August 10, 1977.

Mr. L. DOUGLAS LEE,
Professional Staff Member, Joint Economic Committee, Congress of the United States, Dirksen Senate Office Building, Washington, D.C.

DEAR SIR: Dr. Karchere has asked me to respond to the request he received following his testimony before your committee in June concerning our assessment of the feasibility of achieving the joint objectives of full employment and a balanced federal budget by 1981.

The IBM annual long-term U.S. econometric model was used to develop a set of economic projections for the 1977-81 period. The forecast of economic conditions for 1978-79 is slightly higher than that contained in Dr. Karchere's recent testimony (based on our short-term quarterly model). The differences, however, are not major; both models call for a deceleration in the economic recovery over the next few years. The table below highlights the pattern of economic growth in our base case and shows its implications for employment and the degree of imbalance in the federal budget.

BASE CASE-ECONOMIC INDICATORS
(In billions of dollars)

	1977	1978	1979	1980	1981
GNP (\$72).....	1,328.3	1,393.1	1,447.2	1,509.8	1,578.8
Unemployment rate (percent).....	(6.8)	(6.0)	(5.7)	(5.4)	(4.9)
Federal spending ¹	425.2	470.4	515.3	566.5	615.8
Federal receipts ¹	376.6	416.9	461.3	512.6	583.6
Federal deficit ¹	-48.6	-53.4	-54.0	-44.8	-32.3

¹ NIA basis.

The base case contains no new major fiscal stimulative programs. The only change in policy was a \$15 billion permanent personal tax cut in 1979 in response to the anticipated weakness in the economy. Although the economy is moving closer to its full-employment position, a significant imbalance still exists in the federal budget (over \$30 billion) in 1981.

Several alternative cases were run to assess the economic impact of changes in public policy. One case assumed a stimulative monetary policy (short-term rates in the 4.5-5.0 percent range). In this case, the federal deficit was reduced to approximately \$25 billion by 1981. The other cases assessed the impact of changes in government spending, taxation and public jobs programs. Each of these cases produced significant increases in the federal deficit in the short run. To a certain degree, these results stem from the relatively low spending multipliers in our model. Other models may produce somewhat higher private spending and, consequently, higher government tax receipts and lower deficits. However, the basic conclusion reached by our model should be identical to results obtained from other models; increases in government stimulus in the economy would improve the economic picture but would be initially counter-productive in achieving a balanced budget.

It appears clear that the only way full employment and a balanced federal budget can be achieved as if there is a significant increase in spending in the private sector of the economy. Such strength is not seen at the present time. Even with a sizable increase in private spending, the government objectives may not be achieved unless this includes a significant increase in capital spending to eliminate the possibility of industrial bottlenecks and the resultant acceleration of price increases.

I must apologize for the delay in responding to your request; however, we were in the midst of making several changes to our long-term model. If you would like to discuss these results in more detail, I could arrange a meeting here in Armonk. In any event, if I can be of any further assistance to you, please feel free to contact me by mail or at (914) 765-6049.

BRIAN P. O'CONNOR.

THE 1977 MIDYEAR REVIEW OF THE ECONOMY

THURSDAY, JUNE 9, 1977

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

The committee met, pursuant to recess, at 10:06 a.m., in room 1202, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling, Reuss, Hamilton, and Long; and Senators Humphrey, Javits, and McClure.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Thomas F. Dernburg, G. Thomas Cator, William A. Cox, Kent H. Hughes, John R. Karlik, L. Douglas Lee, Katie MacArthur, and Deborah Norelli, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, Stephen J. Entin, M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

This morning we continue our inquiry into the economic outlook for the remainder of 1977 and 1978.

We are pleased to have Mr. Charles Schultze, Chairman of the Council of Economic Advisers to discuss this with us.

An issue related to the current outlook but with a longer time horizon is the policy goals and targets which the administration has announced.

Unfortunately, the information this committee has gathered thus far indicates that it is very unlikely that we will be able to achieve all of the administration's goals however desirable they may be.

Let me be specific. The administration's long-range objectives call for:

1. A reduction of the unemployment rate to 4¾ percent in calendar year 1981.
2. A reduction in the inflation rate to 4 percent by the end of 1979.
3. A balanced Federal budget in fiscal 1981.

A preliminary evaluation of these targets by the JEC staff indicates that they can be achieved only by extraordinary strength in the private sector.

Even making very generous assumptions about the growth in consumption, inventories, residential construction, State and local spending, and net exports, our estimates show that the only way to achieve

your targets is to have real fixed investments growing about 10 percent each year between now and 1981.

This strikes me as being extremely improbable.

I stress that our evaluation is preliminary and the staff is continuing to work on it, but our witnesses yesterday confirmed this view.

We heard testimony from three outstanding economists who represent very different perspectives on the economy, Mr. Jack Carlson from the U.S. Chamber of Commerce, Mr. Alvin J. Karchere from IBM, and Prof. Ronald Teigen of the University of Michigan.

Despite differences in opinion on other topics, they were unanimous in the conclusion that all of the administration's long-term objectives will not be achieved.

The Department of Commerce survey of capital investment plans released yesterday which indicates an increased investment of about 7½ percent for the year 1977 also causes me to question the likelihood of such high growth rates.

As you present your views on the outlook for 1977 and 1978, I would like you to keep in mind how this fits into the long-run picture because I do want to spend some time discussing this.

Mr. Schultze, please proceed with your prepared remarks.

STATEMENT OF HON. CHARLES L. SCHULTZE, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. SCHULTZE. Thank you, Mr. Chairman and members of the committee. I am happy to be here with you this morning to discuss the outlook for the American economy.

My statement concentrates on the short-run outlook, but in view of your opening statement, Mr. Chairman, I may interpolate some remarks at the end about the longer run planning strategy which the administration has set forth.

I would like to start by tracing recent economic developments and then examine the immediate outlook.

When the administration took office in January, the economy had just begun to emerge from a pause in the recovery during the summer and fall of last year. That pause had widespread effects on the economy, as you know. During the spring and summer of 1976 consumer spending slowed, leading to a pile-up of inventories that soon became excessive in relation to sales.

By late summer and early fall, production cutbacks were occurring in both durable and nondurable goods industries. Eventually, businesses began to postpone, stretch out, or cancel their plans for fixed investment outlays, and so the growth of new orders for nondefense capital goods faltered. In the third quarter, manufacturers reduced their new capital appropriations by 8 percent.

Beginning in October, a much stronger trend in consumer buying emerged. Personal consumption expenditures, adjusted for inflation, rose at an annual rate of 7 percent in the fourth quarter of 1977, well above the long-term trend. But since business firms did not increase production schedules, the rate of inventory investment fell to practically zero. As a result, the ratio of inventories to sales declined in nearly all major lines of business activity. And so, despite strong rise in consumer spending the GNP rose by only 2.6 percent in the fourth quarter.

By early 1977, with the overhang of inventories eliminated and consumer spending still surging strongly, the pace of expansion began to accelerate. For a few weeks time, the cold winter held back the recovery, but the economic effects of the winter weather were as short-lived as they were sharp. Overall, the first quarter of 1977 turned out to be a good one. The real GNP grew by 6.4 percent rate during that quarter. And real personal consumption expenditures recorded a 7-percent growth rate for the second quarter in a row, as you can see in my table 1.

[Table 1 follows:]

TABLE 1.—INCREASE IN REAL GNP AND FINAL SALES
[Percent, annual rate]

	1976 (quarter)				1977 (quarter) 1st
	1st	2d	3d	4th	
Real GNP.....	9.2	4.5	3.9	2.6	6.4
Real final sales.....	3.7	4.2	4.3	5.7	3.7

Mr. SCHULTZE. Automobile sales, in particular, were at a very strong annual rate of 11.3 million units. The first quarter surge in consumer spending led to a sharp increase in production for inventory investment.

The rate of business fixed investment also moved ahead, reflecting in part, deliveries of trucks and farm machinery held back by strikes in the fourth quarter of 1976.

The results of this improving trend have been particularly impressive in labor markets. Total employment has risen by 2 million people in the past 5 months. The unemployment rate has dropped a full percentage point since last November. Moreover, the improvements have been widespread. Unemployment rates have declined for teenagers as well as for adults, and for women as well as for men. The job situation for blacks and other minority groups has also improved, by relatively less than for whites. An extremely high 13 percent of America's blacks are still unemployed.

It is now likely that during the second quarter of 1977 the real GNP will grow at a rate that will match, or perhaps exceed, the first-quarter pace. Residential construction is rising strongly. State and local expenditures appear to be on the increase after two quarters of decline.

Consumer spending also seems to be holding up reasonably well, although the rate of increase appears to be well below the sharp gains registered in the prior two quarters.

PROSPECTS FOR THE REST OF 1977

The second half of 1977 will not show the same rate of gain as the first half, but it will be strong enough to make the full year a very good one for the economy. As the recovery continues, however, the contribution of the various sectors of the economy will be changing.

In particular, consumer spending in the remainder of 1977 cannot be expected to play the dynamic role it has over the past year or so. The first quarter saving rate of 4.8 percent, even after correction for the unusual size of heating bills, which lifts it to something a little over

5, was lower than in all but two quarters of the past 13 years. It will almost surely rise somewhat as the year goes on. Even with the good gains in personal income that are now occurring, the rate of growth of consumer spending must slacken somewhat.

Consumers are in a confident buying mood, however. They are showing a willingness to go into debt heavily to buy autos and other big-ticket items, and their incomes will continue to rise. I expect that consumer spending will increase only moderately less rapidly than the growth in consumer income during the rest of this year.

The slowdown in the growth of consumer spending is no threat to continued expansion, however. For one thing, Federal budget policies will counterbalance in part this shift in the savings behavior of American consumers.

The decline in the Federal budget deficit from the 1976 fiscal year to the 1977 fiscal year was in some measure counterbalanced by the sharp increase in the fraction of income spent by consumers. In the same fashion, the increase in the saving rate that we expect in the months ahead will be countered in part by an increase in fiscal stimulus from the 1978 Federal budget.

Inventory investment may also be less of a source of stimulus in the second half of 1977 than it has been in the first half. Slower growth of consumer spending will mean less pressure to add to stocks. But inventories are now in a much better position relative to sales than they were 1 year ago, and as sales move ahead with rising incomes in the coming months, some further additions to inventories will be called for, although that rate of increase in inventory investment will presumably slow down some.

State and local governments should increase their spending as the year goes on. The financial positions of State and local governments have improved substantially over the past year or so. Their expenditures have been brought under better control and receipts have risen as the economy improved. As a result, the budget positions of State and local governments have changed dramatically, and the aggregate operating surplus now stands at an annual rate of \$6 billion compared to a deficit of \$2 billion in the first half of 1976. These are at annual rates.

The job programs in the President's stimulus package will add further to State and local spending as the year progresses.

Homebuilding is likely to move up further from present high levels. Sales of new single-family homes are still strong. The number of new homes sold in the first four months of 1977 was 10 percent above the number in the previous quarter. Vacancy rates on apartment buildings have been declining over the past year, and permits to build new apartments have been running 60 percent above year-earlier levels during the past several months. Finally, mortgage credit is in ample supply and should impose no constraints on residential construction in the months ahead.

Prospects for growth over the remainder of the year and into 1978 will depend importantly, of course, on the rate of business investment. This sector has lagged somewhat during the recovery up to now. In the first quarter of 1977 real business fixed investment was still 9 percent below the peak in the first quarter of 1974, 3 years earlier.

The shortfall in business investment has been concentrated in new

construction. In the first quarter, outlays for machinery and equipment, adjusted for inflation, were 5 percent below their 1974 peak, while expenditures for structures, by contrast, were almost one-fifth below their prior peak. Slow growth of plant and equipment outlays generally, and of spending for structures in particular, has been characteristic of this recovery in industrialized economies all over the world. To sustain the recovery into the future, this performance must be improved upon.

Recently, we have seen signs of strengthening in the outlook for plant and equipment expenditures. Measured in real terms, new contracts and orders for plant and equipment, after the mid-1976 pause, rose by 6.3 percent—these are not annual rates—in the fourth quarter by another 4.8 percent in the first quarter, and continued to advance strongly by April, as you can see in my table 2.

[Table 2 follows:]

TABLE 2.—CONTRACTS AND ORDERS FOR PLANT AND EQUIPMENT

[1972 dollars]

	1976 (quarters)				1977	
	1st	2d	3d	4th	1st quarter	April
Level, at annual rates (billions).....	\$128.8	\$125.4	\$125.6	\$133.6	\$139.9	\$150.7
Percent change.....	17.1	-2.6	0.2	6.3	4.8	7.7

Note: Increase in 2d quarter, 1977, assuming May-June levels are equal to April.

Mr. SCHULTZE. The most recent Commerce Department survey of business plans for plant and equipment expenditures has raised some questions about the probable strength of business capital outlays over the remainder of this year. The survey found that businesses have revised upward their anticipated outlays during the first two quarters of 1977, but that outlays planned for the last half of this year were relatively unchanged. The pattern of outlays within the year implies only modest growth in real expenditures for business fixed capital in the latter half of this year.

This result seems questionable, however. The projected rate of advance in the second half of 1977 is significantly below the average pace of the past six quarters. Such a decline seems inconsistent with the sharply rising trend of orders and contracts shown in table 2, and the general improvement in the pace of economic expansion. Further upward revisions in reported expenditure plans, while by no means certain, are a very real possibility.

Given these elements of strength in the major sectors of the economy, we can reasonably be confident of achieving the growth objectives for 1977 set forth by the administration at the beginning of the year. At that time, we looked for real growth in GNP of 5¾ to 6 percent from the final quarter of 1976 to the final quarter of 1977.

The rate of expansion probably will decline somewhat in the second half of 1977, to about 5 to 5½ percent, from the 6½ percent or better rate we expect in the first half.

But we expect to reach our end of year target.

The unemployment goal we announced earlier, 6¾ percent by the fourth quarter of 1977, also seems readily achievable. Given the im-

provement in unemployment to date, we may do somewhat better than that although that certainly cannot yet be a firm prediction.

I expect economic activity to continue moving up a good pace in 1978, somewhat slower than the average rate of expansion this year but well above the long-term trend. Unemployment should therefore decline significantly further, to a range of 6 to 6¼ percent of the labor force by the close of 1978.

The recently enacted stimulus program will make an important contribution to sustaining economic growth and reducing unemployment next year, but the principal thrust to economic expansion should come from the private sector, from rising investment by businesses in fixed capital and continued strong markets for consumer goods and services.

We are currently in the later stages of preparing an update of our earlier economic forecasts for 1978. These will be completed and incorporated as part of the revised budget estimates that will be submitted to the Congress next month.

THE PRICE OUTLOOK

Up to this point I have not mentioned inflation, and I would like to turn now to the economy's performance on the price side. Thus far in 1977, that performance has been disappointing. Both wholesale and consumer prices have been rising at a double-digit rate since the beginning of 1977, at least if you take the months altogether. As a result, the public has become concerned, and financial markets have become uneasy. If these rates of inflation were to continue for long, the recovery itself could be put in jeopardy.

Fortunately, there is good reason to expect some moderation in the rate of price advance in the second half of the year. Most of the recent acceleration in the rate of inflation has been associated with food and fuel price increases. For example, when energy prices are excluded, the Wholesale Price Index for industrial commodities has risen only about 6 percent, at annual rates, thus far in 1977, the same rate as in 1976. The Consumer Price Index, when food and fuel prices are dropped, has risen in the 6 to 7 percent range during the past 3 months.

Moreover, there have been no signs of significant acceleration in the rate of wage increase. Large collective bargaining settlements have provided for relatively high rates of increase in wages and fringes, but no higher than a year ago. Wage rate increases in other sectors also are running about at the 1976 pace.

Looked at from these perspectives, it is apparent that the underlying rate of inflation has not changed materially in 1977; it still hovers around 6 percent. This conclusion stems from a calculation of the change in wholesale and consumer prices, once volatile food and fuel items are excluded. And it is consistent with an analysis of changes in unit labor costs. Wages and fringe benefits are increasing by about 8 percent, on the average. Assuming a long-run trend of productivity increase of about 2 percent the underlying rate of increase in unit labor costs is around 6 percent. Cyclical improvements in productivity caused actual unit labor costs to rise somewhat slower than that last year, but the underlying rate of growth does not appear to have changed fundamentally.

Consequently, as the bulge in food prices subsides, the overall inflation rate should drop back to a pace approximating the underlying rate. We may have another month or two of comparatively large increases in retail food prices. They are very hard to predict from month to month.

But the outlook for food prices is better now than it was at the beginning of the year.

Crop harvests in the Midwest will be relatively large, barring adverse weather developments over the remainder of the growing season.

Fruits and vegetables are now in better supply. Coffee prices have begun to decline at the wholesale level, due largely to declining consumption, and those declines should show up in retail prices later on.

The improved outlook for food prices appears to have been reflected in the May wholesale price index. Prices of processed foods and feeds did rise again, but prices of farm products declined after 5 consecutive months of large increases.

Overall prices of industrial materials that are especially sensitive—such as textiles, fibers, hides, rubber, and metals—traded in markets—also have eased recently. These prices began to rise at a fast pace in the closing months of 1976, and continued to move up in the early weeks of 1977. In late March, however, they leveled out and since then have begun to recede. This does not mean that the rise of industrial commodity prices is about to end, but it is an indication that basic inflationary pressures are not accelerating.

LONGER TERM ISSUES

Despite the promising outlook for 1978, we are still a long distance from reaching our goals for the economy. Unemployment is still much too high and it must be brought down substantially. The gap between the economy's actual and potential output is still very large. Based on conservative estimates of what we can produce, the economy is still performing 6 to 7 percent below its potential. We must erase this gap. Inflation, also, remains a serious problem. The 6-percent underlying rate of price increase persists, and we ought to reduce it.

We are making progress in dealing with these problems, however. Unemployment is declining. Economic growth has accelerated to a solid and sustainable pace. The underlying rate of inflation has not accelerated significantly in the face of inflationary pressure from food and fuel prices. But our efforts to promote stable and sustained economic growth cannot end here.

The President has already signed into law the elements of an economic stimulus program designed to support steady economic growth and continuing reductions in unemployment. We are in the process of formulating proposals for tax reform that not only promote equity and simplicity, but also take into account the need to provide sufficient incentives for a high and growing level of business investment.

Bringing down the rate of inflation will be a long and difficult task. The Government can, and will, do its part to maintain an environment in which inflationary pressures can gradually unwind. We have made a firm commitment to budgetary policies and decisions which make it possible to have a balanced Federal budget in a high level economy in

1981. And we will do what we can also to insure that growth of industrial capacity will be ample to meet our needs in the future.

Government cannot achieve our economic objectives alone, however. We can create an environment in which businesses can invest with confidence, but in the end the decision to invest rests in the hands of business planners. We can stand firmly by policies that will reduce the inflationary pressures on the economy, but moderation of wage and price demands by labor and businesses is an essential ingredient to unwinding inflation. Such behavior would be in the best interest of the health of our economy and also in the best interests of both labor and management.

Private decisions that promote our economic objectives will be forthcoming, however, only if the Government sets economic policies that inspire confidence in businesses and consumers that the future does not hold in store the sort of shocks from inflation or recession that rattled the economy since 1973. The Carter administration has set long-term economic goals and made policy commitments designed to foster the public confidence that is needed to achieve the level of economic performance we all desire, and we take those goals and commitments very seriously.

Let me interject here, if I can, Mr. Chairman, some remarks about those long-term goals.

As you indicated earlier, we set a goal for 1981, among other things, of getting the rate of unemployment down in the neighborhood of $4\frac{3}{4}$ percent, which implies an average growth rate in the economy of about $5\frac{1}{2}$ percent from 1977 through 1981, a little more in the early part, a little less in the later period, about 10 million people employed; also, by 1981 a balanced Federal budget.

Let's look at that.

As you know, there is a two-way relationship between the budget and the economy. The faster the rate of growth in the private economy, the more everything else being equal, incomes, profits are going to rise; Federal revenues are going to rise; the more feasible it is to balance the budget.

Not only the more feasible, but in a very strong private economy as you move up to high employment, it is imperative that you balance the budget.

We are just recovering from the traumas of double-digit inflation. We don't want to get into a situation in which, as we enter into a high level economy, we again tick off economic overheating.

There is a clear relationship between the performance of the economy on the one hand and the budget. Conversely, as you know, the budget affects the economy: Tax reductions, judicious increases in Federal expenditures can increase employment and output; and, through multiplier operations, it can go over into private employer output.

It is an uncertain world we are looking at out into the future.

It is an uncertain world we are looking at next week. It is obviously an uncertain world we are looking at 4 years into the future.

How do you plan for an uncertain world?

It is clear on the one hand that if we have a strong private economy, we have to be making budgetary decisions which are now, since budgetary decisions you make now affect not only next years' budget but budgets 3, 4, and 5 years out.

You make budgetary decisions now that are not inconsistent with a balanced budget in a high employment economy.

If the private economy is strong—and let me add one other preliminary point.

I think you have to recognize an assymetry. You gentlemen are even more aware of it than I am; an assymetry in budget planning. Fundamentally it is easier if you have to add economic stimulus if your initial plans are wrong one way than to pull out expenditures or raise taxes if you are wrong the other way.

That assymetry is very important.

If we plan for a balanced Federal budget in 1981 in terms at least of decisions we are taking today, and we are wrong—counting on a strong private economy—and it is always a balanced budget in a high-level economy.

We plan for a balanced budget in 1981. Counting on a strong economy, and we are wrong, it is all things considered relatively easy to take account of getting off that track and putting on additional stimulus.

If, on the other hand, in making budgetary decisions now on long-run matters, counting on a weak private economy we plan now for a large budgetary deficit out in 1981 and we are wrong, then it is much harder to reverse.

So, in laying out a planning strategy, we have admittedly relatively ambitious goals for the economy which, if achieved, require a balanced budget, and we are dealing with a planning strategy, not a cold turkey, blind forecast that we can tell you and guarantee you what is going to happen to the private economy.

It is a reasonable, and a prudent planning strategy which recognizes the real world assymetry of budget decisions.

Representative BOLLING. Would you pause just for a minute?

Mr. SCHULTZE. I am finished.

Representative BOLLING. In the way you put it, it seems essential to ask the question now. It seems to me that even as a planning strategy, the insistence we are going to balance the budget by 1981, come hell or high water—

Mr. SCHULTZE. No, sir. No, sir. If I may interrupt, in a high level economy. I have said that. The President has said that. We have all said that we have a dual objective.

Representative BOLLING. The problem, it seems to me, and the way the public reacts and the way people on the Hill react is that the impression is very clear in the land that the President has a commitment to have a balanced budget in 1981 come hell or high water.

That may be wrong. Maybe I am misjudging the reaction. That's the impression that I get. It seems to me that there is a vast difference between that kind of an approach and the approach that you have outlined.

I think what you suggest as a planning strategy is very different than a goal; and, I have been around long enough to know the difference in the use of language; but, there has been some presentation of this as a goal, not as a planning strategy.

Mr. SCHULTZE. In his UAW speech, for example, the President indicated that we are firmly committed to budgetary policies which make possible a balanced budget in a high level economy in 1981.

If you put those two together, it is kind of hell or high water. That is, we want to be in a budgetary position such that given a strong private economy, you can have it.

Representative BOLLING. I don't want to pursue this at this moment very far. Then you have to get to the second two things that are involved. That's the assumptions on which the plan can be made and the assumptions have to do with a very high level of consumer spending and a very high level of business fixed investment; and, I have a great deal of difficulty finding any evidence to support that level of economic activity over this period of time.

That's my difficulty. Granted, the notion that this is a planning strategy—I have a terrible time—and we are going to be much more careful about our study of it. A lot of our members and staff and I had a very hard time being able to find those elements of strength.

We know that you can argue, as you have very ably, for the possibility, but it seems to be that even in a planning strategy it is important not to confuse people on what the situation looks like.

Mr. SCHULTZE. Let me, again, if I might, Mr. Chairman, pursue that a bit.

As you indicated—

Representative BOLLING. Go right ahead.

Mr. SCHULTZE. As you indicated—well let's take—one of the ways we do this, since you can't really make a forecast for 1981, let me tell you how we go about it.

You set the objectives, 4¾ percent unemployment; you do have problems estimating productivity in a lot of things.

Within some reason you can estimate what kind of gross national product would go along with that, along with your price assumptions.

That gives you your overall target. You can then project out Federal revenues which would be yielded by current tax laws under that kind of an economy, and Federal expenditures under existing programs.

If you do that, you find that by 1981, that a high level economy, revenues would be somewhat higher than expenditures and you balance the budget by some combination, tax cuts and expenditure increases.

Granted that, you then subtract out. You have your economic goals; you have the Federal sector; you subtract out, look at where the non-Federal sector has got to be.

Within that you can't forecast very well, but we know some things. We know, for example, that it is a better than even bet that given the demographic situation with respect particularly to school-age population, given what appears to be some taxpayer resistance to additional rate increases of State and local governments, that the rate of growth of State and local expenditures will probably be somewhat less in the next 5 years than it has been in the past 10 up until the recession.

You know residential construction, with reasonable policy, is going to stay strong. It is obviously not, given the nature of family formation, it is not going to be a leading sector of growth.

Even though when you say "strong" it grows.

You look at net exports. It is clear that the rest of the world is recovering at least for the next year or so on the average at a lower rate than the United States. Even if you assume the enactment of the President's energy program, you assume the attainment of his goals

over the next several years oil imports are not going to decline substantially.

So, net exports, when you look at it, is not going to be a leading sector for the next couple of years. It may then pick up somewhat more.

Then you look at what has to happen to consumption and investment. What we have done is say, looking at consumer saving rates, that in the prior decade consumers spent 93 percent of their income.

That was about a one percent lower rate of spending than in the decade before that. We think it was heavily affected by consumer caution engendered by the yo-yo-like performance of the economy roughly during the two recessions, and by very sharp double-digit inflation.

We think with a reasonable rate of economic growth, we will split the difference. We are talking about consumers spending somewhere between 93 percent of their income which is the prior decade, and 94, which is the decade before that.

That's a very reasonable assumption. Now, you are down to business fixed investment.

We say that would have to grow at a real rate of something like 9 to 10 percent a year for 4 years running. Two things: That's ambitious. There's a precedent.

It did happen from 1962 to 1966. In fact, it grew at more than 10 percent a year averaged over 4 years. In fact, it did so, I believe, for 5 years.

You have to add one other item. If you look at the relationship between capacity and the labor force, as a matter—not just of forecasting, but a planning strategy, you have to get—not necessarily that 9 to 10 percent, but a very healthy growth in business investment to avoid running into capacity bottlenecks if you want to reach your employment target.

So, we set this out as a planning strategy looking both at the supply side and the demand side.

Say it is indeed a reasonable set of goals, although an ambitious set of goals; that, if it is achieved, we want to have budget expenditures in relationship to revenues in which we are at a balanced budget in 1981 because if it is achieved we don't want to be otherwise.

We don't want to tick off excess demand. Conversely, we are perfectly aware of the fact that if the economy falters and if that performance isn't forthcoming, do whatever we can to make it forthcoming, you have to come in with some additional stimulus.

As the President indicated in the UAW speech, we are not saying we are going to balance the budget with high unemployment. It seems to me given the assymetry I talked about, given the supply side need, that is a reasonable way to set our targets for trying to get the economy going, not only in terms of budget planning but in terms of looking at the problem of investment which we have to get up not just from the demand side but we think we have to from the supply side also.

Representative BOLLING. Mr. Schultze, I have great admiration for you as an economist and great admiration for you as an advocate.

I don't wish to be unduly mean. I think that rather than a planning document, what you have done is articulate a wishbook in which I join. I think it is exactly what I hope happens.

My problem is that I don't quite see the signs that you think you see.

I will be specific about one factor, the comparison with 1962 and 1966.

That was clear the first time I saw your charts that that was what was being assumed was that kind of exceptional rate, both in consumer expenditure and in business investment.

I hope you are right. We very badly need that kind of a result. I am having a very hard time working with my staff, working with other members of this committee, and working with other members of other committees finding that very many people feel that that is going to happen.

So, that's why I characterize it as a wishbook rather than as a planning document.

Perhaps I was being too mean; I sort of halfway take it back.

Mr. SCHULTZE. I think I would agree with the last part of the statement.

Representative BOLLING. I thought you might.

Congressman Long.

Representative LONG. Thank you, Mr. Chairman.

May I pursue perhaps a couple of questions, Mr. Schultze? I would like to get into the whole question of inflation for a moment.

It seems to me that there is one sure thing in this unsure world we live in that is becoming more sure every day, and I wonder whether it has been given adequate consideration in looking at the inflationary aspects of the economic picture.

That is that, fairly substantial additional increases in crude oil prices will be coming from the Middle East. I use, as the most recent basis for this, the Saudi statements in the last week or two, which spoke of 5 percent increases.

To the degree that you have given consideration to an uncertain factor in figuring what price crude oil will be, and assuming that this price will almost assuredly increase, what effect will such increases have on inflation?

If you look at the figures of recent inflation for the first half of this year, perhaps 1 percent of the inflation rate has been due to increased energy prices; that has certainly been true in the past year or so; I don't know the exact figures.

Address this point for a moment, if you will. It is something that was not mentioned in your prepared statement. I am not sure that in past statements, which I have studied, we have given it the consideration that we should.

Mr. SCHULTZE. Well, I start, I guess, with a bit of a pitch.

I will start with that and go right to the question.

I think it is true that what happens to world oil prices has a significant impact on the economy of the United States including inflation.

What determines world oil prices? Well, I don't pretend to be an expert on how the cartel operates and what drives it. I know one thing. I know one major factor. It is the strength of the world oil demand.

It is not the only factor, but it is an important factor. What is hap-

pening to the rate of growth of oil imports in the oil-consuming nations?

This is why I think even though it is clearly not going to do any good over the next year or two, the enactment of a comprehensive energy program, whatever the quarrels with particular parts of it, the enactment of a comprehensive energy program even at the initial cost—and there will be an initial cost of driving energy prices up still further, to reduce the rate of growth and then to turn down U.S. oil imports—which is a big part of that world market—is critical in terms of the longer run.

I have to tell you that if you are going to get the longer run objective, paradoxically there is going to be some price in driving up the rate of oil prices in the United States initially faster than might otherwise be the case.

I think that's the most important thing we can do to get at this problem.

Next, I think when you look at the inflationary impact of oil pricing, basically you have to look at the excess of the growth of oil prices over the general rate of inflation.

If oil prices are growing at the usual rate of inflation, they are neither subtracting from nor contributing to the pressures.

So, the rates of increase you are likely to get in world oil prices over the next couple of years, I am not predicting. What you really have to do is take the excess over a 5- or a 6-percent rate at which general inflation is going.

In that sense, the numbers aren't quite as scary as might otherwise be the case. I don't want to pretend I can predict what is going to happen to OPEC prices.

Representative LONG. Well, it is essential to the whole plan; it obviously is. We don't know what type of program we are going to be able to enact; we don't know how long it will be before such a program is enacted; and we don't know how the American people are going to respond to it once it is enacted.

There are so many variables to consider, living in this uncertain world, that it really makes the underpinning of the whole plan subject to some question. As Mr. Bolling said, it looks like an awfully good hope chest.

All of us hope, for our part, that it is more than that.

Mr. SCHULTZE. Again, I can't disagree with that in one sense; but, I think what the Government policy has to do is to recognize the difficulties and uncertainties of the world and try to move not to remove them all.

You can't remove them all; but, to recognize what they are and move at them. I think the energy program does move at one uncertainty at the paradoxical cost in the period when you are debating it with increasing uncertainty.

That is the nature of a democratic system. I think one of the big features of having an energy program come up early in a fairly comprehensive manner, quite apart from what it does explicitly, is to try to nail it down and remove that—not the uncertainty, all the uncertainties; but at least remove one element of the uncertainty: What is the U.S. Government's policy going to be?

You can move to reduce some elements of it, not all of them.

Representative LONG. The conduct of the economy as a result of the recession and the recession's effect upon inflation—which has been contrary to what we were used to—has been of interest to me. I am not, of course, a trained economist, but I was in the business community for a considerable period of time, and I have spent considerable time studying economics on this committee.

It seems to me that, during the past 3 or 4 years, prices have shown a tendency to stabilize when the economy was growing faster; and, in turn, increase substantially when we were in a recessionary period.

So, the question immediately comes to mind, is growth inflationary, or is it really anti-inflationary?

If we can have this reversal of what was, in the past, accepted form, and if we are successful in promoting growth during, say, the next 3 years, do you believe this trend will continue sufficiently, so as to result in an anti-inflationary aspect?

Mr. SCHULTZE. It is a complicated question, a complicated subject. I will try to give as little a complicated answer as I can.

I think a steady sustainable growth is anti-inflationary. Not any growth; not a burst of growth; not growth that threatens to ultimately overheat the economy.

We are not in that stage now. I think what you want is steady sustainable growth—really, all wrapped around one big reason, that we can afford to get into is a situation in which growth is so sluggish for so long that plant and equipment investment slackens off, gets very sluggish over a number of years; then, when you want to get back to any kind of reasonable economic performance, lo and behold, there is an imbalance between your labor force on the one hand and your plant and equipment capacity on the other.

As you try to get the unemployment rate down, you run up very early against shortages. So, in a most fundamental sense of the term, I think steady and sustainable growth is anti-inflationary.

I think, at the same time, one has to be careful to do your forewarned planning such that that growth doesn't ultimately put you in a position of overheating. I don't think we are in that situation but I think we have to be aware of it.

Representative LONG. Thank you, Mr. Chairman.

Representative BOLLING. I have a series of questions on long-range knowledge and some on relatively short-range knowledge.

I have been concerned about the attention—systematic attention, I am sure—that you were giving to the inflationary impacts of a variety of governmental actions.

I sent you a letter, and a variety of other people a letter on that. I wondered how much you have been able to deal systematically with that.

I note that, in Business Week, a CEA study concluded that limiting TV imports to even 2 million sets would boost color TV prices by 15 percent and cost the American consumer an extra \$535 million a year.

If there is such a study, could we have it?

Mr. SCHULTZE. No, sir, there is a whole range of studies.

Representative BOLLING. You have a whole range of studies?

Mr. SCHULTZE. Not that we have done. We have done some; other people have done some. There is a whole range of studies.

It turns out when you look at them, it is very, very difficult to come down with a particular number. Let me give you—that doesn't mean we don't try.

The 15- to 20-percent number essentially is the possible implication of a combination of the Zenith case and some anti-dumping cases that are around.

That is the countervailing duty problem.

Next, just to illustrate this problem that plagues you: If you take the agreement with the Japanese, the impact of that is going to depend upon two things, which raises a lot of questions.

What is built up in inventories that were brought in in 1976 and early 1977 in anticipation of something being done?

Quite frankly, there is no way to get your hands around that. There is evidence that there was a large inventory built up. There is evidence that it may not have been so large.

What happens with respect to the construction and establishment of assembly facilities in the United States for putting together foreign parts and building assemblies here?

That has begun to occur. That is outside the OMA. How much that occurs has a major impact on what the consequences of that agreement are going to be.

So, it is very hard to come up with any number. You can sit and make studies, but it is very difficult to come up with any one number. That is what plagues you in each of these cases. It depends upon those two critical factors for which I wish I had a better answer.

Representative BOLLING. In effect, you are saying there are a lot of studies but not many results?

Mr. SCHULTZE. There are lots of studies, and lots of results.

Representative BOLLING. But you don't mean them?

Mr. SCHULTZE. You live in a world in which you do the best with the information you can gather.

Representative BOLLING. The question is: Can we have some of those studies that you have?

I am not trying to —

Mr. SCHULTZE. I understand.

Representative BOLLING. Can we negotiate with you?

Mr. SCHULTZE. I would like to review that.

Representative BOLLING. If I may, I will prepare a letter to you on that subject.

I want to get clear a small thing with regard to some of the figures I think you are using.

The consumption-to-disposable-income ratio you have been using are personal outlays as I understand it, not personal consumption expenditures.

Mr. SCHULTZE. To get the saving rate, the normal technique is to use the outlay number against disposable income. It is the way Commerce counts personal interest payments.

These are the standard numbers that are used.

Representative BOLLING. Right.

In dealing with the GNP and the quantities involved in real consumer spending, we do use personal consumption expenditures.

Mr. SCHULTZE. You make a translation from one to the other.

Representative BOLLING. The latter ratio has fallen steadily from about 93 percent in the early sixties to 90 percent in recent years. Isn't that so?

Mr. SCHULTZE. I would have to review that, sir.

At the moment—I assume whoever gave you the numbers, I am sure gave you the right numbers. I would have to go back and review it.

Representative BOLLING. In effect, your figures include consumer interest in transfers to foreigners that have nothing to do with consumption?

Mr. SCHULTZE. No, we make the translation and get down to consumption. We use the Department of Commerce personal consumption estimate.

Representative BOLLING. That's what I wanted to be sure of.

Now, I would like to ask you a series of questions about different aspects of that long-range planning. The question of the consistency of the 1981 target of 4¾ percent with the plan to balance the budget with expenditure and revenue equal to 21 percent of GNP.

If your growth assumptions prove to be too optimistic and you find that you cannot reach all of your targets, have you any notion which one would be sacrificed?

Mr. SCHULTZE. In the first place, within the obvious narrow range of uncertainty, you are not going to basically sacrifice your unemployment target, No. 1.

No. 2, if you are asking me whether if you need additional stimulus in order to meet it you do it on the revenue side or on the expenditure side, which has an impact there for the ratio of expenditures to GNP, that I can't answer because I think it depends upon the nature of the shortfall.

Representative BOLLING. The first point is you consider the priority among the goals the unemployment factor?

Mr. SCHULTZE. I think you have unemployment, inflation, balanced budget.

The priorities are the economic ones. Let me put it another way:

The reason for the balanced budget is not balanced budget per se. It is because in a high-level economy you don't want a unbalanced budget for economic reasons.

Representative BOLLING. I have absolutely no disagreement with that presentation of the notion of a balanced budget.

The thing that worries me is having been around here a long time and been beaten over the head with the empty bladder of the sanctity of the balanced budget, I am not particularly anxious to have it twisted around that if we get—and I hope we don't—into a difficult situation with regard to employment and unemployment. I am not interested in seeing anybody, particularly a democratic administration, make it easier for people to kill programs that I may happen to consider essential, with the argument that you have to balance the budget as a matter of religion.

One of the things that worries me about this so-called planning approach is that it seems to me politically—and I will say it flatly—it seems to be giving aid and comfort to a notion that must be outworn by now that there is some virtue by itself in a balanced budget.

I agree entirely that you need balanced budgets and have high levels of activity. You may need high levels of activity.

There is nothing sacred about a balanced budget per se. That's what worries me about the whole situation we are facing now.

Mr. SCHULTZE. Can I respond simply by saying one has to also balance various aspects of this in the planning strategy.

Right now, for example, there is no question—no question in my mind—that the deficits the Federal Government is running are not inflationary. They are running an economy of ample slack.

There is only one way they could be harmful, conceivably and that is if the fact of running large deficits now were taken by large elements of the community that you have gotten yourself into a position where you couldn't balance the budget in a high-level economy, that could be dangerous and therefore laying out the planning strategy to make sure you are not doing anything now which is consistent with a balanced budget and high level economy is paradoxically important to wring out, to get rid of, to damn what I think is the wrong view that current deficits are inflationary.

I do think it is important to do that, very important.

Representative BOLLING. Well, I think that is a very sophisticated approach. I can't disagree with anything except that I notice that politically those who are against virtually all the social programs that have been conceived in the last 25 or 30 years seize upon the balancing of the budget in an entirely different context than you do and in your testimony and all your presentations and the political danger is a very real danger.

That's one of the reasons why I think it has to be looked at in some detail and rather cold bloodedly.

Congressman Reuss.

Representative REUSS. Thank you, Chairman Schultze, for your testimony.

I wanted to address myself to the composition of unemployment which you covered in your testimony, Chairman Schultze, where you say, "The results of this improving trend have been particularly impressive in labor markets. Total employment has risen by 2 million in the past 5 months."

I will skip a couple of sentences. Then you say, "The job situation for blacks and other minority groups has also improved, but relatively less than for whites."

As I read the figures, the job situation for blacks has not improved. I am using the Bureau of Labor Statistics latest release, May 1976 versus May 1977, black men's unemployment went up from 9.6 percent to 9.9 percent; black women's unemployment went up from 10.4 percent to 11.8 percent, and black teenagers' unemployment went up from 37.8 percent to 38.7 percent.

It is largely the same story if you look at last January. Overall black unemployment, January through May, has increased from 12.5 percent to 12.9 percent; and particularly increased in black women and black teenagers.

I can't see how you can derive any joy from those minority statistics any way you look at it.

Mr. SCHULTZE. I am not extracting any joy from it. The sense of the statement was the following. I was concentrating on what had hap-

pened to unemployment, and employment, since its peak early last year, that November 8-percent peak it reached and the improvement in the last 6 months.

During that period I am talking about, during that last 6 months, unemployment rates have moved down generally; but, explicitly pointing out that even during that period, which is what I was talking about, the gains in the early part of 1977, it has been less than proportional for blacks and other minority groups.

That's right.

I don't disagree with you.

Representative REUSS. The gains have been losses. Any month you take—let's take November—black teenagers, unemployment is up since last November. Black women, unemployment is up since last November. It is not that they gained less.

Mr. SCHULTZE. Again, I don't want to argue with you. I agree with the central thrust you are making. For blacks and other minorities, it has not gone so well.

All I am pointing out is during the period in which unemployment has come down for blacks as a whole it has also come down although relatively less, and that's not good.

I was simply talking about the improvement in the first 6 months.

Representative REUSS. I want to say this, though. As I read the figures, unemployment for black teenagers and black women has not come down, not only relatively less than for whites, but it has gone up; it has gotten worse.

Mr. SCHULTZE. We had better check our numbers. The table I have must be different from the table you have.

Representative REUSS. I am using the Bureau of Labor Statistics.

Mr. SCHULTZE. If you take from November to May on blacks and other races, it has come down.

Again, I don't want to get in a position of saying that's a great thing.

Representative REUSS. It would be a modestly great thing if it had come down appreciably. I am claiming that the figures I look at show it has gone up since January and there has been no significant improvement in the black unemployment rate since last November, using any base you wish.

Mr. SCHULTZE. Let me submit for the record just to make sure we have a complete rundown of that.

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

The rate of unemployment among black Americans has declined since last November, but is higher now than it was one year ago. In my testimony before the committee, I was drawing attention to the comparison of current conditions in the economy to conditions during the pause and deterioration of last fall. Looked at from a longer perspective, however, the employment situation among blacks remains a serious problem.

Representative REUSS. Fine. I will submit the Bureau of Labor Statistics release, "The Employment Situation: May 1977," of June 3, 1977, particularly table A-2.

[The release referred to follows:]

News

United States
Department
of Labor



Bureau of Labor Statistics

Washington, D.C. 20212

Contact: J. Bregger (202) 523-1944
523-1371
K. Hoyle (202) 523-1913
523-1208
home: 333-1384

USDL 77-504
TRANSMISSION OF MATERIAL IN THIS RELEASE IS
EMBARGOED UNTIL 10:00 A. M. (EDT), FRIDAY,
JUNE 3, 1977

THE EMPLOYMENT SITUATION: MAY 1977

Employment rose in May and unemployment showed little change, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The Nation's overall rate of unemployment was 6.9 percent, not much different from April's 7.0-percent rate but down substantially from last November's high of 8.0 percent.

Total employment--as measured by the monthly survey of households--rose by nearly 400,000 in May to 90.4 million. Employment gains have totaled almost 2.7 million since last October, an average of 380,000 a month.

Nonagricultural payroll employment--as measured by the monthly survey of establishments--rose by 185,000 in May to 81.8 million. Manufacturing continued to pace the current expansion and over the past 7 months has accounted for 600,000 of the total job growth of 2.0 million.

Unemployment

There were 6,750,000 persons unemployed in May, seasonally adjusted, virtually the same level as in April. This followed reductions totaling 450,000 in the 2 previous months. The overall unemployment rate of 6.9 percent was about unchanged from the previous month, after declining by half a percentage point from February and a full point since November.

Despite the over-the-month stability in overall joblessness, there were some offsetting movements among component labor force groups. The jobless rate for adult women fell from 7.0 to 6.6 percent; this was accompanied by decreases among female household heads and married women. The unemployment rate for adult men, on the other hand, moved up from 5.0 to 5.3 percent, largely the result of an increase for black men. The adult male rate had declined by nearly a full percentage point between February and April. Rates for most other major worker categories--including teenagers, full-time

and part-time workers, and job losers--showed little or no change in May. (See tables A-2 and A-5.)

The number of persons looking for work for 15 or more weeks--the long-term unemployed-- was about unchanged in May at 1.8 million, after declining steadily during the first 4 months of the year. Among the shorter duration categories, there was an increase among those jobless for 5 to 14 weeks, but an even greater decrease took place among workers who were seeking work for less than 5 weeks. The average (mean) duration of unemployment moved up from 14.3 to 14.9 weeks. (See table A-4.)

Table A. Major indicators of labor market activity, seasonally adjusted

Selected categories	Quarterly averages				Monthly data			
	1976				1977	1977		
	I	II	III	IV	I	Mar.	Apr.	May
HOUSEHOLD DATA								
Thousands of persons								
Civilian labor force	93,644	94,544	95,261	95,711	96,067	96,539	96,760	97,158
Total employment	86,514	87,501	87,804	88,133	88,998	89,475	90,023	90,408
Unemployment	7,130	7,043	7,457	7,578	7,068	7,064	6,737	6,750
Not in labor force	59,327	59,032	58,963	59,132	59,379	59,104	59,094	58,943
Discouraged workers	940	903	827	992	929	N.A.	N.A.	N.A.
Percent of labor force								
Unemployment rates:								
All workers	7.6	7.4	7.8	7.9	7.4	7.3	7.0	6.9
Adult men	5.8	5.7	6.0	6.2	5.6	5.4	5.0	5.3
Adult women	7.4	7.1	7.7	7.6	7.1	7.2	7.0	6.6
Teenagers	19.2	18.8	18.8	19.1	18.6	18.8	17.8	17.9
White	6.9	6.8	7.1	7.2	6.7	6.6	6.3	6.2
Black and other	13.1	12.9	13.1	13.4	12.8	12.7	12.3	12.9
Household heads	5.0	4.9	5.3	5.3	4.8	4.6	4.4	4.5
Full-time workers	7.1	7.0	7.4	7.5	6.8	6.7	6.5	6.5
ESTABLISHMENT DATA								
Thousands of jobs								
Nonfarm payroll employment ...	78,674	79,333	79,683	80,090	80,927	81,395	81,605p	81,792p
Goods-producing industries ...	23,142	23,380	23,372	23,440	23,765	24,005	24,163p	24,244p
Service-producing industries ..	55,532	55,953	56,311	56,650	57,162	57,390	57,442p	57,548p
Hours of work								
Average weekly hours:								
Total private nonfarm	36.3	36.2	36.1	36.2	36.1	36.3	36.2p	36.3p
Manufacturing	40.3	40.0	39.9	40.0	40.1	40.4	40.2p	40.4p
Manufacturing overtime	3.1	3.0	3.0	3.1	3.3	3.3	3.4p	3.4p

p=preliminary.

N.A.=not available.

Total Employment and Labor Force

Total employment rose for the seventh consecutive month, with an increase of 385,000 in May to 90.4 million, seasonally adjusted. This included a rise of 125,000 in agriculture. (See table A-1.) Employment has grown by 2.8 million over the past year, nearly all of it since last October.

The employment-population ratio--the proportion of the total noninstitutional population that is employed--continued its recent steady advance and, at 57.1 percent, was just 0.3 percentage point below the alltime high last reached more than 3 years earlier.

The civilian labor force rose by 400,000 to 97.2 million in May. The labor force was 2.6 million above its year ago level, with adult women accounting for more than half of the growth. The civilian labor force participation rate--the proportion of the civilian noninstitutional population that is either working or looking for work--edged up to a new high of 62.2 percent, well above the May 1976 level of 61.6 percent. (See table A-1.)

Industry Payroll Employment

Total nonagricultural payroll employment also increased for the seventh consecutive month, advancing by 185,000 in May to 81.8 million, seasonally adjusted. Nearly two-thirds of the industries that comprise the BLS diffusion index of nonagricultural payroll employment posted over-the-month gains in employment. Payroll employment has risen by 2.5 million since last May, with four-fifths of the growth occurring since October. (See tables B-1 and B-6.)

The largest over-the-month gain was in manufacturing, where employment increased by 65,000. Eighty percent of this growth took place in the durable goods industries, a sector which has added 215,000 jobs to its payrolls since February. Fabricated metal products, machinery, and electrical equipment accounted for 45,000 of the April-May increase in durables. Contract construction employment, which had grown substantially between January and April, rose slightly in May (15,000).

In the service-producing sector, employment in State and local government and services each increased by 30,000, while smaller gains occurred in the other major industry divisions.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls edged up from 36.2 to 36.3 hours in May, seasonally adjusted. Average hours have been at about this level since February. The manufacturing workweek returned to the March level of 40.4 hours after dipping to 40.2 hours in April. Factory overtime was unchanged from the April level of 3.4 hours. (See table B-2.)

Reflecting the increases in both employment and hours, the index of aggregate hours of production or nonsupervisory workers on private nonagricultural payrolls rose 0.5 percent in May to 116.0 (1967=100). This was 3.6 percent above the year-ago level. The manufacturing index advanced by an even larger amount over the month--1.0 percent--and was up 3.3 percent over the year. (See table B-5.)

Hourly and Weekly Earnings

Both average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls increased moderately in May, by 0.6 and 0.9 percent, respectively. Hourly and weekly earnings were each 7.4 percent higher than a year earlier.

Before adjustment for seasonality, average hourly earnings were \$5.19, up 4 cents from April and 36 cents from a year earlier. Average weekly earnings were \$187.36, an increase of \$2.47 over the month and \$13.00 from May 1976. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 196.3 (1967=100) in May, 0.5 percent higher than in April. The index was 6.9 percent above May a year ago. During the 12-month period ended in April, the Hourly Earnings Index in dollars of constant purchasing power rose 0.3 percent. (See table B-4.)

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey, a sample survey of households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 47,000 households selected to represent the U.S. civilian noninstitutional population 16 years of age and over.

Statistics on nonagricultural payroll employment, hours, and earnings (B tables) are collected by the Bureau of Labor Statistics, in cooperation with State agencies, from payroll records of a sample of approximately 165,000 establishments. Unless otherwise indicated, data for both series relate to the week containing the 12th day of the specified month.

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire population 16 years of age and over, without duplication, since each person is classified as employed, unemployed, or not in the labor force.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. The household survey counts employed persons in both agriculture and in nonagricultural industries and, in addition to wage and salary workers (including private household workers), includes the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) have been without a job during the survey week, (2) have made specific efforts to find employment sometime during the prior 4 weeks, and (3) be presently available for work. In addition, persons on lay-off and those waiting to begin a new job (within 30 days) are also classified as unemployed. The unemployed total

includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

To meet the extensive needs of data users, the Bureau regularly publishes data on a wide variety of labor market indicators—see, for example, the demographic, occupational, and industry detail in tables A-2 and A-3. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force, extending from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, school vacations, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 90 percent of the month-to-month variance in the unemployment figures. Since seasonal variations tend to be large relative to the underlying cyclical trends, it is necessary to use seasonally-adjusted data to interpret short-term economic developments. At the beginning of each year, current seasonal adjustment factors for unemployment and other labor force series are calculated taking into account the prior year's experience, and revised data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unemployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components). Several alternative methods for seasonally adjusting the overall unemployment rate are also used on a regular basis in order to illustrate the degree of uncertainty that arises because of the seasonal adjustment procedure. Among these alternative methods are five different age-sex adjustments,

including a concurrent adjustment and one based on stable factors and four based on other unemployment aggregations. Alternative rates for 1976 are shown in the table at the end of this note. (Current alternative rates and an explanation of the methods may be obtained from BLS upon request.)

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are revised annually, usually in conjunction with the annual benchmark adjustments (comprehensive counts of employment).

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaire and procedures. The standard error is the measure of sampling variability, that is, the variations that might occur by chance because only a

sample of the population is surveyed. Tables A-E in the "Explanatory Notes" of *Employment and Earnings* provide standard errors for unemployment and other labor force categories.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. Moreover, since the estimating procedures employ the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks, usually annually. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 benchmark levels. Measures of reliability for employment estimates are provided in the "Explanatory Notes" of *Employment and Earnings*, as are the actual amounts of revisions due to benchmark adjustments (tables G-L).

Unemployment rate by alternative seasonal adjustment methods

Month	Unadjusted rate	Official Adjusted Rate	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment	Composite	Range (cols. 2-13)
			All multiplicative	All additive	Year-ahead	Con-current	Stable 1967-73	Duration	Reasons	Total	Residual			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	7.8	7.8	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.6	7.8	7.8	7.6	7.7	7.5	7.5	7.8	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	7.5	7.5	7.7	7.3	7.4	7.5	7.6	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	7.2	7.2	7.5	7.2	7.4	7.5	7.2	7.5	7.3	.3
June	8.0	7.6	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.8	7.7	7.7	7.7	7.7	.2
August	7.6	7.9	7.9	7.8	7.9	7.9	7.7	8.0	8.0	7.9	7.8	8.0	7.9	.3
September	7.4	7.8	7.8	7.7	7.8	7.8	7.6	8.0	7.9	7.8	7.8	7.8	7.8	.4
October	7.2	7.9	8.0	7.8	7.9	7.9	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	8.1	8.0	7.8	8.1	8.0	8.0	7.8	8.0	8.0	.3
December	7.4	7.8	7.9	7.8	7.9	7.8	7.9	7.9	7.8	7.8	7.8	7.9	7.8	.1

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted					Seasonally adjusted				
	May 1976	Apr. 1977	May 1977	May 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977	May 1977	
	TOTAL									
Total noninstitutional population ¹	155,711	157,986	158,228	155,711	157,381	157,584	157,782	157,986	158,228	
Armed Forces	2,142	2,137	2,128	2,142	2,131	2,137	2,138	2,137	2,128	
Civilian noninstitutional population ¹	153,570	155,854	156,101	153,570	155,250	155,447	155,643	155,854	156,101	
Civilian labor force	93,582	95,826	96,193	94,551	95,516	96,145	96,539	96,760	97,158	
Participation rate	60.9	61.5	61.6	61.6	61.6	61.9	62.0	62.1	62.2	
Employed	87,278	89,258	90,042	87,640	88,558	88,962	89,475	90,023	90,408	
Employment-population ratio ²	56.1	56.3	56.9	56.3	56.3	56.5	56.7	57.0	57.1	
Agriculture	3,415	3,140	3,478	3,332	3,090	3,090	3,116	3,260	3,386	
Nonagricultural industries	83,863	86,118	86,564	84,308	85,468	85,872	86,359	86,763	87,022	
Unemployed	6,304	6,568	6,151	6,911	6,958	7,183	7,064	6,737	6,750	
Unemployment rate	6.7	6.9	6.4	7.3	7.3	7.5	7.3	7.0	6.9	
Not in labor force	59,988	60,028	59,907	59,019	59,732	59,302	59,104	59,094	58,943	
Men, 20 years and over										
Total noninstitutional population ¹	66,087	67,209	67,324	66,087	66,930	67,025	67,114	67,209	67,324	
Civilian noninstitutional population ¹	64,398	65,522	65,641	64,398	65,250	65,342	65,423	65,522	65,641	
Civilian labor force	37,500	38,400	38,400	37,500	38,400	38,400	38,400	38,400	38,400	
Participation rate	79.5	79.2	79.3	79.3	79.5	79.7	79.6	79.5	79.5	
Employed	48,498	49,114	49,487	48,542	48,961	49,091	49,267	49,465	49,531	
Employment-population ratio ²	73.4	73.1	73.5	73.5	73.2	73.2	73.4	73.6	73.6	
Agriculture	2,468	2,259	2,423	2,418	2,209	2,230	2,208	2,280	2,373	
Nonagricultural industries	46,030	46,855	47,064	46,124	46,752	46,861	47,059	47,185	47,158	
Unemployed	2,707	2,795	2,575	2,893	2,881	3,001	2,794	2,624	2,751	
Unemployment rate	5.3	5.4	4.9	5.6	5.6	5.8	5.4	5.0	5.3	
Not in labor force	13,193	13,614	13,579	12,963	13,408	13,250	13,362	13,433	13,359	
Women, 20 years and over										
Total noninstitutional population ¹	72,837	73,958	74,081	72,837	73,642	73,746	73,852	73,958	74,081	
Civilian noninstitutional population ¹	72,733	73,863	73,987	72,733	73,500	73,654	73,757	73,863	73,987	
Civilian labor force	33,865	35,418	35,478	33,999	34,760	34,982	35,295	35,455	35,634	
Participation rate	46.5	48.0	48.0	46.7	47.2	47.5	47.9	48.0	48.2	
Employed	31,682	33,080	33,299	31,671	32,331	32,477	32,750	32,985	33,288	
Employment-population ratio ²	43.5	44.7	44.9	43.5	43.9	44.0	44.3	44.6	44.9	
Agriculture	521	511	641	485	488	445	496	577	597	
Nonagricultural industries	31,161	32,570	32,658	31,186	31,843	31,992	32,254	32,408	32,691	
Unemployed	2,183	2,337	2,179	2,328	2,409	2,505	2,545	2,470	2,346	
Unemployment rate	6.4	6.6	6.1	6.8	6.9	7.2	7.2	7.0	6.6	
Not in labor force	38,908	38,446	38,509	38,754	38,810	38,672	38,462	38,408	38,353	
Both sexes, 16-19 years										
Total noninstitutional population ¹	16,788	16,819	16,823	16,788	16,810	16,813	16,816	16,819	16,823	
Civilian noninstitutional population ¹	16,419	16,468	16,473	16,419	16,448	16,451	16,464	16,468	16,473	
Civilian labor force	8,532	8,499	8,653	8,653	8,934	9,071	9,183	9,216	9,242	
Participation rate	52.0	51.6	52.5	52.5	54.3	55.1	55.8	56.0	56.1	
Employed	7,099	7,063	7,256	7,427	7,366	7,394	7,458	7,573	7,589	
Employment-population ratio ²	42.3	42.0	43.1	44.2	43.2	44.0	44.4	45.0	45.1	
Agriculture	426	370	414	429	393	375	412	403	416	
Nonagricultural industries	6,672	6,693	6,842	6,998	6,873	7,019	7,046	7,170	7,173	
Unemployed	1,434	1,436	1,397	1,690	1,668	1,677	1,725	1,643	1,653	
Unemployment rate	16.8	16.9	16.1	18.5	18.7	18.5	18.8	17.8	17.9	
Not in labor force	7,886	7,969	7,820	7,302	7,514	7,380	7,281	7,252	7,231	
WHITE										
Total noninstitutional population ¹	137,081	138,894	139,089	137,081	138,415	138,575	138,732	138,894	139,089	
Civilian noninstitutional population ¹	135,296	137,139	137,337	135,296	136,654	136,814	136,972	137,139	137,337	
Civilian labor force	82,924	84,890	85,214	83,668	84,616	85,086	85,482	85,642	85,937	
Participation rate	61.3	61.9	62.0	61.8	61.9	62.2	62.4	62.4	62.6	
Employed	77,836	79,618	80,373	78,070	78,923	79,365	79,832	80,249	80,603	
Employment-population ratio ²	56.8	57.3	57.8	57.0	57.0	57.3	57.5	57.8	58.0	
Unemployed	5,088	5,273	4,841	5,598	5,693	5,721	5,650	5,393	5,334	
Unemployment rate	6.1	6.2	5.7	6.7	6.7	6.7	6.6	6.3	6.2	
Not in labor force	52,372	52,249	52,123	51,628	52,038	51,724	51,490	51,497	51,400	
BLACK AND OTHER										
Total noninstitutional population ¹	18,630	19,091	19,140	18,630	18,966	19,009	19,050	19,091	19,140	
Civilian noninstitutional population ¹	18,273	18,714	18,763	18,273	18,594	18,637	18,672	18,714	18,763	
Civilian labor force	10,658	10,935	10,979	10,846	11,030	11,163	11,104	11,071	11,171	
Participation rate	58.3	58.4	58.5	59.4	59.3	59.9	59.5	59.2	59.5	
Employed	9,842	9,640	9,669	9,509	9,648	9,697	9,690	9,711	9,730	
Employment-population ratio ²	50.7	50.5	50.5	51.0	50.9	51.0	50.9	50.9	50.8	
Unemployed	1,216	1,295	1,310	1,337	1,382	1,466	1,414	1,360	1,441	
Unemployment rate	11.4	11.8	11.9	12.3	12.5	12.1	12.7	12.3	12.9	
Not in labor force	7,616	7,779	7,784	7,427	7,564	7,474	7,568	7,643	7,597	

¹ The population and Armed Forces figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.² Civilian employment as a percent of the total noninstitutional population (including Armed Forces).

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (In thousands)		Unemployment rates					
	May 1976	May 1977	May 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977	May 1977
Total, 16 years and over	6,911	6,750	7.3	7.3	7.5	7.3	7.0	6.9
Men, 20 years and over	2,893	2,751	5.6	5.6	5.8	5.4	5.0	5.3
Women, 20 years and over	2,328	2,346	6.8	6.9	7.2	7.2	7.0	6.6
Both sexes, 16-19 years	1,690	1,653	18.5	18.7	18.5	18.8	17.8	17.9
White, total	5,598	5,334	6.7	6.7	6.7	6.6	6.3	6.2
Men, 20 years and over	2,379	2,206	5.2	5.0	5.2	4.9	4.6	4.7
Women, 20 years and over	1,893	1,817	6.4	6.3	6.4	6.5	6.1	5.9
Both sexes, 16-19 years	1,326	1,311	16.3	18.1	16.3	16.6	16.1	15.7
Black and other, total	1,337	1,441	12.3	12.5	13.1	12.7	12.3	12.9
Men, 20 years and over	512	543	9.6	10.2	9.9	9.4	8.5	9.9
Women, 20 years and over	472	566	10.4	10.8	12.4	11.6	12.3	11.8
Both sexes, 16-19 years	353	332	37.8	36.1	37.2	40.1	36.2	38.7
Household heads, total	2,632	2,467	4.9	4.8	4.9	4.6	4.4	4.5
Men	2,005	1,812	4.4	4.3	4.5	4.2	3.9	4.0
With relatives	1,601	1,435	4.0	3.8	4.0	3.7	3.5	3.5
Without relatives	404	377	8.3	8.2	8.2	7.8	6.9	7.3
Women	547	578	6.4	7.0	7.1	7.2	7.0	6.3
With relatives	355	361	8.7	9.0	9.4	9.6	9.2	8.4
Without relatives	192	217	4.3	5.1	4.9	5.0	5.0	4.5
Married men, spouse present	1,618	1,445	4.1	3.8	4.1	3.7	3.6	3.6
Married women, spouse present	1,462	1,417	6.7	6.5	6.7	6.7	6.6	6.3
Full-time workers	5,573	5,389	6.9	6.7	6.9	6.7	6.5	6.5
Part-time workers	1,398	1,429	10.1	10.2	10.7	11.1	9.9	9.9
Unemployed 15 weeks and over ¹	2,062	1,856	2.2	2.4	2.0	2.0	1.9	1.9
Labor force time lost ²	--	--	8.1	8.0	7.9	7.8	7.4	7.5
OCCUPATION³								
White-collar workers	2,074	1,994	4.5	4.5	4.6	4.7	4.4	4.3
Professional and technical	425	408	3.1	3.3	3.3	3.1	3.2	2.9
Managers and administrators, except farm	293	270	3.1	3.0	2.8	3.4	2.9	2.8
Sales workers	287	329	4.9	5.7	5.6	5.5	5.1	5.5
Clerical workers	1,069	987	6.3	6.0	6.4	6.5	6.0	5.7
Blue-collar workers	2,870	2,621	9.0	8.4	8.7	8.3	7.8	7.9
Craft and kindred workers	756	703	6.3	6.1	6.5	6.0	4.9	5.6
Operatives, except transport	1,203	1,025	10.6	9.2	9.6	9.2	9.3	8.9
Transport equipment operatives	230	255	6.5	7.2	7.7	6.9	6.0	6.7
Nonfarm laborers	681	638	13.6	12.9	12.8	13.2	12.6	12.5
Service workers	1,079	1,222	8.2	8.6	8.4	7.9	8.1	9.0
Farm workers	138	135	4.6	4.8	6.7	5.4	4.8	4.4
INDUSTRY³								
Nonagricultural private wage and salary workers ⁴	5,144	5,018	7.5	7.4	7.6	7.4	7.0	7.1
Construction	625	603	14.5	14.9	15.2	14.2	12.0	13.0
Manufacturing	1,569	1,351	7.4	6.9	7.1	6.6	6.7	6.2
Durable goods	928	727	7.3	6.5	7.0	6.1	6.0	5.7
Nondurable goods	641	624	7.5	7.4	7.3	7.3	7.7	7.0
Transportation and public utilities	243	213	5.0	4.7	4.6	5.1	4.4	4.3
Wholesale and retail trade	1,423	1,493	8.2	8.4	8.7	8.4	7.8	8.3
Finance and service industries	1,252	1,330	6.3	6.2	6.2	6.4	6.1	6.6
Government workers	716	644	4.6	4.3	4.5	6.0	4.0	4.1
Agricultural wage and salary workers	186	172	12.5	12.6	13.4	13.2	12.3	11.5
VETERAN STATUS								
Male Vietnam-era veterans:⁵								
20 to 34 years	468	489	7.4	7.6	7.0	6.8	7.3	7.5
20 to 24 years	142	125	15.2	16.8	15.8	17.1	14.4	13.6
25 to 29 years	218	225	6.9	7.9	6.7	6.6	7.7	7.8
30 to 34 years	108	139	4.9	3.6	3.9	3.3	4.3	5.1
Male nonveterans:								
20 to 34 years	1,186	1,119	7.9	8.2	8.6	7.9	6.8	7.2
20 to 24 years	725	696	10.8	10.6	11.6	10.4	10.1	10.2
25 to 29 years	285	268	6.1	7.7	7.3	7.0	5.7	5.4
30 to 34 years	176	155	4.9	4.2	4.8	4.3	4.2	4.1

¹ Unemployment rate calculated as a percent of civilian labor force.² Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.³ Unemployment by occupation includes all experienced unemployed persons, whereas that

by industry covers only unemployed wage and salary workers.

⁴ Includes mining, not shown separately.⁵ Vietnam-era veterans are those who served between August 5, 1964, and April 30, 1975.

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-3. Selected employment indicators

(Numbers in thousands)

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	May 1976	May 1977	May 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977	May 1977
CHARACTERISTICS								
Total employed, 16 years and over	87,278	90,042	87,640	88,558	88,962	89,475	90,023	90,408
Men	52,301	53,525	52,490	52,918	53,046	53,270	53,575	53,722
Women	34,977	36,517	35,150	35,640	35,916	36,205	36,448	36,686
Household heads	51,200	52,366	51,170	51,710	51,729	51,970	52,230	52,514
Married men, spouse present	31,177	38,470	38,196	38,195	38,159	38,294	38,536	38,509
Married women, spouse present	20,260	20,920	20,300	20,511	20,756	20,963	21,076	20,962
OCCUPATION								
White-collar workers	43,478	44,485	43,757	44,521	44,451	44,495	44,851	44,766
Professional and technical	13,235	13,483	13,236	13,444	13,408	13,439	13,591	13,483
Managers and administrators, except farm	9,237	9,428	9,210	9,613	9,302	9,543	9,434	9,400
Sales workers	5,506	5,661	5,539	5,633	5,615	5,617	5,765	5,695
Clerical workers	15,300	15,913	15,772	15,831	15,726	15,896	16,061	16,188
Blue-collar workers	28,991	30,284	29,066	29,634	29,917	30,025	30,193	30,423
Craft and kindred workers	11,234	11,870	11,259	11,626	11,668	11,709	11,896	11,894
Operatives, except transport	10,060	10,393	10,192	10,341	10,351	10,574	10,394	10,530
Transport equipment operatives	3,278	3,334	3,296	3,358	3,448	3,487	3,482	3,552
Nonfarm laborers	4,359	4,487	4,319	4,309	4,430	4,255	4,421	4,447
Service workers	11,955	12,356	12,034	11,874	12,017	12,272	12,356	12,372
Farm workers	2,914	2,981	2,839	2,624	2,663	2,652	2,779	2,904
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,296	1,325	1,297	1,246	1,280	1,282	1,310	1,325
Self-employed workers	1,697	1,688	1,664	1,490	1,511	1,513	1,548	1,655
Unpaid family workers	422	465	357	354	338	319	366	393
Nonagricultural industries:								
Wage and salary workers	77,447	79,758	78,070	79,205	79,520	79,869	80,306	80,429
Government	14,984	15,196	14,858	15,013	14,913	14,923	14,960	15,075
Private industries	62,463	64,561	63,212	64,192	64,607	64,946	65,346	65,354
Private households	1,315	1,317	1,303	1,391	1,317	1,313	1,320	1,305
Other industries	61,148	63,244	61,909	62,801	63,290	63,633	64,026	64,049
Self-employed workers	5,922	6,219	5,759	5,853	5,854	5,919	5,954	6,050
Unpaid family workers	494	587	463	419	516	536	499	550
PERSONS AT WORK¹								
Nonagricultural industries	80,099	82,957	78,960	79,832	80,837	81,330	81,005	81,771
Full-time schedules	65,207	67,555	64,877	65,700	66,144	66,659	66,436	67,219
Part time for economic reasons	3,071	3,070	3,287	3,320	3,438	3,276	3,174	3,290
Usually work full time	1,358	1,240	1,438	1,112	1,335	1,212	1,167	1,314
Usually work part time	1,713	1,830	1,849	2,208	2,103	2,064	2,007	1,976
Part time for noneconomic reasons	11,821	12,332	10,796	10,812	11,255	11,395	11,395	11,262

¹ Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

Table A-4. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	May 1976	May 1977	May 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977	May 1977
DURATION								
Less than 5 weeks	2,450	2,437	2,795	2,762	2,804	3,005	3,100	2,782
5 to 14 weeks	1,544	1,635	1,978	2,083	2,107	2,098	1,857	2,093
15 weeks and over	2,310	2,078	2,042	2,283	2,182	1,923	1,816	1,836
15 to 26 weeks	1,022	959	850	1,038	967	777	715	800
27 weeks and over	1,289	1,120	1,192	1,245	1,235	1,146	1,101	1,036
Average (mean) duration, in weeks	16.6	16.4	15.1	15.5	14.7	14.0	14.3	14.9
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	38.9	29.6	41.0	38.7	39.5	42.8	45.8	41.5
5 to 14 weeks	24.5	19.9	29.0	29.2	29.7	29.9	27.4	31.2
15 weeks and over	36.6	25.3	30.0	32.0	30.8	27.4	26.8	27.4
15 to 26 weeks	16.2	11.7	12.5	14.6	13.4	11.1	10.6	11.9
27 weeks and over	20.4	13.6	17.5	17.3	17.4	16.3	16.3	15.4

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-5. Reasons for unemployment

Reasons	Not seasonally adjusted		Seasonally adjusted					
	May	May	May	Jan.	Feb.	Mar.	Apr.	May
	1976	1977	1976	1977	1977	1977	1977	1977
NUMBER OF UNEMPLOYED								
Lost last job	3,201	2,774	3,506	3,207	3,396	3,143	2,933	3,038
On layoff	853	664	963	791	1,001	865	754	749
Other job losers	2,348	2,110	2,543	2,416	2,395	2,278	2,199	2,289
Left last job	716	758	892	932	852	919	846	964
Reentered labor force	1,619	1,818	1,775	1,991	1,963	2,013	2,001	1,993
Seeking first job	768	801	860	905	936	1,003	972	893
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	50.8	45.1	49.9	45.6	47.5	44.4	43.6	44.2
On layoff	13.5	10.8	13.7	11.2	14.0	12.2	11.1	10.9
Other job losers	37.3	34.3	36.2	34.3	33.5	32.2	32.5	33.3
Job leavers	11.4	12.3	12.7	13.2	11.9	13.0	12.5	13.7
Reentrants	25.7	29.6	25.2	28.3	27.5	28.4	29.5	29.0
New entrants	12.2	15.0	12.2	12.9	15.1	14.2	14.4	13.0
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	3.4	2.9	3.7	3.4	3.5	3.3	3.1	3.1
Job leavers .....	.8	.8	.9	1.0	.9	1.0	.9	1.0
Reentrants	1.7	1.9	1.9	2.1	2.0	2.1	2.1	2.1
New entrants .....	.8	.8	.9	.9	1.0	1.0	1.0	.9

Table A-6. Unemployment by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)		Unemployment rate						
	May	May	May	Jan.	Feb.	Mar.	Apr.	May	
	1976	1977	1976	1977	1977	1977	1977	1977	
Total, 16 years and over									
16 to 19 years	6,911	6,750	7.3	7.3	7.5	7.3	7.0	6.9	
16 to 17 years	1,690	1,653	18.5	18.7	18.5	18.8	17.8	17.9	
18 to 19 years	811	799	21.7	21.1	19.8	22.2	19.2	20.4	
20 to 24 years	879	873	16.5	17.0	17.5	16.6	16.8	16.3	
25 to 24 years and over	1,572	1,533	11.3	11.4	12.0	11.4	10.8	10.7	
25 to 54 years	3,646	3,565	5.1	5.1	5.2	5.1	4.9	4.8	
55 years and over	3,064	3,006	5.3	5.3	5.3	5.2	5.1	5.1	
	606	580	4.3	4.1	4.8	4.3	4.1	4.0	
Men, 16 years and over									
16 to 19 years	3,830	3,609	6.8	6.6	6.9	6.5	6.1	6.3	
16 to 17 years	937	858	19.2	17.4	18.6	18.7	17.0	17.0	
18 to 19 years	459	399	22.6	19.5	19.3	22.2	17.9	18.7	
20 to 24 years	478	459	17.0	16.1	17.9	16.1	16.0	16.0	
25 years and over	869	823	11.3	11.3	12.1	11.2	10.5	10.6	
25 to 54 years	1,984	1,892	4.5	4.6	4.6	4.3	4.1	4.2	
55 years and over	1,613	1,563	4.6	4.7	4.6	4.3	4.3	4.4	
	387	343	4.4	4.0	4.7	4.4	3.7	3.9	
Women, 16 years and over									
16 to 19 years	3,081	3,141	8.1	8.3	8.4	8.5	8.2	7.9	
16 to 17 years	753	795	17.8	20.1	18.4	18.9	18.8	19.0	
18 to 19 years	352	380	20.6	23.0	20.4	22.2	20.8	22.5	
20 to 24 years	401	414	15.9	18.1	18.9	17.1	17.7	16.6	
25 to 24 years and over	703	710	11.2	11.4	11.9	11.7	11.2	10.9	
25 years and over	1,662	1,673	6.0	5.9	6.1	6.1	6.0	5.7	
25 to 54 years	1,451	1,443	6.5	6.2	6.3	6.6	6.5	6.1	
55 years and over	219	237	4.2	4.3	4.9	4.2	4.6	4.3	

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-7. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Measures	Quarterly averages					Monthly data		
	1976				1977	1977		
	I	II	III	IV	I	Mar.	Apr.	May
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	2.7	2.2	2.4	2.6	2.2	2.0	1.9	1.9
U-2—Job losers as a percent of the civilian labor force	3.8	3.7	3.9	3.9	3.4	3.3	3.1	3.1
U-3—Unemployed household heads as a percent of the household head labor force	5.0	4.9	5.3	5.3	4.8	4.6	4.4	4.5
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	7.1	7.0	7.4	7.5	6.8	6.7	6.5	6.5
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.6	7.4	7.8	7.9	7.4	7.3	7.0	6.9
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ¼ total on part-time for economic reasons as a percent of the civilian labor force less ¼ of the part-time labor force	9.3	9.1	9.5	9.7	9.0	8.9	8.6	8.6
U-7—Total full-time jobseekers plus ½ part-time jobseekers plus ¼ total on part-time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ¼ of the part-time labor force	10.2	10.0	10.3	10.7	9.9	N.A.	N.A.	N.A.

N.A.—not available.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	May 1976	Mar. 1977	Apr. 1977 ^P	May 1977 ^P	May 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977 ^P	May 1977 ^P
TOTAL	79,424	80,547	81,252	81,900	79,319	80,561	80,824	81,395	81,605	81,792
GOODS-PRODUCING	23,245	23,461	23,793	24,106	23,381	23,589	23,701	24,005	24,163	24,244
MINING	775	827	838	848	776	817	823	842	847	849
CONTRACT CONSTRUCTION	3,598	3,451	3,674	3,840	3,605	3,561	3,645	3,759	3,835	3,848
MANUFACTURING	18,872	19,183	19,281	19,418	19,000	19,211	19,233	19,404	19,481	19,547
Production workers	13,571	13,763	13,855	13,997	13,693	13,801	13,810	13,958	14,032	14,120
DURABLE GOODS	11,034	11,246	11,317	11,419	11,062	11,236	11,230	11,370	11,392	11,445
Production workers	7,890	8,025	8,092	8,195	7,916	8,026	8,011	8,128	8,153	8,221
Ordinance and accessories	157.9	155.4	156.4	155.9	160	156	156	156	158	157
Lumber and wood products	600.1	614.0	624.4	640.1	601	625	626	633	637	641
Furniture and fixtures	490.9	498.4	500.5	501.1	496	494	497	503	506	506
Stone, clay, and glass products	628.0	625.9	642.2	649.8	627	631	620	641	650	649
Primary metal industries	1,194.5	1,190.8	1,204.7	1,215.3	1,193	1,183	1,178	1,199	1,207	1,214
Fabricated metal products	1,385.1	1,415.9	1,423.1	1,437.2	1,392	1,413	1,416	1,432	1,433	1,444
Machinery, except electrical	2,063.7	2,148.1	2,140.0	2,155.2	2,068	2,125	2,134	2,142	2,138	2,160
Electrical equipment	1,822.3	1,886.6	1,895.0	1,911.8	1,837	1,874	1,888	1,906	1,916	1,927
Transportation equipment	1,755.2	1,775.4	1,790.4	1,810.2	1,747	1,790	1,766	1,808	1,798	1,801
Instruments and related products	510.6	521.8	520.9	524.4	512	521	524	526	525	525
Miscellaneous manufacturing	425.6	413.5	415.2	417.7	429	424	425	424	424	421
NONDURABLE GOODS	7,838	7,937	7,964	7,999	7,938	7,975	8,003	8,034	8,089	8,102
Production workers	5,681	5,738	5,763	5,802	5,777	5,775	5,799	5,830	5,879	5,899
Food and kindred products	1,652.0	1,661.4	1,659.9	1,659.7	1,712	1,721	1,727	1,734	1,738	1,720
Tobacco manufactures	67.7	63.9	67.2	66.1	76	74	73	68	74	74
Textile mill products	971.9	969.8	977.9	982.1	977	958	964	973	981	987
Apparel and other textile products	1,318.8	1,286.9	1,282.6	1,292.4	1,321	1,278	1,280	1,283	1,288	1,295
Paper and allied products	672.3	682.9	690.0	695.6	679	684	688	688	698	703
Printing and publishing	1,076.1	1,096.4	1,097.3	1,102.5	1,079	1,090	1,095	1,097	1,098	1,106
Chemicals and allied products	1,028.8	1,047.5	1,050.9	1,052.0	1,034	1,044	1,050	1,051	1,057	1,058
Petroleum and coal products	202.8	202.0	206.0	207.5	203	205	205	207	210	208
Rubber and plastic products, nec.	568.7	661.4	665.8	672.5	578	656	656	666	678	683
Leather and leather products	280.0	264.8	265.9	268.3	279	265	265	267	267	268
SERVICE-PRODUCING	56,179	57,086	57,459	57,794	55,938	56,972	57,123	57,390	57,442	57,548
TRANSPORTATION AND PUBLIC UTILITIES	4,494	4,522	4,531	4,569	4,503	4,549	4,553	4,568	4,568	4,578
WHOLESALE AND RETAIL TRADE	17,606	17,779	18,017	18,155	17,663	17,981	18,067	18,189	18,194	18,214
Wholesale trade	4,228	4,310	4,327	4,339	4,258	4,323	4,334	4,354	4,366	4,370
Retail trade	13,378	13,469	13,690	13,816	13,405	13,658	13,733	13,835	13,828	13,844
FINANCE, INSURANCE, AND REAL ESTATE	4,278	4,422	4,446	4,473	4,282	4,423	4,431	4,453	4,459	4,477
SERVICES	14,654	15,028	15,171	15,293	14,567	15,010	15,068	15,149	15,171	15,202
GOVERNMENT	15,147	15,315	15,294	15,304	14,923	15,009	15,004	15,031	15,050	15,077
FEDERAL	2,735	2,714	2,716	2,722	2,730	2,721	2,721	2,725	2,719	2,717
STATE AND LOCAL	12,412	12,601	12,578	12,582	12,193	12,288	12,283	12,306	12,331	12,360

preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	May 1976	Mar. 1977	Apr. 1977 ^P	May 1977 ^P	May 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977 ^P	May 1977 ^P
TOTAL PRIVATE	36.1	36.0	35.9	36.1	36.3	35.8	36.3	36.3	36.2	36.3
MINING	42.5	43.7	43.9	43.6	42.4	42.9	43.6	44.4	44.4	43.5
CONTRACT CONSTRUCTION	37.2	36.8	36.9	37.3	37.1	35.4	37.8	37.1	37.2	37.2
MANUFACTURING	40.2	40.2	40.0	40.3	40.3	39.5	40.3	40.4	40.2	40.4
<i>Overtime hours</i>	3.1	3.2	3.1	3.3	3.3	3.2	3.3	3.3	3.4	3.4
DURABLE GOODS	40.9	40.8	40.7	41.1	40.9	40.0	40.8	41.0	40.8	41.1
<i>Overtime hours</i>	3.3	3.3	3.3	3.6	3.4	3.4	3.3	3.4	3.6	3.7
Ordnance and accessories	40.7	40.8	40.9	40.4	40.8	40.5	40.6	40.6	41.1	40.5
Lumber and wood products	40.4	39.8	40.0	40.1	40.1	39.9	40.5	40.1	40.0	39.8
Furniture and fixtures	38.6	38.1	37.8	38.2	39.0	37.0	38.1	38.6	38.3	38.5
Stone, clay, and glass products	41.5	41.2	41.4	42.0	41.4	39.9	41.4	41.4	41.7	41.9
Primary metal industries	40.9	41.0	41.3	41.6	41.0	40.0	40.6	41.1	41.4	41.7
Fabricated metal products	41.0	40.8	40.5	41.0	41.0	39.9	40.8	41.0	40.7	41.0
Machinery, except electrical	41.0	41.5	41.2	41.5	41.2	40.6	41.3	41.5	41.4	41.7
Electrical equipment	40.2	40.2	39.9	40.2	40.2	39.4	40.6	40.3	40.0	40.2
Transportation equipment	42.5	42.4	42.0	42.9	42.4	41.4	41.4	42.8	41.9	42.8
Instruments and related products	40.7	40.3	39.9	40.2	40.8	39.8	40.8	40.4	40.0	40.3
Miscellaneous manufacturing	38.7	39.3	38.8	39.0	38.7	38.2	39.5	39.3	38.8	39.0
NONDURABLE GOODS	39.4	39.3	39.1	39.2	39.5	38.7	39.6	39.5	39.5	39.4
<i>Overtime hours</i>	3.0	2.9	2.9	3.0	3.1	3.0	3.2	3.1	3.2	3.1
Food and kindred products	40.0	39.6	39.4	39.7	40.2	39.5	40.3	40.2	40.1	39.9
Tobacco manufactures	35.1	37.7	37.8	37.6	38.6	36.1	39.4	38.4	38.3	38.1
Textile mill products	40.5	40.5	40.1	40.2	40.6	39.7	40.5	40.8	40.5	40.3
Apparel and other textile products	35.8	35.5	35.0	35.4	36.0	34.2	35.7	35.6	35.1	35.6
Paper and allied products	42.5	42.4	42.8	42.7	42.8	41.9	42.7	42.8	42.8	43.3
Printing and publishing	37.5	37.6	37.4	37.6	37.6	37.4	37.9	37.7	37.7	37.7
Chemicals and allied products	41.6	41.7	41.8	41.5	41.6	41.6	41.7	41.8	41.8	41.5
Petroleum and coal products	42.2	42.6	42.7	42.1	42.2	42.3	42.5	43.0	42.7	42.1
Rubber and plastics products, nec	40.5	41.2	41.0	41.2	40.7	40.9	41.4	41.2	41.2	41.4
Leather and leather products	38.4	36.3	36.4	36.8	38.2	35.3	36.7	36.4	37.1	36.6
TRANSPORTATION AND PUBLIC UTILITIES	39.5	39.9	40.0	40.2	39.7	39.8	40.5	40.3	40.2	40.4
WHOLESALE AND RETAIL TRADE	33.5	33.1	33.1	33.2	33.7	33.2	33.4	33.5	33.5	33.5
WHOLESALE TRADE	38.8	38.7	38.6	38.7	38.8	38.7	39.1	38.9	38.9	38.7
RETAIL TRADE	31.9	31.4	31.5	31.7	32.2	31.6	31.8	31.9	31.9	32.0
FINANCE, INSURANCE, AND REAL ESTATE	36.7	36.6	36.7	36.7	36.8	36.8	36.6	36.7	36.7	36.8
SERVICES	33.4	33.3	33.3	33.3	33.6	33.5	33.6	33.5	33.5	33.5

¹ Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls. Preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	May 1976	Mar. 1977	Apr. 1977 ^p	May 1977 ^p	May 1976	Mar. 1977	Apr. 1977 ^p	May 1977 ^p
TOTAL PRIVATE	\$4.83	\$5.11	\$5.15	\$5.19	\$174.36	\$183.96	\$184.89	\$187.36
Seasonally adjusted	4.84	5.12	5.17	5.20	175.69	185.86	187.15	188.76
MINING	6.35	6.78	6.82	6.80	269.88	296.29	299.40	296.48
CONTRACT CONSTRUCTION	7.61	7.87	7.87	7.88	283.09	289.62	290.40	293.92
MANUFACTURING	5.12	5.48	5.52	5.57	205.82	220.30	220.80	224.47
DURABLE GOODS	5.49	5.84	5.88	5.96	224.54	238.27	239.32	244.96
Ordnance and accessories	5.64	6.12	6.14	6.15	229.55	249.70	251.13	248.46
Lumber and wood products	4.61	4.89	4.92	4.97	186.24	194.62	196.80	199.30
Furniture and fixtures	3.93	4.19	4.21	4.25	151.70	159.64	159.14	162.35
Stone, clay, and glass products	5.26	5.57	5.66	5.72	218.29	229.48	234.32	240.24
Primary metal industries	6.73	7.13	7.22	7.42	275.26	292.33	298.19	308.67
Fabricated metal products	5.40	5.65	5.67	5.73	221.40	230.52	229.64	234.93
Machinery, except electrical	5.69	6.04	6.06	6.10	233.29	250.66	249.67	253.15
Electrical equipment	4.82	5.18	5.21	5.24	193.76	208.24	207.88	210.65
Transportation equipment	6.48	6.99	6.99	7.12	275.40	296.36	293.58	305.45
Instruments and related products	4.81	5.10	5.10	5.14	195.77	205.53	203.49	206.63
Miscellaneous manufacturing	3.99	4.27	4.27	4.30	154.41	167.81	165.68	167.70
NONDURABLE GOODS	4.59	4.95	4.99	5.00	180.85	194.54	195.11	196.00
Food and kindred products	4.90	5.22	5.27	5.30	196.00	206.71	207.64	210.41
Tobacco manufactures	5.13	5.36	5.56	5.53	195.45	202.07	210.17	207.93
Textile mill products	3.57	3.85	3.87	3.87	144.59	155.93	155.19	155.57
Apparel and other textile products	3.38	3.57	3.57	3.57	121.00	126.74	124.95	126.38
Paper and allied products	5.31	5.72	5.79	5.81	225.68	242.53	247.81	248.09
Printing and publishing	5.66	5.97	5.99	6.03	212.25	224.47	224.03	226.73
Chemicals and allied products	5.79	6.21	6.26	6.29	240.86	258.96	261.67	261.04
Petroleum and coal products	7.11	7.68	7.74	7.71	300.04	327.17	330.50	324.59
Rubber and plastics products, nec	4.36	5.03	5.06	5.04	176.58	207.24	207.46	207.65
Leather and leather products	3.42	3.61	3.61	3.62	131.33	131.04	131.40	133.22
TRANSPORTATION AND PUBLIC UTILITIES	6.39	6.71	6.78	6.80	252.41	267.73	271.20	273.36
WHOLESALE AND RETAIL TRADE	3.95	4.20	4.23	4.24	132.33	139.02	140.01	140.77
WHOLESALE TRADE	5.15	5.41	5.48	5.51	199.82	209.37	211.53	213.24
RETAIL TRADE	3.52	3.76	3.78	3.79	112.29	118.06	119.07	120.14
FINANCE, INSURANCE, AND REAL ESTATE	4.36	4.51	4.54	4.58	160.01	165.07	166.62	168.09
SERVICES	4.34	4.62	4.64	4.67	144.96	153.85	154.51	155.51

¹ See footnote 1, table B-2.
^p preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-4. Hourly earnings index for production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, seasonally adjusted

(1967=100)

Industry	May 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr.-p 1977	May p 1977	Percent change from	
								May 1976-1977	Apr. 1977-1977
TOTAL PRIVATE NONFARM:									
Current dollars	183.6	190.6	192.7	193.2	194.1	195.3	196.3	6.9	0.5
Constant (1967) dollars	108.3	109.4	108.7	109.0	108.8	108.7	M.A.	(2)	(3)
MINING	197.0	206.8	207.8	210.1	210.4	212.0	212.1	7.7	(4)
CONTRACT CONSTRUCTION	185.2	189.5	192.4	190.8	191.6	192.6	192.3	3.8	-2
MANUFACTURING	182.5	191.0	192.3	193.3	194.3	195.4	196.9	7.9	.7
TRANSPORTATION AND PUBLIC UTILITIES	198.1	203.1	205.1	206.2	206.7	208.6	209.1	5.5	.2
WHOLESALE AND RETAIL TRADE	177.2	184.6	185.4	187.6	188.5	189.8	190.4	7.4	.3
FINANCE, INSURANCE, AND REAL ESTATE	170.5	172.9	176.5	175.7	175.9	177.4	179.3	5.2	1.1
SERVICES	187.4	194.6	197.7	197.7	198.7	199.8	200.8	7.2	.5

¹ See footnote 1, table B-2.² Percent change was 0.3 from April 1976 to April 1977, the latest month available.³ Percent change was -0.1 from March 1977 to April 1977, the latest month available.⁴ Less than 0.05 percent.

M.A. = not available. preliminary.

NOTE: All series are in current dollars except where indicated. The index excludes effects of two types of changes that are unrelated to underlying wage-rate developments: Fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes in the proportion of workers in high-wage and low-wage industries.

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry, seasonally adjusted

(1967=100)

Industry division and group	1976								1977				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^P
TOTAL	112.0	111.6	111.8	111.8	112.2	112.2	112.8	113.3	112.3	114.2	115.2	115.4	116.0
GOODS-PRODUCING	97.2	96.8	96.5	95.7	95.9	96.0	97.2	96.9	95.2	98.3	100.0	100.5	101.4
MINING	124.7	125.0	127.7	115.6	131.7	131.1	132.6	134.0	130.7	134.6	141.5	141.7	138.6
CONTRACT CONSTRUCTION	104.0	104.0	103.7	102.5	99.4	104.2	105.7	104.3	96.4	105.9	108.1	111.4	111.9
MANUFACTURING	95.1	94.6	94.2	93.9	94.0	93.2	94.5	94.4	93.8	95.7	97.1	97.2	98.2
DURABLE GOODS	94.0	93.8	93.5	93.6	93.2	92.0	93.8	93.6	93.2	94.8	96.8	96.5	98.1
Ordinance and accessories	41.0	40.7	40.0	39.8	38.6	38.5	38.5	39.5	39.0	39.1	38.5	40.7	41.8
Lumber and wood products	96.6	96.1	98.6	97.6	98.2	99.4	100.8	101.9	101.1	103.0	103.4	103.9	104.3
Furniture and fixtures	105.1	103.3	102.3	101.2	102.4	102.2	102.8	103.5	98.5	102.7	105.3	105.5	106.1
Stone, clay, and glass products	99.5	99.7	99.2	98.6	98.9	99.7	100.2	99.1	96.1	97.1	101.5	103.9	104.2
Primary metal industries	88.3	89.2	90.1	89.8	88.8	86.2	85.7	85.0	84.8	85.5	88.5	89.7	91.5
Fabricated metal products	98.7	98.4	98.0	98.6	98.6	96.5	98.1	98.1	97.6	100.0	101.6	101.0	102.7
Machinery, except electrical	94.9	94.5	95.9	95.9	95.9	94.0	96.7	96.0	95.7	97.7	98.6	98.1	100.8
Electrical equipment and supplies	92.2	91.9	90.5	92.2	91.5	92.1	93.4	93.1	91.7	95.5	95.9	95.9	97.3
Transportation equipment	92.8	92.6	90.3	90.7	89.1	86.1	91.5	90.6	93.3	91.3	96.7	94.2	96.2
Instruments and related products	109.6	109.1	110.3	108.1	107.2	107.9	108.5	110.4	108.9	112.4	111.6	110.5	111.3
Miscellaneous manufacturing, Ind.	95.4	94.7	93.1	91.8	92.2	92.0	92.1	91.6	93.1	96.8	96.0	94.5	94.7
NONDURABLE GOODS	96.6	95.8	95.2	94.2	95.2	95.0	95.4	95.5	94.7	97.1	97.6	98.2	98.4
Food and kindred products	96.6	96.8	97.0	96.5	96.4	96.2	96.6	95.5	95.1	97.5	97.9	98.1	96.6
Tobacco manufactures	85.4	83.4	82.3	84.0	82.1	83.0	81.6	81.6	76.1	83.0	75.5	80.7	78.9
Textile mill products	99.9	98.6	98.0	95.5	95.2	95.0	95.6	96.1	95.4	97.9	99.5	99.7	100.0
Apparel and other textile products	92.0	91.4	88.9	87.6	86.2	85.7	86.1	86.3	84.1	88.0	87.9	87.1	88.9
Paper and allied products	98.1	97.3	96.9	96.1	96.5	95.7	97.0	97.2	96.2	98.0	98.3	100.8	101.2
Printing and publishing	93.6	93.1	93.6	92.9	93.1	93.4	93.6	93.7	93.0	94.8	94.3	94.6	95.5
Chemicals and allied products	100.0	99.0	99.4	99.8	100.3	99.4	100.0	100.0	100.4	101.8	102.2	103.2	103.4
Petroleum and coal products	113.9	111.6	112.2	112.4	112.2	112.5	113.1	114.7	115.0	114.7	118.7	120.4	116.2
Rubber and plastics products, nec	108.8	107.0	106.2	105.2	124.3	125.6	125.7	127.6	127.7	129.6	131.7	134.2	135.9
Leather and leather products	79.8	76.0	74.7	72.5	72.1	71.0	70.4	70.5	69.1	71.9	71.9	73.3	72.3
SERVICE-PRODUCING	122.3	121.8	122.5	123.0	123.6	123.5	123.5	124.6	124.1	125.3	125.8	125.8	126.1
TRANSPORTATION AND PUBLIC UTILITIES	101.9	101.6	102.1	102.5	102.9	102.0	103.2	105.0	102.7	104.4	104.2	104.0	104.8
WHOLESALE AND RETAIL TRADE	118.9	118.1	118.9	119.0	119.7	119.3	118.9	120.0	119.1	120.7	121.5	121.5	121.8
WHOLESALE TRADE	114.3	114.1	115.3	114.7	114.9	114.8	114.8	114.8	115.4	117.0	116.9	117.2	116.7
RETAIL TRADE	120.6	119.6	120.3	120.6	121.6	121.0	120.4	122.0	120.4	122.1	123.2	123.1	123.7
FINANCE, INSURANCE, AND REAL ESTATE	126.3	126.3	126.6	127.3	127.7	128.2	129.1	129.8	130.6	130.2	131.1	131.2	132.0
SERVICES	135.3	135.0	135.4	136.6	137.2	137.6	137.7	138.4	138.8	139.7	140.0	140.0	140.1

¹ See footnote 1, table B-2.

preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-6. Indexes of diffusion: Percent of industries in which employment¹ increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1974				
January	58.7	61.6	64.8	63.1
February	55.8	55.2	56.4	59.6
March	48.0	54.7	54.7	54.9
April	54.7	52.3	51.5	50.0
May	54.7	57.0	50.3	40.1
June	54.4	50.9	44.5	28.2
July	49.1	44.2	35.8	26.7
August	42.2	36.0	32.0	22.1
September	32.6	35.5	21.8	20.6
October	35.5	26.2	15.7	18.6
November	19.8	21.8	16.0	16.6
December	19.8	12.8	13.7	14.0
1975				
January	16.9	12.5	13.7	16.3
February	16.9	14.0	12.8	17.4
March	27.3	22.7	18.9	17.2
April	44.2	34.6	29.1	20.3
May	51.2	43.6	40.7	25.6
June	39.8	47.7	59.0	40.1
July	57.3	55.5	63.4	50.3
August	72.4	75.0	66.6	61.9
September	81.4	78.8	72.4	71.5
October	64.0	70.6	78.8	75.9
November	59.6	69.2	79.4	79.1
December	69.2	75.0	77.6	81.4
1976				
January	76.7	82.0	82.8	84.6
February	74.4	84.3	83.1	82.8
March	77.9	84.9	77.0	79.4
April	77.9	81.1	77.0	73.5
May	63.4	70.6	71.5	79.7
June	47.1	57.0	70.9	79.4
July	52.9	47.4	55.2	75.3
August	49.1	65.1	55.2	74.1
September	68.9	54.9	61.9	78.2
October	39.0	59.9	70.1	75.0p
November	64.2	53.8	69.8	75.9p
December	68.3	75.9	76.7	
1977				
January	71.5	76.7	89.2p	
February	61.6	84.6	86.6p	
March	79.7	83.1p		
April	70.9p	80.2p		
May	64.2p			
June				
July				
August				
September				
October				
November				
December				

¹ Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

Representative REUSS. Whatever the truth of the matter is, whether it is shocking, outrageous—

Mr. SCHULTZE. No; it is not.

Representative REUSS. Is it not a fact that the public jobs this summer, that the Federal Government is underwriting, are about the same in number as last summer?

Mr. SCHULTZE. Slightly higher. About 1 million. My recollection of the goal is 1 million.

Representative REUSS. It is in the 900,000 to 1 million range, and that's about what it was last summer; isn't it?

Mr. SCHULTZE. Again, I will have to check for the record.

My recollection is that it is up slightly over 900,000 to 1 million. Maybe less than a 10-percent increase. That's my recollection.

Representative REUSS. I will just record my belief once again, which I record here once a month, that we aren't doing enough about structural unemployment; we aren't doing enough for the unemployed of our central city ghettos. It isn't impossible. Franklin Roosevelt was inaugurated on March 4, 1933. He introduced the Civilian Conservation Corps bill on March 21, 1933. Congress passed it and it was signed into law on March 31, 1933; and by mid-April, there were half a million young people out in the countryside and in the cities doing useful work.

This remains one of our great mysteries. Somewhere in the Government there must be people who are saying it can't be done; now is not the time.

We could do better.

Mr. SCHULTZE. Without ever wanting to say we couldn't do better, I also would ask to add that the increase in summer jobs, the increase in public service employment from 300,000 to 725—

Representative REUSS. That's for next fall?

Mr. SCHULTZE. It is starting now. It can't start before the law is passed. It is starting now to move as fast as—at least, I don't think we dare do it before the law is passed.

In addition to having a substantial increase—again, although I don't remember the numbers—of youth employment apart from summer employment in that same package.

I apologize that I can't remember the numbers. I don't want to ever sit here and say that maybe we couldn't do better, but it is a very substantial increase in the program.

Representative REUSS. Compared to 1933, I think both the administration and the Congress have been quite lazy.

Let me turn now to our foreign trade account.

The Treasury's estimate for calendar 1977 included a trade deficit as large as \$25 billion and a current account deficit of around \$12 billion.

These are up very substantially from calendar 1976 when we were about in balance and our trade deficit was around \$9 billion.

What do you expect the situation to be like in 1978 and what do you have to say about the problems of running deficits of these magnitudes in our trade and our current accounts?

I think we can stipulate we should run deficits.

Mr. SCHULTZE. Pardon.

Representative REUSS. I think we can stipulate between us that we should be running deficits. I have no fault to find with that whatever. It is the numbers that I am concerned with.

Mr. SCHULTZE. I think the central point is, using round numbers, that we are dealing with a trade deficit of somewhere between \$20 and \$25 billion of which oil is \$40 to \$45 billion, leaving you excluding oil.

These are arithmetic exercises that have to be done with care; but, leaving you excluding oil with a trade surplus something in the neighborhood of \$20 billion.

My own judgment is that the essential problem with that kind of deficit number is not so much the deficit per se, but the implications of those very large oil imports for all other elements of our society; that is, in terms of what it is doing to strengthen the world market for oil and the political problems raised by that kind of dependence on imported oil.

Let me also note that in terms of the impact of this on the U.S. dollar, of course, you have to obviously take into account the very large financial investments back into the United States.

There is no indication that this is weakening the dollar.

So, I think what is really important about this is not the size of the aggregate deficit, but the fact that there is a \$40 to \$45 billion oil bill.

Representative REUSS. Do you foresee any danger if the numbers of our trade and our current account deficits continue to escalate?

I will name several. Foreign countries putting pressure on the dollar?

Dumping dollars? Saying this country is in dire international monetary straits?

Of the OPEC countries saying that a country with deficits of that magnitude isn't the best place for their investments, so they keep their oil in the ground?

There may be other horribles, too.

Mr. SCHULTZE. I understand that. Again, in my judgment, if that deficit rises further, that very likely won't be the problem.

Where else do they go in terms of looking for stability of an economy?

I think what would be difficult, however, is if you got a further widening of that deficit because U.S. exports were falling off in terms of the domestic economic implications; and the impact on domestic employment, output and income.

I think that that would be a real problem.

I would think if that should happen—I don't expect it to happen—but, if that happens, it would be worse, rather than so much all of a sudden financial investments are going to move substantially, and you are going to get real pressure on the dollar, I don't think that would be the point.

I would worry about the domestic economic implications.

Representative REUSS. Finally, a word on inflation.

Since by reason of its firmly casting aside wage-price controls, a decision supported in the Congress, the administration doesn't have that weapon in its arsenal, I have understood that the administration was contemplating something that I would find very useful: Setting up task forces in specific sensitive commodities to see what can be done by

increasing competition, by exports, by imports, by capital stimulus in that particular area, et cetera.

I think that is a good approach considering the other approaches that are, for the time being at least, closed to us.

What has been done about that?

Mr. SCHULTZE. Our first priority is to get an extension and beefing up of the Council on Wage-Price Stability where this would be done.

This is now before the Congress.

Given that, we have already moved internally with what we can. We would want the Council on Wage-Price Stability to take the lead in doing what you have suggested under the larger rubric of kind of an inflationary warning system where one would begin looking at where the potential areas of problems might come by specific industry in detail.

They are indeed within the limits they can do before they get their authorization extended trying to beef up to do this. I think the key thing is to get that authorization extended and some increase in their ceiling.

We certainly hope the Congress will move expeditiously to do this.

Representative REUSS. Thank you, Mr. Chairman.

Representative BOLLING. Mr. Schultze, if I read signs correctly, the administration's major priorities for this year in the Congress—we have passed a number of things that the President had at the top of his list more or less in the way that he wanted them passed.

If I read signs correctly, his major priorities for the rest of this year are very major programs.

There is an energy package and the reform of the social security situation.

Those are the top priorities. There are many other things that will come to Congress; but one of them that I don't think is on the list of expected action this year—for a variety of reasons, some of which are pretty obvious and are on the Hill—is the whole question of tax reform.

I think we are going to get a tax reform message but I don't think anybody expects us to do anything about it in terms of finishing it this year.

I am not saying we are not going to do anything about it. We are not going to get it done this year.

Now, the thing that I am concerned about was very well depicted by one of our witnesses yesterday, Mr. Karchere.

He noted quite accurately that real disposable income per person employed has not yet recovered to its prerecession peak.

In fact, he projects it will be less than 1 percent above that peak by the end of 1978. One reason for this is that despite the tax cuts of 1975 and 1977, the inflation-generated tax increases have reduced disposable personal income.

In our March report, the Joint Economic Committee noted that under the administration's tax proposals, the share of personal income taxes in the GNP would rise significantly in the year 1978.

We therefore recommended that taxes be reduced further.

That proposal, that recommendation is either going to be renewed or withdrawn when we comment to the Budget Committee some time between now and the second budget resolution.

It seems to me that this element—this element of a tax take, is a fairly important part of a long-range strategy.

Obviously, our judgment—at least on the Democratic side—was that we needed to do something with tax reform that would include some tax reduction.

Now, the problem then is: Is it timely? Is it going to turn out to be timely?

If we are putting in place something some time next year—really, I am asking your opinion as to what kind of things we ought to be telling our friends on the Budget Committee?

Mr. SCHULTZE. As I indicated in my testimony, our current—although yet incomplete in the sense we haven't finished the really detailed update of forecasting for 1978—our current view is that taking everything into account, including the impact of current tax rates on personal income and everything else, you would in 1978 and certainly in the first half of 1978 see a continuing good rate of economic growth, not up to what we have had in the first half of this year where it has been 6½ percent or better, but a good rate of economic growth.

Under those circumstances, immediacy in moving may not be so important. Over the longer run, without wanting to pin down the timing—and I kind of agree with the thrust of your remarks, that as part of the tax reform, I think for both economic and political reasons, some tax reduction will almost assuredly be there. I think timing is a difficult question. At this state I don't see any—I have no sense of alarm about the fact timing is going to be impossible.

Obviously it is something we have to monitor very closely.

Representative BOLLING. I have spent a long time insisting to my brothers on the Hill that sometimes we are going to have to—if we want real reasonable flexibility in the management of the Federal Government's role in the economy, at some point we are going to have to give the President some discretionary power in a neutral fashion to raise and lower taxes by a specified limited amount, and I, having watched a great many tax bills, have only once seen the Congress function in time to have a useful targeted macroeconomic effect except by accident.

What I am saying is that I am very concerned about our ability to come in in a timely fashion unless we look very hard at the problem now. I don't know that this administration is going to ever decide to propose something that it may feel will never happen, but I don't see any solution to the kinds of lag that is built into the tax system, except if we give the President the right to, in a neutral fashion—perhaps even subject to a veto—raise or lower taxes by certain percentages.

Do you feel that that approach as an individual still makes sense? Do you feel it makes no sense because it is so politically impractical?

Mr. SCHULTZE. I was about to make one answer but now I am not sure with that last amendment how I should answer it. Without wanting it to be interpreted as the administration now requesting, which I am not. I always thought more flexibility would be very useful. On the other hand, as you know there is a long history of discussion on this. It does not seem to be something which most observers have thought was very likely. I am not in the position of saying yes.

Representative BOLLING. I would say nobody expected the Congress to ever adopt the Budget Act. We did.

Mr. SCHULTZE. Touché.

Representative BOLLING. There are things we sometimes come to do because we have to. The thing that I am concerned about is that the combination of the game plan, the Congress inability to react quickly, may lead us into considerable difficulty. That is why I raise this perhaps abstract point.

My friend, Senator Humphrey, just got here. Do you want to be recognized?

Senator HUMPHREY. Go right ahead.

Representative BOLLING. Congressman Hamilton.

Representative HAMILTON. Mr. Schultze, I am sorry I wasn't here for your testimony. I had a chance to look it over quickly. I wanted to raise a question or two with you with regard to the administration's policy on inflation.

Your testimony with regard to the price outlook says that the performance so far has been disappointing. The inflation rate hovers around 6 percent. Then when you discuss the longer term issues, you really don't say an awful lot about what the administration is going to do with regard to inflation except that you made a firm commitment for a balanced budget by 1981 and you want to assure that the growth of industrial capacity will be ample to meet our needs.

I must say I have the impression that most people think the administration's anti-inflation program is kind of sputtering and that there isn't any really strong anti-inflation program now. Your statement suggests that 6 percent is kind of built in because of the wage increases and the 2 percent increase in unit labor costs. I would like you to respond to that, if you would, please. What really is your focus in this anti-inflation program?

Mr. SCHULTZE. There are a number of focuses, Mr. Hamilton. One is providing an economic climate which prevents an acceleration of inflation, an economic climate in which we can get the kind of increases in investment, capacity increases which can reduce price pressure. That is very important. Which can increase productivity again, which are very important.

As you know, that is an important way to do it. I don't know whether you heard earlier the colloquy I had with Mr. Reuss. We are trying to provide a mechanism whereby we can spot in advance particular inflationary problems and move to meet them.

Finally, we are conducting a series of discussions with a labor-management group aimed, among other things, at trying to devise procedures whereby we can get, on a voluntary basis, cooperation from labor and management in trying to moderate wage and price increases. We don't feel we can unilaterally impose them.

Representative HAMILTON. It has been reported in the press that that particular group is extremely pessimistic about the administration's hopes of bringing down the inflation rate lower than 6 percent. Is that an accurate impression?

Mr. SCHULTZE. Not to the best of my knowledge. My people are currently engaged explicitly in working with them. That has certainly not been my impression.

Representative HAMILTON. You don't think they are pessimistic about that underlying rate of inflation?

Mr. SCHULTZE. If you mean by pessimistic that everybody realizes it is going to be a difficult job to do, in that sense you are right. It is.

Representative HAMILTON. You said you could bring the inflation rate down to 4 percent by 1981? Isn't that your target?

Mr. SCHULTZE. That is our aim. It is our aim to do that. We realize in order to do it we will have to get cooperation to do it.

Representative HAMILTON. Do you think policies now in place are sufficient to bring that about?

Mr. SCHULTZE. If we can work out that kind of cooperation. I think it is an achievable target. If we can work out that kind of cooperation.

I have to state that what we can't do is kind of predicting the vague areas of the weather. There are all sorts of things that can upset you. I also realize—

Representative HAMILTON. You don't see the necessity for any major initiatives other than what you are now doing in order to get the inflation rate down to 4 percent?

Mr. SCHULTZE. At this stage—I do not. I do not.

I would be—no, I think that is the best answer.

Representative HAMILTON. I was interested in the President's remarks at a press conference not long ago when he said, and I am quoting from a news source here that—

The main concern on the economic front is the rate of inflation which is tied directly to the degree of responsibility of the Federal Government in handling excessive spending.

Those words are directly quoted from the President. Does that mean in the President's view that the present rate of inflation is linked directly to the budget deficits?

Mr. SCHULTZE. No, sir. If you read the next sentence—I don't know whether you have the statement. If you read the next sentence, that becomes clear.

Representative HAMILTON. I don't have the next sentence.

Mr. SCHULTZE. What he was saying is—he explicitly said it in the next sentence what I said to Mr. Reuss earlier. We have to plan now such that when the economy returns to high employment, as it returns to high employment, we are not in the position of having locked ourselves into a budget deficit. That is the essence of the succeeding sentences.

Representative HAMILTON. Let me raise one other question, if I may, that relates to trade deficits. I want to get your reaction to our trade deficits. I understand that our trade deficit may be as large as \$20 billion, that is the excess of imports over exports for this year, and that the so-called current account will show a deficit of some \$10 to \$12 billion.

How serious a matter is that for the United States? How long can we continue to sustain such a deficit? What is your feeling of that problem?

Mr. SCHULTZE. Well, sir, in the first place the world outside of the OPEC countries has to, in the aggregate, run a deficit of some \$40 to \$45 billion this year because OPEC is running a surplus of \$40 to \$45 billion. It is important that the stronger countries of the world bear their proper share of that deficit. So some deficit clearly is proper, appropriate, and as a matter of fact in the interest of the world stability.

Representative HAMILTON. You have Japan running a \$10 billion surplus. You have Germany running a \$13 or \$14 billion surplus.

Mr. SCHULTZE. That's right. At the economic summit it was agreed upon that both of those countries would take steps to reduce those current account surpluses. I think—I may have to correct this for the record. My recollection is, for example, the Japanese have a target of getting it to zero. I don't remember the German target.

I think what is important, as I indicated earlier about the deficit, is the fact that there's a \$40 to \$45 billion oil bill in that, that is in round numbers. We have a \$20 billion—\$20-odd billion deficit this year, something above \$20 billion, probably, which is roughly speaking a \$40-odd billion oil deficit and a \$20 billion surplus everywhere else. What is so very—I think in the long run—dangerous is that level of oil import in terms of what it does both to strengthening the world market for oil and, therefore, making it easier to raise prices and what it does to the United States in terms of its oil dependence. That is the thing to worry about within some reason not the aggregate size of it so much as the fact of the oil problem.

Representative HAMILTON. Thank you.

Senator JAVITS. I didn't quite hear those words, Mr. Schultze. What were the last words?

Mr. SCHULTZE. Senator, I said that in my mind what is worrisome about that deficit is not principally the size of the deficit per se but that it has within it, and the reason for its existence, is the \$40 to \$45 billion oil bill that we are paying. That is what is worrisome. I don't want to suggest that any old deficit would not worry me. I don't mean that. It is the oil component that is really the worrisome part of that.

Senator HUMPHREY. I want to pick up there, Mr. Schultze. Whenever we discuss our problems, just as you mentioned a moment ago, one of the reasons for our trade deficit obviously, as you put it, is the large price of imported oil.

The truth is Japan has to import all of its oil.

Mr. SCHULTZE. That's right.

Senator HUMPHREY. It has to import its coal; it has to import all of its basic commodities.

When we get to the rationale for our inflation, we say, well, look what is happening in commodity prices, raw materials, look what has happened to us in terms of oil, fuel.

We have certain beliefs that we cling to. The point is that here are the Japanese with a \$10 billion trade surplus, importing all of their oil. They don't have any domestic production; importing 90 or 80 percent of their food. They are able to have a trade surplus.

Mr. SCHULTZE. That is not good.

Senator HUMPHREY. I think someone ought to speak up and say we are not very competitive. That's what it boils down to. We have a lower fuel price than any other major producer in the world. The Germans do not produce the amount of fuel we do. They don't have the fossil oil, fossil fuels, the oil that we do.

I just think that we are kidding ourselves. We tell the Japanese, you reduce trade surplus. We ought to be telling our industrialists in this country and our labor force in this country and our Government in this country, get on the stick.

They have wage rates in Germany that are comparable to ours. When you get all their benefits put into their wage rates, they are just as high priced as what we have.

The Japanese have gone up with tremendous quantum jumps in the last few years. I think we are sort of rationalizing our position rather than getting at it. That's my view.

I want to get down to this business of our inflation rate. I notice in your statement, according to the markup that I have here—wage rates have been holding at about what they were the year before; and you point out, looking at it from these perspectives, it is apparent that the underlying rate of inflation has not changed materially in 1977.

It still hovers around 6 percent. Of course, you exclude from that food and fuel. Well, the trouble is, the worker has to buy food and fuel. For purposes of statistical analysis and convenience to an economist, you can exclude certain items.

The fact includes two things:

No. 1, the fuel costs are there. One of the things that has been holding down the rate of inflation is the fact that there's going to be mass liquidation and bankruptcy in rural America.

When you have wheat selling for \$1.95 a bushel, and corn dropping 30 cents in the last 2 to 3 weeks, and every time you pick up the reports, it says that is the one thing that is helpful—and I notice you have in here something about improved outlook for food prices. That appears to be reflected in the May wholesale price index.

If you were in my part of the country, an improved outlook for lower hog prices, lower beef prices, lower egg prices, lower corn prices, lower wheat prices, would not be good news. That's not good news. That's arsenic, economic arsenic, slow death.

Now I think somewhere we have to come to grips with this. We can't go around saying, "Isn't it just wonderful that farmers are going to go broke so we can have a nice little figure on the inflation rate?"

Frankly, wheat ought to sell for a minimum of \$3 a bushel. Corn ought to sell for a minimum of \$2.50 a bushel. You can't produce it for less.

Around here we worry about everything including people not having enough money to pay their bills. So I just have to say in all candor, as a Senator from my home State of Minnesota, and as a U.S. Senator, that I do not like economic figures that somehow or other seem to take a little joy out of the fact that food prices are going down.

First of all, food prices are not going down as fast as commodity prices are.

Mr. SCHULTZE. I am not suggesting food prices are going down.

Senator HUMPHREY. You did say that, though.

Mr. SCHULTZE. No, sir. I said the increases in food prices are going to go down.

Senator HUMPHREY. That means food prices are going to come down.

Mr. SCHULTZE. I hadn't thought that. [Laughter.]

Senator HUMPHREY. If you don't believe food prices are coming down, I don't know what you call food. Out my way, we call a bushel of wheat food. A bushel of corn is food. A steer is food. Turkeys are food. If you don't think those prices are down, then you are reading the wrong papers.

Mr. SCHULTZE. I am saying prices that consumers are paying for food have gone up at about a—

Senator HUMPHREY. Not as fast as they used to?

Mr. SCHULTZE. About 16 percent in the first 4 months. The rate of growth is going to be substantially less.

Senator HUMPHREY. I thought I ought to state what I believe is the central problem in the economy today. You are going to have a very substantial drop in farm prices. You are going to have a trend—as I told the President this morning—a big crisis. Banks are loaned up to their eyeballs, 80 percent of their lending capacity, some of them higher.

Meantime, these big central banks are awash with money, they are loaded with it. They have the unmitigated gall and arrogance to raise their interest rates. Thank God, Mr. Lance spoke out on that as a banker.

I finally got a chance to say something nice about the OMB. [Laughter.]

Let's lay it on the line. You are Chairman of the Council of Economic Advisers. You ought to get those fellows in and say, "What the hell is going on?"

You take a look at these big banks. Listen, I can tell you that they are out shopping, they are going to the country banks saying, "Don't you want to borrow some money from us, please? Take some of the money."

They have money they don't know what to do with. Here they are with a surplus of money, raising the interest rates.

You talk about the housing business being better. Interest rates are going up on housing. I think if you want to talk inflation, Mr. Schultze, you better start talking about what the money charges are on inflation. That's one of the biggest items of inflation.

People have to pay those interest rates; and they just seem to keep going up and up.

Of course, they paid out through those high peaks. They are still going up. I want to hear this administration not only just occasionally tinkle, tinkle, tinkle about interest rates, but let them have it. Let them have it.

The Federal Reserve Board is a Federal institution. They think they are a private bank, but they are not. The Secretary of the Treasury is supposed to represent the fiscal interests of this country. I want him to find out why these bankers are raising these interest rates.

I think you, Mr. Schultze, as Chairman of the Council of Economic Advisers, ought to find out why they are raising these interest rates, and at the same time going around telling us we are going to hold down the rate of inflation at the cost of farm people and rural producers.

I know you don't want that. Don't misunderstand me. I know what the facts are. I live with them. I go home every weekend. They are down here seeing me during the week as the President threatens to veto the farm bill.

I just think it is high time that we come to grips with what I think are the real facts. The real facts are that the Japanese and the Germans

that import all their fuel pay more for it than we do; they are out-competing us, they are outselling us. That's why they are out there with a trade surplus. They have to import food. They have to import commodities. They don't have anywhere near the range of raw materials that we do.

They have to face every conglomerate, every merger, every cartel that we do. They pay their workers as much or more than we do; and they outsell us. We need to get the people to understand this. That's number one. That's the way you combat inflation.

I see this huge trade deficit we have, it is due to oil. I tell you what, it is due to oil and shortage of agricultural exports. It is going to get worse, not better.

The Russians today are reporting a crop year of over 225 million tons of feed grains. Can you imagine what it would have been like if they hadn't bought that 6 million tons in our country? Wheat would be \$1.50 a bushel. That's bankruptcy, catastrophe. That's like asking General Motors to cut the price of their cars by 50 or 60 percent.

If anyone did that to General Motors, there would be half a revolution started in this country. The same would happen if we asked workers to take \$1.50 an hour minimum wage.

I guess I didn't ask any questions, but I did tell you what I thought.

Mr. SCHULTZE. Yes, sir.

Senator HUMPHREY. I believe it is imperative we come to grips with these salient facts. I want to know what the administration is going to do about it.

I think that your estimates, for example, on capital spending were a little bit optimistic. Is that correct?

Mr. SCHULTZE. For this year?

Senator HUMPHREY. Yes.

Mr. SCHULTZE. Well, the last survey was slightly up from the earlier one, not down, and slightly less than we had counted on.

Senator HUMPHREY. If that's the case, which is very important to employment, then what do you have in mind to kind of "fill in" the gap?

Mr. SCHULTZE. We don't think it will end up with there being a gap. We think the rate of growth in GNP from year-end to year-end will be what we said it would be, about $5\frac{3}{4}$ to 6 percent in real terms.

Senator HUMPHREY. I hope you are right. I must say the improvement in unemployment is very encouraging. The improvement in GNP is encouraging.

I noticed per capita indebtedness is going up and up. Consumer indebtedness is also going up. Yet in my State, spending is down.

Mr. SCHULTZE. It is rising at a slower rate.

Senator HUMPHREY. Rising at a slower rate?

Mr. SCHULTZE. That is what is relevant, Senator.

Senator HUMPHREY. It is rising less than it did rise. That's what you are saying?

Mr. SCHULTZE. That's correct.

Senator HUMPHREY. When it raised in the past, it was with $7\frac{1}{2}$ percent unemployment.

Mr. SCHULTZE. You can disagree, of course, Senator. I am trying to give an honest estimate of where we think it is going. We are saying

we do not believe the consumer is going to continue spending at the rate he has been spending. We think that is going to slow down some. We think there are other elements which are going to come up some. There are pluses and minuses. We may be wrong. We have been in the past.

We think it is likely to come out at $5\frac{3}{4}$ to 6 percent including a slower rate of growth of consumer spending, an increase—although not steadily all through the year—increase in residential construction. We go through the individual elements. We are not talking about declines in consumer spending, but a slower rate of growth.

Senator HUMPHREY. Well, I am optimistic. I long felt there was great vitality in the American economy. I think the economy has demonstrated this. There are some areas that are in danger, and dangerously so.

One of them is the agricultural sector.

Another one that is dangerously hard is the interest rate sector. I am not going to sit here as a U.S. Senator and let these bankers raise their prices when they have surplus.

Take a look at the Washington Post this morning. There is sale after sale. Why? They have surplus goods. They are merchants, competitors, business people. I just looked at this, one page after the other.

The Thursday Post always has a lot and the Thursday Star. If they have more suits than they can sell at a haberdashery, they cut the price. If bankers have more money than they can use, they raise the price. We let them get by with it. We sit here and say mustn't touch the monetary system. They have a mystique there.

I have listened to that baloney long enough. This is supposed to be a progressive liberal administration. They should take up where Mr. Lance started. He's a banker. I think somebody else better speak up right from the top on down and say we have had enough of this; join the team; quit putting on the brakes; quit telling the American people they have to be paying more for rent on money.

We don't need a rise in rent on money. When you have a surplus of apartments, you generally cut the rent. That's the way it used to be. That's the way this economy wants it to be. If we have a surplus of money—and we have, haven't we? Is that a fact? Are the banks not awash, flush with money?

Mr. SCHULTZE. Some are, some aren't.

Senator HUMPHREY. I mean the big ones.

Mr. SCHULTZE. New York City banks apparently have money.

Senator HUMPHREY. Chicago, Los Angeles, San Francisco, and Houston.

Mr. SCHULTZE. I think the key thing, Senator, is not so much what has gone on in the last month. I think the key thing is the stability of the monetary system and interest rates so that we can have the kind of growth we are talking about, which is no reason, given the outlook we are talking about, for any share runup in interest rates.

I agree with that. I don't think the problem is so much the last month. I think it is when you look out the next year what kind of monetary interest rate pattern you are going to get.

If you look at the economic forecasts we have, with the rate of inflation moderating, the rate of growth what we think it will be, you get

some runup of interest rates. We see no reason for any sharp runup on interest rates which would choke the recovery.

Senator HUMPHREY. I don't agree with what you just said. I don't think a recovery necessitates an increase in interest rates.

Mr. SCHULTZE. I don't think it is a question of what is the market using. It is a question of what does it do to the overall economy. I am not quite sure I know.

The Federal Reserve—by pulling in and taking money back—can make surpluses or smaller surpluses of money available. I don't think you can quite put it in those terms. It is what is going on in terms of the rate of growth of the economy.

Senator HUMPHREY. I have used my time. Thank you.

Representative BOLLING. Senator McClure.

Senator McCLURE. Thank you, Mr. Chairman.

Let me underscore what the Senator from Minnesota said about farm prices and continue that for a moment.

In your statement, although you say you are looking for a smaller rate of increase in farm prices, you said farm prices of farm products declined.

Mr. SCHULTZE. In May.

Senator McCLURE. You thought that was a healthy sign?

Mr. SCHULTZE. For 1 month, I think it is without specifically talking to the particular price of any commodity.

I think that is right.

Senator McCLURE. Well, I tell you the producers of those commodities don't agree with you.

I remember when a Secretary of Agriculture a few years ago in a speech in New York City took great cheer in the fact that food prices had gone down, the farmers across this country reacted to that statement.

I suspect they will react to that one also.

Mr. SCHULTZE. Again, Senator, without passing judgment on any particular commodity, when the price of farm products taken all together has risen at a very substantial rate in the first 4 months of the year, if they went down in 1 month, it doesn't seem to me that is something that shouldn't be mentioned and shouldn't be noted that it is going to have an impact on prices.

Senator McCLURE. It may please some, but it certainly isn't going to please the producers of those commodities, particularly when they have had years and years of very slow, sluggish performance and a near disaster in the last year or two.

The beef industry has been down for 5 years. The wheat and feed grains industries have been down in the last 2 years.

The Senator from Minnesota does not overstate the case when he says there are going to be widespread bankruptcies among those who produce those commodities simply because they have to have further increases in price if they are going to stay in business.

Congress is trying to respond to that. I think farmers should get their price in the marketplace. They shouldn't be forced to come here to the Congress and ask for a massive subsidy.

If we succeed in getting farm prices down, the only result will be, whether it is good or not, the kind of legislation this Congress has passed with regard to farm support prices.

Mr. SCHULTZE. This is not a question of getting farm prices down, Senator.

I think what is at issue is the level of support prices. Nobody is talking about a world with no support prices. I think what the debate between the administration and Congress is the specific level of those prices.

Nobody is talking about yanking them. There is legitimate room for debate. We think we are right in terms of the specific level of support prices involved.

Senator McCLURE. I understand that. I am more concerned that the long-term consequences of that policy may be as important as the immediate returns to the farmer.

Mr. SCHULTZE. I agree with you.

Senator McCLURE. I am concerned about that. Again, it ought to be in the marketplace and not in Government programs. In your statement, you make a comment about the improved situation of State and local governments and that they are running surpluses.

You mention that they changed from a \$6 billion deficit to a \$2 billion—

Mr. SCHULTZE. No. It is the other way around.

Senator McCLURE. From a \$2 billion deficit to a \$6 billion surplus at an annual rate.

Does that indicate that the Congress ought to reverse its policy on countercyclical revenue sharing?

Mr. SCHULTZE. No, sir. I think this is a lag phenomenon. What we are seeing is, as a matter of fact, in the first quarter of this year State and local spending adjusted for inflation actually fell.

In terms of explaining why we think it will pick up, we noted that they shifted from a position which was putting substantially downward constraints on expenditures to one which was allowing expenditures to go ahead.

The way State and local governments normally work is with a lag on this. When there is a constraint on deficits, you try to push up revenues. When those pick up, you run surpluses.

It works its way, then, into spending.

Senator McCLURE. Are you saying that this is a usual phenomenon?

Mr. SCHULTZE. That is correct. If you look at what happens cyclically to State and local governments, as revenues come in, they go into a surplus, then they get spent.

Senator McCLURE. If that is the case, will they remain in surplus?

Mr. SCHULTZE. You know, you are dealing with 50 State governments and Lord knows how many individual localities.

We think when you take into account—there would probably remain some surplus.

Senator McCLURE. If they remain in surplus, what is the justification for countercyclical revenue sharing?

Mr. SCHULTZE. By their very nature, State, and local governments, given the restraints on the kind of deficits they can get in normal circumstances as expenditures phase in and out, you almost always, under good times, find some modest surpluses.

Senator McCLURE. Are you telling me that the countercyclical revenue sharing is going to be there regardless of the phase and the cycle?

Mr. SCHULTZE. No, sir, I am not saying that.

Senator McCLURE. You say they are now in the phase of the cycle in which they get a surplus?

Mr. SCHULTZE. I am saying they are in a phase of the cycle in which as economic recovery is beginning to proceed, after having a very severe impact on it, the normal lag structure is such that you build up a surplus and then start spending it out.

Given the lags, that surplus may remain for a while.

Senator McCLURE. As I understand what you said, given the performance of the economy that you anticipate, they will remain in surplus.

Mr. SCHULTZE. That is correct, sir.

Senator McCLURE. If they do, why do we need countercyclical revenue sharing?

Mr. SCHULTZE. Because it is not a static sort of thing.

In order for them to budget normally—

Senator McCLURE. Then you expect them to go into deficit?

Mr. SCHULTZE. No, sir.

I am saying in the normal course of events given the lag structure of the thing, in order to budget correctly, they will normally—on the average—given 50 States and 10,000 localities or whatever it is, you will find that statistical showing.

What they are doing is increasing their expenditures along with their revenues. There is a lag.

Senator McCLURE. If countercyclical revenue sharing is a justified program—

Mr. SCHULTZE. It doesn't say you never have it unless it is shown that State and local governments have a deficit.

Senator McCLURE. What is the purpose of countercyclical revenue sharing?

Mr. SCHULTZE. The purpose is during periods of high employment, not just when unemployment is increasing, but periods of unemployment when it is decreasing, you want to aid them to increase their outlays faster than they otherwise would have.

Senator McCLURE. As I understood you to say, they would be in surplus.

Mr. SCHULTZE. That is correct.

Senator McCLURE. In the future. In spite of that surplus in the future, you still say we ought to have countercyclical revenue sharing to aid them to spend more.

Mr. SCHULTZE. What I am saying, sir, is as revenues begin to come in as the economy recovers, there was a lag between them coming in and going out.

That gives you the surplus. It doesn't mean they don't need additional revenues there. It is a lag that you get when the revenues are coming in as to how fast they in turn can put them out.

We did not propose a countercyclical revenue sharing program that says you only had countercyclical revenue sharing when the economy was going down.

We said you had it when you were in the "V" of the recession, both the down side and part way through the up side. That is where we now are.

As additional public service employment money comes in, there is a lag between it coming in and actually getting spent out.

That does indeed give you a statistical surplus.

Senator McCLURE. While you say we are at the bottom of the trough, and we are on the up side, we will still be in the trough for some time. The countercyclical revenue sharing will be needed for some time while we are still in the bottom of that trough?

Mr. SCHULTZE. As we are coming up the up side, that is correct.

I believe the cutoff is 6 percent unemployment. I am not sure that is right, but I think it is approximately right.

Senator McCLURE. Do you anticipate we will get there?

Mr. SCHULTZE. In our current projections, the end of 1978.

Senator McCLURE. You have suggested the housing industry is moving up.

I don't mean to get into all kinds of small questions, but I think the Senator from Minnesota was correct in focusing on some of the very large ones.

We know that there will not be enough timber supply in this country to sustain 3 years running, 2 million housing starts per year, unless there are changes in national policy.

Do you anticipate the timber supply is not only good but will continue to be good?

What will the administration do to increase timber supply so that we can sustain that level of housing starts?

Mr. SCHULTZE. I am sorry to say, Senator, that is something that I am not familiar with to give you an answer on.

The only thing I noted is that lumber prices have finally been coming down a little bit.

Senator McCLURE. Cyclically. But, lumber prices also go up.

Mr. SCHULTZE. I am not suggesting that you are not raising a very important question.

I just have to admit my ignorance of that topic at the moment.

Senator McCLURE. Yesterday we had testimony that before you could expect any large investments in capital goods or production, that there had to be the expectation of sustained consumer spending.

You have suggested that we will have capital investment in the face of slower rates of increase, whatever that means, in regard to consumer spending.

Mr. SCHULTZE. I think I would rephrase it that I think in order to get continued increases in capital spending, you need—among other things—continued good increases in sales of all kinds, not just to consumers.

What we have suggested in that while the rate of consumer spending may for a while go up somewhat less than it has been in this quarter, that in other parts of the economy there will be increases so that total sales will be going up, again not quite at the rate of the first half of the year.

Senator McCLURE. But sufficiently to induce the capital investment you think is necessary?

Mr. SCHULTZE. We believe there is a good chance of that coming about; yes, sir.

It is a combination of a lot of things. We think so. It is really a question as to whether or not you are forecasting as you get out of the latest Commerce survey something like a 7, 7½ percent real rate

of increase or something over the next your quarters, something like 8, 8½, to 9, a difference of 1½ to 2 percentage points.

Senator McCLURE. My time has about expired. I have a number of questions.

I will just touch on one in the time that I have. You mentioned not in your statement but in the remarks that followed the statement that we had had very fast growth and that there is precedent for assuming that perhaps we can meet the goals that have been established by the administration; even though they may be optimistic, they are not without precedent.

You pointed back to the period of 1962 through 1965 as a period of very rapid growth. A good many people believe that one of the reasons for that very fast growth in that period of time was the massive tax cut proposed by President Kennedy and voted upon by the Congress at that time.

As I to assume that you may be having in the back of your mind a similar massive tax cut to be proposed by this administration in the tax package that comes up in August or September?

Mr. SCHULTZE. I will answer that question in reverse order.

Without wanting to forecast, I think it is highly likely that the tax reform proposals, as they are commonly called, the administration will be sending up will in turn end up with a significant reduction in taxes as well as change in structure and reform.

Yes; I am not sure I want to use the word "massive", but yes.

Senator McCLURE. Is it on the order of the 25 percent cut in taxes in 1963?

Mr. SCHULTZE. All I am saying is some tax reduction will very likely accompany it.

No. 2, you also have to remember that the increase in investment spending started 2 years before that tax cut was passed.

It was important. I mean, it helped sustain it. I am not suggesting it didn't.

Senator McCLURE. Do you think that was just one of several factors and not relatively more important than others?

Mr. SCHULTZE. I am not sure I know how to weight it. I think it was important.

I think there were a lot of things that were important. I agree with you fully.

That was important.

Senator McCLURE. I have used my time.

Representative BOLLING. Senator Javits.

Senator JAVITS. Mr. Schultz, it is always a great pleasure to have you and a great honor to question you. I apologize for not being here sooner. You know our problem with the multiplicity of committees.

I notice a rather singular omission in your statement. That is the absence of any account as to the influence upon us of the economic situation in the world, especially the monetary situation which is extremely serious.

We have been unable to substitute for the dollar really anything else, though technically we have substituted SDR's.

The unbelievable pileup of debts of the developing countries now is coming to an estimated \$170 to \$190 billion of which over 70 is owed to U.S. banks.

That pileup is extremely evident, as I will get to in a minute, as well

as the deficit developing countries are suffering, the whole world is suffering in terms of the accounts with the Arab states, the OPEC countries.

That is quite apart from the United States. As you already said, we have a \$25 billion deficit. It looks like the deficits are going on for 10 years.

My own judgment, sir, is—and I would like very much to have your view—that the principal threat to the United States economy is not in the United States; that the principal threat to the U.S. economy is what is happening in the world. We can get a crack because we are not prepared for it which would sink our economy into a depression without our having really anything to do with it in terms of inflation or productivity or unemployment or any of the other factors.

Let me tell you the evidence briefly.

I have just come from Paris where I have been a delegate with Cy Vance and others to the so-called North-South Dialog. That conference substantially failed.

Now, we have no right to expect that it would "succeed." It substantially failed for this reason: It demonstrated such an abyss of differences which we were unable to bridge that we had to transfer all further negotiation to the United Nations and put off this Conference on the North-South Dialog.

In my judgment it was a very, very tragic result. I would have much rather it continued.

The things that were sticky points were these very items I have described to you: The inability of the Western World to supply the resources to meet these deficits down the road or at least to provide in aid, committed aid, what would meet them.

In my view, I don't say that is wrong. I think one of the big things disclosed in Paris was the fact that the developing countries are not ready to do what needs to be done in terms of their own self-help and mutual cooperation.

I said it before and I will say it again: There is such a thing as a tyranny of weakness which was very much in evidence in my judgment in Paris.

The fact is that there was nothing done about the debts. There was nothing done about our commodity fund, to wit, to back up countries' export sales or get them to increase their commodity production.

There was nothing done about really supplementing the assets of the IMF and the World Bank and the other agencies to give them the equipment to meet the orders of magnitude of deficit which were described.

Finally, and the most crushing blow of all, there was nothing done with the OPEC countries to continue any dialog at arm's length.

They meet, tell us the price, and we pay.

Now, question one is: Is there a great threat to the U.S. economy from the operations of the world economic system, especially its monetary system, which is not taken into account in the presentation which you have just made to us?

Two, what is our Government prepared to do to meet that situation in combination with others?

Three, what are the conditions that we are setting, the so-called conditionality in terms of the developing world.

Four, how do we see the prospects for accomplishing such things?

In short, Mr. Chairman, what I am laying before you is what I consider the most awesome threat of all, and ask for you to appraise it.

Mr. SCHULTZE. I am not sure I can give you a carefully considered appraisal extemporaneously.

You have asked a whole series of important questions. I might want to respond to some of those in writing.

Senator JAVITS. Would you do that?

Honestly, sir, I have no desire to get a witness to say something he shouldn't say.

Mr. SCHULTZE. It is a very complicated set of problems: I guess in my own judgment I would say, yes, there is a problem. I do not believe the problem from the strict point of view of the U.S. economy poses the greatest threats we now have.

I would put it more in perspective and say yes, the way in which the world financial system handles the inevitable accumulation of debts that occur as OPEC surpluses continue is indeed a problem.

I don't think, however, I would go so far as to say at this stage that it is the gravest problem facing us.

I think one has to distinguish, first, where the debts are being run up, what the economic growth prospects of the countries that are incurring them, and there is a mixed picture.

Interestingly enough, it is my impression—I have to say impression because it is not something I studied that carefully, that the more rapidly developing countries have managed their affairs with few exceptions rather well, in a sense given the kind of threats they were under, financial threats.

I think you have to look at the debt service capacity of these countries in terms of their economic growth capabilities, almost one by one.

They are quite different.

Some, for example, of the smaller relatively developed countries are doing much worse than some of the less developed but rapidly developing countries.

So, I think it is a mixed picture.

I wouldn't want to describe the threat as grave. It is a long-run problem that must be handled. Clearly, more official financing is needed.

The U.S. Government, as you know, is at the present time, committed, is in negotiation with respect to the Witteveen facility and what can be done through the IMF is the first stage.

I can't pretend at this stage to give an intelligent forecast as to how that will come out.

With respect to conditionality, that is again the subject of recent negotiations. The last meeting more or less got around the problem by talking about "adequate conditionality," that being a word that goes into communiques to describe something you can't settle on.

That is under discussion. I am not prepared to say right now where the stage is up to the last minute on that.

With respect to the common fund, compared to earlier attitudes of the United States, we were much more forthcoming, but in general did not want to get into the position of setting up the financial backing for a fund without commodity agreements, that these should go on simultaneously, as I understand.

In short, I think there is over the long term a problem. I think it is a problem which must be handled in part by official mechanisms for financing.

We are pursuing those. I think with respect to the very particular things that came up at SEAC, we did move a long way from where we had been but clearly in terms of the demands of the 19 not enough.

Beyond that, I am not sure I am prepared to give a well-rounded view of exactly where we stand.

Senator JAVITS. Thank you very much. I would say this to you: I was not finding fault with our country. I think our country behaved magnificently in Paris and the developed countries behaved magnificently.

I only wish our developing country friends had not been manipulated as I think they were by the OPEC countries who just didn't want to go through with the discussions.

I believe, and I would be less than honest about it, that we gravely, grossly underestimate this threat to the American economic situation.

I would respectfully ask to let us have in writing the view of the Council on this issue.

I hope you will agree with me that it is important enough.

Mr. SCHULTZE. It is clearly an important issue, Senator.

Senator JAVITS. You could let us have their appraisal of its seriousness, especially as a threat to the American economy in 1978 and 1979, within the contemporaneous future.

I would appreciate it.

I ask unanimous consent that that be incorporated in the record.

Representative BOLLING. It certainly will be done without objection.

Senator JAVITS. Thank you.

[The following questions and answers were subsequently supplied for the record:]

RESPONSE OF HON. CHARLES L. SCHULTZE TO ADDITIONAL WRITTEN QUESTIONS
POSED BY SENATOR JAVITS

U.S. SENATE,
Washington, D.C., June 10, 1977.

HON. CHARLES L. SCHULTZE,
Chairman, Council of Economic Advisers,
Washington, D.C.

DEAR DR. SCHULTZE: At the hearing of the Joint Economic Committee on June 9, 1977, concerning the economic outlook, I told you my great concern over international financial conditions.

You may recall that I expressed the fear that the financial strains currently present in the world economies were the principal threats to the United States economy in the next year or so. I noted several specific areas on which you assured me that the Council of Economic Advisers would be willing to comment. These include:

- (1) An appraisal of the immediacy and seriousness of the future of the international monetary system especially as a threat to the American economy in 1977 and 1978.
- (2) What would be done by the United States in order to offset this threat?
- (3) What conditions should be set by the United States for itself and other countries in order to achieve these goals?
- (4) What are the prospects for successful accomplishment of the above?

On a slightly different subject, I also would appreciate your response to this question: How much of the German and Japanese surpluses are due to failure to increase imports because of prevailing tariffs and quotas, and how much are due to failure to stimulate their economies? Should Germany, Japan and the United States take another hard look at trade barriers facing the Third World?

Sincerely,

JACOB K. JAVITS.

THE CHAIRMAN OF THE
COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., July 2, 1977.

Hon. JACOB K. JAVITS,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JAVITS: I am writing in response to the questions that you raised when I appeared before the Joint Economic Committee on June 9, 1977 and that were set down again in your letter of June 10.

1. You asked for my "appraisal of the immediacy and seriousness of the future of the international monetary system especially as a threat to the American economy in 1977 and 1978."

The international monetary system has been under severe strain throughout this decade. There were fundamental changes as the Bretton Woods system of par values for currencies was replaced by the system of widespread floating that we have today. The surpluses accumulated by the oil exporting countries created unprecedented needs for balance-of-payments financing for those countries having the corresponding deficits. On top of these adjustments we have experienced the deepest global economic recession in 40 years. These events have severely strained the international monetary system. But they have also forced adaptation, so that the system is more flexible and more able to withstand stress than before.

Today the international monetary system, while under some strain, seems in less immediate peril than it has for several years. Private banks have emerged as important intermediaries between the OPEC countries with surpluses and countries in deficit, and over the past three years they have gained considerable sophistication in these operations. At the same time, there have been a number of innovations in the IMF's structure that have enlarged its capacity to make credits available to countries and to attach appropriate conditionality to those credits. Moreover, current account deficits have narrowed in a number of countries where financing problems had been worrisome. The combined deficit of the non-OPEC developing countries contracted in 1976 and is expected to contract further this year. South Korea and Taiwan are two examples of countries whose large borrowing had given rise to concern about their abilities to service their debts and whose positions have improved markedly. Mexico and Brazil have also begun to show signs of an improvement. Among the developed countries that have had large deficits and that have relied heavily on official borrowing there has been some improvement—the United Kingdom, helped by North Sea oil as well as by domestic policy measures, should be in current account surplus by the end of the year; Italy should be near balance. The swing in the U.S. current account from surplus to deficit has made an important contribution to the reduction in deficits elsewhere.

There are dark spots in the world financial picture, however. Some LDC's continue to have large deficits. The need successfully to roll over debts piled up earlier will present a challenge for many more. The less well off of the OECD countries will present the most serious challenge to the system in the next year or so. These countries, especially Greece, Portugal, Spain, and Turkey, have large current account deficits that show little prospect of being reduced substantially soon. Their borrowing needs will remain large, and they cannot be expected to have access to private capital markets.

My judgment, however, is that the international financial system will be able to cope with the stresses that are likely to occur over the next year or so. The world need not suffer major financial problems that would bring restrictive trade practices and demand-reducing policies and thus threaten our own economic expansion. To assure this outcome, however, we must follow policies that facilitate the working of the system and plan for the possibility that financial strains might be more severe than expected.

2. What should be done by the United States to offset the threat to the system?

There are a number of measures we can take ourselves and encourage for others that will enhance the stability of the world financial system.

- We must achieve a steady pace of aggregate demand growth in the United States and press other countries in strong positions to do the same. In this way we will provide growing markets in which countries in deficit can sell their products.
- We must avoid restrictive trade practices that would limit access to our markets by countries in deficit.

—We must encourage responsible international lending policies by U.S. banks. Our banks, including the offices of U.S. banks abroad, will continue to play a central role in taking OPEC funds and lending them to countries in deficit.

—We must work to assure that the international financial institutions will have adequate resources to meet the demands that will be placed on them. Capital increases for the IBRD and IDA have been negotiated and we are optimistic that agreement will soon be reached on the so-called Witteveen facility, which will substantially augment the resources of the IMF with funds advanced by the stronger industrial countries and the surplus OPEC countries. The activities of these institutions can help countries meet their balance-of-payments deficits. But more than this, their lending operations provide a mechanism through which the international community can provide guidance on economic policies to promote growth and stability. Congressional approval of U.S. contributions to the capital of the IBRD and IFC will help to assure a continued flow of resources through these institutions. The Administration hopes soon to be in a position to seek Congressional approval of a U.S. contribution to the Witteveen facility as well.

3. What conditions should be set by the United States and the IMF on the policies and performance of borrowing countries?

At the April meeting of the Interim Committee of the IMF it was agreed that lending in the new facility being negotiated by Managing Director Witteveen would be accompanied by "appropriate conditionality." The word appropriate covers a range of views among countries on exactly what conditions should be set. It does, however, reflect a common recognition of changed circumstances—policy conditions that were generally applied in the past are not appropriate today. The fact of the OPEC current account surplus means that countries cannot be expected to aim for the same current account targets that were appropriate before the oil crisis. We can expect, nevertheless, that countries restructure their economies in ways that will make the necessary deficits more manageable. Specifically, the growth of domestic private and government consumption in countries with deficits may need to be slowed in favor of stronger growth of productive investment and exports. Of course, export growth cannot be pursued by countries with balance-of-payments constraints if others do not maintain steady growth and liberal trade policies.

In the present international environment, with the structural changes that will be required for some countries to achieve sustainable balance-of-payments positions, the time that must be allowed for adjustment to occur may be several years, compared with the one-year adjustment period that was once considered the norm in establishing conditions for an IMF stand-by.

4. What are the prospects for successful accomplishment of the above?

The adjustments in balance-of-payments positions that are now occurring should make it possible for private financial institutions to meet most countries' financing needs in the year or two ahead. The sixth IMF quota increase, when ratified by other countries, and the Witteveen facility, if negotiations can be successfully concluded, should provide adequate resources to meet the additional official lending needs, except for the special case of Portugal. If policies supporting steady economic growth are followed in the stronger countries, the international monetary system should successfully respond to the demands made on it. Nevertheless, it is important that we continually review the need for official financing and the adequacy of the resources that are in place to meet them.

5. How much of the German and Japanese surpluses are due to failure to increase imports because of prevailing tariffs and quotas, and how much are due to failure to stimulate their economies?

I can't give a precise answer to this question. Cyclical developments appear to have been the most powerful influence on the recent evolution of German and Japanese imports. Japanese import volume expanded by 10 percent in 1976 after declining during the recession. In Germany, the growth of imports in 1976 was even stronger at 16 percent. These are substantial gains but not as large as the 22 percent rise in the United States, where the recovery was stronger and where oil imports expanded because of declining domestic production as well as for cyclical reasons.

Perhaps more significant than the behavior of imports in Germany and Japan has been their export performance. Japanese export volume continued to grow throughout the recession with a surge of 22 percent in 1976, German export

volume fell off in 1975, but more than recovered with a 14 percent increase in 1976. U.S. export volume, in contrast, grew only 3 percent last year, and most of the increase was in agricultural exports. It should be noted, though, that U.S. exports and declined by less than 3 percent during the recession in 1975.

Exports of foreign countries, and those of Japan in particular, were boosted by the strong U.S. recovery. The Japanese also cut prices in some markets and made a strong drive to push up exports. German exports were boosted by the growth of shipments to Eastern Europe.

It is unlikely that present tariff rates are an important factor holding down the level of imports in Germany and Japan, although they present important barriers to particular products. The role of nontariff barriers in reducing imports to Japan and Germany is still harder to assess. These barriers include the whole gamut of regulations, laws, and administrative practices that directly or indirectly place foreign producers at a disadvantage. As with tariffs, they undoubtedly have a greater impact in particular markets than on imports in the aggregate. One of the major areas of discussion in the Tokyo Round of Multilateral Trade Negotiations is nontariff barriers. The United States is seeking to achieve a substantial lessening of these barriers in these negotiations.

Agricultural imports into the European Community and Japan are severely restricted both by high duty rates and by nontariff barriers. The liberalization of agricultural trade has been made a priority objective for the United States in the Multilateral Trade Negotiations.

6. Your final question was: Should Germany, Japan, and the United States take another hard look at trade barriers facing the third world? This is being done in the context of the Multilateral Trade Negotiations. At the Downing Street Summit last month President Carter and the Heads of State of the other major Western industrial countries recognized the need for the agreements coming out of the negotiations to "provide special benefits to developing countries."

Cordially,

CHARLES L. SCHULTZE.

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

We have enjoyed your appearance. It has been very helpful.

The committee will now recess.

[Whereupon, at 12:12 p.m., the committee recessed, to reconvene at 10 a.m., Monday, July 25, 1977.]

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

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C., June 10, 1977.

HON. CHARLES L. SCHULTZE,

Chairman, Council of Economic Advisers, Executive Office Building, Washington, D.C.

DEAR MR. SCHULTZE: During our discussion yesterday I raised a question about an analysis of the inflationary impact of television import quotas which Business Week Magazine (June 6, 1977) stated had been made by the Council of Economic Advisers. If you have made such a study or if you have any other information which would be helpful to the Committee I would appreciate your supplying it for the record. I am quite concerned about the inflationary impact of many of the Administration's proposals. While each may have a very small impact alone, the cumulative effect could be significant. If you have any studies of the inflationary impact of other Administration proposals we would also appreciate your supplying a copy of those studies for the record.

You mentioned in your testimony that the Council is currently reviewing its entire forecast in conjunction with the mid-session review of the budget. When you have completed that analysis we would appreciate your making available to the Committee the estimates of full employment receipts and expenditures by quarters for fiscal years 1977 and 1978.

We appreciate your cooperation very much.

Sincerely,

RICHARD BOLLING, *Chairman.*

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., July 26, 1977.

HON. RICHARD BOLLING,
Chairman, Joint Economic Committee,
Washington, D.C.

DEAR MR. CHAIRMAN: I am pleased to respond to your recent letter requesting further information on the orderly marketing agreement with Japan on imports of television receivers, and on full employment budget estimates through 1978.

In your letter, you asked me to provide information on the inflationary impact of the recently negotiated OMA with Japan. CEA prepared no formal studies of this matter, but my staff did analyze a number of estimates of the inflationary consequences of this agreement. No precise estimate of this impact is possible. Estimates of the potential price increase for small screen television receivers vary widely. These estimates vary so widely because they are highly sensitive to a number of factors that are extremely difficult to forecast.

First, we cannot predict the extent to which domestic suppliers will respond to import quotas by increasing their own production. Capacity utilization in the domestic color television industry in 1976 was about 70 percent, compared with a peak level of 80 percent in 1973. If domestic capacity utilization rises to 80 percent by 1978 as a result of the quota imposed under the OMA, but then rises no further, a rather substantial price increase is likely to result. On the other hand, if domestic capacity utilization were to increase to 90 percent by 1978, and if capacity grew by 10 percent in each subsequent year, price increases would be much smaller.

Moreover, we do not know the extent of inventories of Japanese televisions in the United States, although they are believed to be substantial. Large inventories will tend to restrain increases in price to the extent they are depleted to substitute for imports barred by the OMA. However, the effect of drawing down inventories can only be temporary. It may moderate the price impact of the OMA through 1978, but not for the longer term.

The OMA also leaves open the possibility for Japanese manufacturers to move their assembly operations to the United States. We expect that this will occur, but we cannot predict how rapidly, and to what extent, Japanese manufacturers will elect to build their televisions in the United States. The greater the extent of Japanese investment in productive facilities here, of course, the greater will be the supply of televisions for consumers, and the lower the price increase caused by the OMA.

A final factor that could affect color TV prices in the future is the recent Customs Court decision in the Zenith case. The Customs Court held that the rebate on export of Japanese domestic commodity taxes is a subsidy, so that Japanese products receiving such rebates are subject to U.S. countervailing duties. If affirmed on appeal, this decision could result in additional duties of about 15 percent on some \$1.2 billion of Japanese televisions and other electronic equipment. These duties would be passed on to consumers in the form of higher prices for imports, and would probably spill over into higher domestic prices as well. If the Zenith case sets a precedent, it could affect nearly all our manufactured imports, not only from Japan, but also from Western Europe.

You also requested data on full employment budget receipts and expenditures, by quarter, for fiscal years 1977 and 1978. The table below includes those estimates, revised to be consistent with the materials released with the mid-session review of the budget.

NATIONAL INCOME AND PRODUCT ACCOUNT FULL EMPLOYMENT BUDGET (BASED ON JULY 1977 MID-SESSION
REVIEW OF THE BUDGET)

[In billions of dollars]

Fiscal year and quarter	Receipts	Expenditures	Surplus or deficit (-)
1977:			
I.....	388.6	398.7	-10.1
II.....	402.6	400.3	+2.3
III.....	402.3	407.4	-5.1
IV.....	409.8	426.9	-17.1
1978:			
I.....	422.8	443.1	-20.3
II.....	432.4	459.3	-25.9
III.....	445.1	472.6	-27.5
IV.....	463.2	480.7	-17.5

Sincerely,

CHARLES L. SCHULTZE.

THE 1977 MIDYEAR REVIEW OF THE ECONOMY

MONDAY, JULY 25, 1977

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

The committee met, pursuant to recess, at 10 a.m., in room 1202, Dirksen Senate Office Building, Hon. Lee H. Hamilton (member of the committee) presiding.

Present: Representatives Bolling, Reuss, Hamilton, and Brown of Ohio; and Senator McClure.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Richard F. Kaufman, general counsel; William A. Cox, Thomas F. Dernburg, Brett Fromson, Kent H. Hughes, and L. Douglas Lee, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, Stephen J. Entin, George D. Krumbhaar, Jr., M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON

Representative HAMILTON. The committee will come to order.

Today's hearing is the third of four hearings before the Joint Economic Committee as part of its midyear review of the economy. The first two hearings, dealing mainly with the short-term outlook were held in June. Today and tomorrow, we shall focus to a greater extent on the longer run planning period extending through 1981. These hearings will end tomorrow with the testimony of Bert Lance, Director of the Office of Management and Budget.

The economy this year has fared surprisingly well, despite apparent threats from many sides. The disruptions brought by a harsh winter were quickly overcome and hardly left a mark on the economic statistics. Drought has seemed to threaten agricultural production, but major crops up to now are coming in at close to record levels. Employment has grown rapidly and unemployment has declined somewhat, although it remains alarmingly high.

At our June hearings, however, the preponderance of opinion among private forecasters was that the economy's growth can be expected to decline substantially in the latter half of 1977. Consumer spending and residential investment will grow much more slowly; business investment will pick up but only modestly; export markets are relatively weak, because of economic stagnation in other countries; and the Federal budget is not providing the support that the economy appears to

require—or even the support that has been mandated by Congress—although it is expected to become more stimulative toward the end of the year and in 1978. With the current very rapid labor force growth, a slowdown in output would mean a loss of momentum in cutting unemployment or even a new increase in joblessness.

This outlook has not changed much since our hearings in June, except for new expressions of concurrence from the Congressional Budget Office, the Brookings Institution, and other private forecasters.

Today's hearing will focus on the pattern of objectives of economic policy projected for the long run. As you know, the administration has laid out an ambitious array of targets to be achieved by the end of President Carter's term of office. Unemployment is to be cut from today's 7 percent to $4\frac{3}{4}$ percent; inflation is to be reduced from the current range of 7 or 8 percent to about $4\frac{1}{2}$ percent; and the Federal budget is to be brought into balance. In the meantime, both Congress and the administration aspire to enact major reforms of the tax and welfare systems and to examine certain potentially costly initiatives, such as better medical insurance. Many people question whether the announced objectives for the economy and the Federal budget are consistent with each other and are mutually attainable.

Can we really drive unemployment down steadily over several years while simultaneously reducing inflation? Maybe so, but such a pattern goes against much conventional wisdom and experience. It will require new job creation at an unprecedented rate year after year while reducing inflation as the economy approaches full use of capacity.

Can we really drive unemployment down while moving firmly to balance the Federal budget? Will such a fiscal policy provide the necessary support to the private economy? What levels of taxation are implied by the objective of balancing the budget, and do we want tax rates to go that high? If not, what elements of spending can we cut?

More fundamentally, one must really ask whether it is plausible to expect the business expansion to remain steady and strong through 1981? Already many analysts are talking about a business expansion that is middle aged compared to earlier upturns. Will this one remain balanced and carry on at full steam for 6 years and beyond?

If it is likely that these objectives cannot be fulfilled, then priorities will have to be established among them, and certain objectives will have to be modified. Then we must inquire what kinds of new methods—targeted efforts beyond macroeconomic policies—might be devised to deal with the problems that remain. This is what we shall be investigating today and tomorrow.

Our witnesses this morning are Robert Hartman, senior fellow of the Brookings Institution; Ray Fair, professor of economics, Yale University; and Robert Gordon, professor of economics at Northwestern University.

I would like to ask Mr. Hartman to begin. I understand you have a prepared statement, and that statement has attached to it chapter 11 of the recently issued Brookings Institution book on "Setting National Priorities" for the 1978 budget. Your prepared statement, together with the attached chapter 11 will be made a part of the record in full. You may proceed, sir.

**STATEMENT OF ROBERT W. HARTMAN, SENIOR FELLOW, THE
BROOKINGS INSTITUTION**

Mr. HARTMAN. It is a pleasure to participate in the committee's review of the July long-run projections of the administration. Our projections are contained in the chapter attached to my prepared statement.

Our projections of budget outlays and receipts for fiscal year 1981, when adjusted for a few conceptual differences, do not significantly differ from those of the administration. Since our estimates of outlays were derived largely from Congressional Budget Office data and receipts from estimates prepared at Brookings, the committee should take some comfort in the alinement of OMB estimates with ours. We are either all wrong or all right, but we are together.

I would like to devote my remarks today to some comments on the uses and abuses of budget projections and to some suggestions for improvement in the future.

Under the leadership of Charles Schultze, the practice of viewing current decisions in the context of budget projections was brought to public attention in Brookings' annual "Setting National Priorities" volumes. Gradually, this practice has been adopted by both OMB and CBO and has become an important part of the new budget process. Unfortunately, the very limited purpose of these projections has sometimes been misinterpreted.

The purpose of long-run projections has always been to show how budgets under existing programs and tax laws would develop in the future (a) assuming a given course for the economy and (b) assuming that no laws or programs were changed. When understood this way it is obvious that budget projections are not forecasts of the level of outlays or of receipts. Yet the press often treats projections that way, as witnessed by the new reports on the July OMB projections that said that President Carter has advanced the date of budget balance to 1980. Not so. The projections simply show that receipts would exceed outlays under existing law and assumed economic conditions in fiscal year 1980.

Budget projections are not forecasts of the state of the economy. Projections cannot tell you what the state of the economy will be if the budget margin is spent, for example, because the level of GNP and of inflation are assumed for purposes of making projections. Thus, there is no good reason for anyone to express optimism or pessimism about the economic outlook as a result of the administration's new projections.

If these budget projections are not forecasts of either the budget or the economy—what are they and how should they be used?

Budget projections show how much margin exists between receipts and outlays under existing laws. For example, our budget projections show a margin of about \$50 billion for fiscal year 1981. This means that by fiscal year 1981 a combination of spending initiatives and tax cuts totaling \$50 billion could be undertaken assuming that the proper fiscal policy in fiscal year 1981 is a balanced full-employment budget. It has been a convention of macroeconomists that, on the average, the correct fiscal policy at full employment would be one of budget bal-

ance. This has always been a counsel of ignorance ("We don't know what fiscal policy would be required to attain full employment 4 years from now.") rather than one based on empirical evidence. That is still the case today.

Budget planning based on spending the budget margin (or cutting taxes) in a future year may make sense even if one is pretty sure that the required fiscal policy for that year is a small deficit or surplus. This is because it makes good economic sense to set spending programs and tax laws according to a long-run view of the economy, planning to meet short-run fiscal policy needs through temporary tax changes (such as, income tax rebates and surcharges) or temporary spending (such as, countercyclical revenue sharing and public works).

To recap, budget projections give us a picture of how much room there is for spending initiatives or tax cuts in some future year in which we specify a full-employment goal and the accompanying inflation. Such projections enable us to plan for a balanced budget; whether such a budget balance materializes or whether it will even be desirable depends on how the non-Federal economy behaves. Barring some chronic weakness or chronic buoyancy in the private economy, budget projections can be used to set in motion new spending and tax reduction programs designed to balance at full employment. Temporary measures to counteract small deviations in non-Federal demand can be instituted as the projection period develops.

The hearing today and an increasing flow of press reports have turned this use of budget projections on its head. Everybody seems to be asking "If we pursue a balanced budget program for fiscal year 1981, will the economy, in fact, reach the employment and inflation assumptions stated by the administration?" To this question, I have three "answers":

First, and most directly, I do not know now what the rate of unemployment and inflation will be in 1981 if a balanced budget is pursued in that year. I don't think any careful forecaster would want to go much beyond 1 year ahead in predicting the state of the economy on the basis of knowing only fiscal policy. At a minimum, the forecaster will insist on knowing your assumptions for the next 4 years on weather and crops, oil and commodity prices, monetary policy (here and abroad) inventory building patterns between now and 1981, and the state of the national mood in 1981 insofar as it affects consumer spending, business confidence and the actions of scores of State legislatures and city halls. Even if you feed your forecaster this information, if he is really sensible, he will tell you his equations are good for a 6-month prediction, fair for a year, better than nothing for 18 months and even worse for longer term forecasts. Maybe he won't tell you that but we will find out shortly.

Second, I would reiterate as strongly as possible that we need not now set fiscal policy in concrete for fiscal year 1981, so to focus on a balanced budget for that year as if we were deciding it imminently is confusing and misleading. January 1980 is the right time to ask whether a balanced budget is right for fiscal year 1981. For now, our major concern should be to make sure not to undertake permanent program changes that will make the January 1980 fiscal decisions impossibly difficult.

Third, the distorted emphasis on desirability and feasibility of a balanced budget in fiscal year 1981 can be laid squarely on the new administration's doorstep. The merits of the administration's emphasis on balancing the budget—such as building business confidence and restraining pent-up demand in Government agencies—has been more than offset by the demerit of the widespread belief that balancing the budget in 1981 is a promise to be understood literally. As a result, we are embarked on a wild goose egg chase on the consequences of a balanced budgeting. We should be arguing over whether the budget margin should be used for spending or for tax cuts and given that division of the margin, whether more should go to defense or to welfare, whether business taxes should fall or whether to enlarge the earned income credit.

This fixation on the consequences of a balanced budget will pass well before the 4 years are up, I hope. It is constructive, therefore, to turn to the next round of scheduled budget projections and ask how we can make them more useful.

In November OMB is obligated to present to this committee for review its estimates of a current services budget a 1 year projection for fiscal 1979. CBO, if it follows last year's timetable, will produce 5-year projections (based on the second concurrent resolution of fiscal year 1978) for fiscal year 1979-83 shortly thereafter. Then, in January, the President's budget will appear with another set of 5-year projections (1979-83) based on the Carter administration's first full blown set of priorities.

It is my opinion that there will be too many numbers floating around at that time.

I think the process can be streamlined and better coordinated. In what follows, I will try to spell out how I think projections ought to be formulated in the next round ignoring the possible need for legal waivers or workload drawbacks. These can be overcome if the basic ideas are acceptable.

The first step, it seems to me, ought to be the presentation of a current service budget for fiscal years 1978-83 by OMB sometime in November. This set of projections ought to be much more firmly based than in the past since every department is doing a zero base budget review which entails, in virtually all cases, the estimation at the sub-agency level of the current service level. OMB should base its future projections on these estimates—which, in turn, should be based on the second concurrent budget resolution for 1978—using whatever economic assumptions it wishes to highlight.

This set of 5-year projections should be the basis for the President's January budget. That is, the January budget submission for each account should consist of the November current service estimate plus/minus two additional items.

Reestimates. These would stem from any rethinking on the administration's part of its November economic assumptions or of any revised estimates due simply to new information. All such reestimates should be extended for 5 years and be clearly labeled so that any dispute over the implications of changed assumptions can be easily identified.

Policy changes. Any administration proposal that deviates from current services should be identified as a policy change (unless it is a reestimate included above) and should be shown on a detailed budget accounts basis for the full projection period.

Under this procedure OMB could just as well submit a master computer tape of the current service projections in November and then, in January, present the President's budget—which will simply be the reestimates and policy change tapes.

The role of the Joint Economic Committee in this process might be the following. In December, the JEC could hold hearings in which the Budget Committees, with the assistance of CBO, would be asked to comment on the administration's projects. How do they differ from CBO's projections? What is a reasonable estimate of the likely range of the budget margin for the out-years? Where do congressional experts differ from OMB on the fiscal year 1979 outlook? These hearings could culminate in a report advising the administration on the technical aspects of its projections as well as giving the committee's majority view of the needed fiscal policy for the coming year and on the division of the long-run margin.

This proposal has several advantages:

The budget presented to you in January will be a comprehensible set of administration proposals for policy change, clearly labeled and set in a multiyear framework.

Disputes over the magnitude of efficiencies produced by zero-based budgeting can be fought out in December since the primary way for the administration to pad efficiencies is to inflate current service estimates. The Congress will have an opportunity to uncover any such padding in December during the JEC review.

By forcing agencies to go public with their current service estimates (many of which will become the actual budgets of programs), the Congress will begin to build a data base against which shortfalls can be measured. Indeed, agencies may be less inclined to inflate outlay estimates if they know that congressional oversight will be active.

Since the Congress will be acting on the policy proposals in the budget, it should be possible for CBO to keep a running scorecard not only on the fiscal year 1979 budget but on future years as well. This would be a useful first step toward multiyear budgeting.

The goal of setting out budget projections ought to be to display how an administration's long-run program fits within overall economic and budgetary restraints; the Congress, although under no constitutional mandate to propose, should move in the direction of making its decisions under its own long-run plan.

[The prepared statement, with an attachment, of Mr. Hartman follows:]

PREPARED STATEMENT OF ROBERT W. HARTMAN*

USING LONG-RUN BUDGET PROJECTIONS

It is a pleasure to participate in the Committee's review of the July long-run projections of the Administration. I have recently contributed a chapter on this subject, which is attached to this statement, to the Brookings Institution's annual *Setting National Priorities* and would like to submit that chapter for the record.

Our projections of budget outlays and receipts for fiscal year 1981, when adjusted for a few conceptual differences, do not significantly differ from those of the Administration. Since our estimates of outlays were derived largely from Congressional Budget Office data and of receipts from estimates prepared at Brookings, the Committee should take some comfort in the alignment of OMB estimates with ours. We are either all wrong or all right, but we're together.

* Senior Fellow, the Brookings Institution. The views presented in this statement are those of the author and not necessarily those of the officers, trustees, or other staff members of The Brookings Institution.

I would like to devote my remarks today to some comments on the uses and abuses of budget projections and to some suggestions for improvement in the future.

The Limited Uses of Budget Projections

Under the leadership of Charles Schultze, the practice of viewing current decisions in the context of budget projections was brought to public attention in Brookings' annual *Setting National Priorities* volumes. Gradually, this practice has been adopted by both OMB and CBO and has become an important part of the new budget process. Unfortunately, the very limited purpose of these projections has sometimes been misinterpreted.

The purpose of long-run projections has always been to show how budgets under existing programs and tax laws would develop in the future (a) assuming a given course for the economy and (b) assuming that no laws or programs were changed. When understood this way it is obvious that:

Budget projections are not forecasts of the level of outlays or of receipts. Yet the press often treats projections that way, as witnessed by the news reports on the July OMB projections that said that President Carter has advanced the date of budget balance to 1980. Not so. The projections simply show that receipts would exceed outlays under existing law and assumed economic conditions in fiscal year 1980.

Budget projections are not forecasts of the state of the economy. Projections cannot tell you what the state of the economy will be if the budget margin is spent, for example, because the level of GNP and if inflation are assumed for purposes of making the projections. Thus, there is no good reason for anyone to express optimism or pessimism about the economic outlook as a result of the Administration's new projections.

If these budget projections are not forecasts of either the budget or the economy—what are they and how should they be used?

Budget projections show how much margin exists between receipts and outlays under existing laws. For example, our budget projections show a margin of about \$50 billion for fiscal year 1981. This means that by fiscal year 1981 a combination of spending initiatives and tax cuts totalling \$50 billion could be undertaken assuming that the proper fiscal policy in fiscal year 1981 is a balanced full employment budget. It has been a convention of macroeconomists that, on the average, the correct fiscal policy at full employment would be one of budget balance. This has always been a counsel of ignorance ("We don't know what fiscal policy would be required to attain full employment four years from now.") rather than one based on empirical evidence. That is still the case today.

Budget planning based on spending the budget margin (or cutting taxes) in a future year may make sense even if one is pretty sure that the required fiscal policy for that year is a small deficit or surplus. This is because it makes good economic sense to set spending programs and tax laws according to a long-run view of the economy, planning to meet short-run fiscal policy needs through temporary tax changes (such as, income tax rebates and surcharges) or temporary spending (such as, countercyclical revenue sharing and public works).

To recap, budget projections give us a picture of how much room there is for spending initiatives or tax cuts in some future year in which we specify a full employment goal and the accompanying inflation. Such projections enable us to plan for a balanced budget; whether such a budget balance materializes or whether it will even be desirable depends on how the nonfederal economy behaves. Barring some chronic weakness or chronic buoyancy in the private economy, budget projections can be used to set in motion new spending and tax reduction programs designed to balance at full-employment. Temporary measures to counteract small deviations in non-federal demand can be instituted as the projection period develops.

The Current State of the Debate

The hearing today and an increasing flow of press reports have turned this use of budget projections on its head. Everybody seems to be asking "If we pursue a balanced budget program for fiscal year 1981, will the economy in fact reach the employment and inflation assumptions stated by the Administration?" To this question, I have three "answers."

First, and most directly, I do not know now what the rate of unemployment and inflation will be in 1981 if a balanced budget is pursued in that year. I don't think any careful forecaster would want to go much beyond one year ahead in predicting the state of the economy on the basis of knowing only fiscal policy.

At a minimum, the forecaster will insist on knowing your assumptions for the next four years on weather and crops, oil and commodity prices, monetary policy (here and abroad), inventory-building patterns between now and 1981, and the state of the national mood in 1981 insofar as it affects consumer spending, business confidence and the actions of scores of state legislatures and city halls. Even if you feed your forecaster this information, if he's really sensible he'll tell you his equations are good for a 6-month prediction, fair for a year, better-than-nothing for 18 months and even worse for longer-term forecasts.

Second, I would reiterate as strongly as possible that we need not now set fiscal policy in concrete for FY 1981, so to focus on a balanced budget for that year as if we were deciding it imminently is confusing and misleading. January 1980 is the right time to ask whether a balanced budget is right for fiscal year 1981. For now, our major concern should be to make sure not to undertake permanent program changes that will make the January 1980 fiscal decisions impossibly difficult.

Third, the distorted emphasis on desirability and feasibility of a balanced budget in fiscal year 1981 can be laid squarely on the new Administration's doorstep. The merits of the Administration's emphasis on balancing the budget—such as, building business confidence and restraining pent-up demand in government agencies—has been more than offset by the widespread belief that balancing the budget in 1981 is a promise to be understood literally. As a result, we are embarked on a wild goose egg chase on the consequences of balanced budgeting. I regret this distortion not only because—as indicated above—there is no answer to be given, but also because, especially in a new Administration, budget projections should be the starting point for a debate on national priorities. We should be arguing over whether the budget margin should be used for spending or for tax cuts and given that division of the margin, whether more should go to defense or to welfare, whether business taxes should fall or whether to enlarge the earned income credit. Instead of discussing such difficult long-run policy choices, we are discussing long-run macroeconomics, for which Keynes had an apt prognosis.

The Next Round of Budget Projections

This fixation on the consequences of a balanced budget will pass well before the four years are up, I hope. It is constructive, therefore, to turn to the next round of scheduled budget projections and asks how we can make them more useful.

In November OMB is obligated to present to this Committee for review its estimates of a "current services budget", a one-year projection for fiscal 1979. CBO, if it follows last year's timetable, will produce five-year projections (based on the second concurrent resolution of fiscal year 1978) for fiscal years 1979-83 shortly thereafter. Then, in January, the President's budget will appear with another set of five-year projections (1979-83) based on the Carter Administration's first full-blown set of priorities.

It is my opinion that there will be too many numbers floating around at that time. For example, the OMB current services budget will probably be based on the status of programs under enacted appropriations or continuing resolutions, while its January budget will shift that base. CBO's base will be the second concurrent resolution for fiscal year 1978. OMB's five-year projections will probably incorporate presidential proposals (as its July projection incorporates welfare reform, energy, and payroll tax proposals) while its November current services budget and CBO's projections exclude any such proposals.

I think the process can be streamlined and better coordinated. In what follows, I will try to spell out how I think projections ought to be formulated in the next round ignoring the possible need for legal waivers or workload drawbacks. These can be overcome if the basic ideas are acceptable.

The first step, it seems to me, ought to be the presentation of a current service budget for fiscal years 1979-83 by OMB sometime in November. This set of projections ought to be much more firmly based than in the past since every department is doing a zero-base budget review which entails, in virtually all cases, the estimation at the subagency level of "the current service level." OMB should base its future projections on these estimates—which, in turn, should be based on the second concurrent budget resolution for fiscal year 1978—using whatever economic assumptions it wishes to highlight.¹

¹ The Budget Committees might submit to OMB alternative economic paths for which OMB should prepare alternative budget estimates.

This set of five-year projections should be the basis for the President's January budget. That is, the January budget submission for each account should consist of the November current service estimate plus/minus two additional items.

Reestimates.—These would stem from any rethinking on the Administration's part of its November economic assumptions or of any revised estimates due simply to new information. All such reestimates should be extended for five years and be clearly labeled so that any dispute over the implications of changed assumptions can be easily identified.

Policy Changes.—Any Administration proposal that deviates from current services should be identified as a policy change (unless it is a reestimate included above) and should be shown on a detailed budget accounts basis for the full projection period.

Under this procedure OMB could just as well submit a master computer tape of the current service projections in November and then, in January, present the President's "budget"—which will simply be the Reestimates and Policy Change tapes.¹

The role of the Joint Economic Committee in this process might be the following. In December, the JEC could hold hearings in which the Budget Committees, with the assistance of CBO, would be asked to comment on the administration's projections. How do they differ from CBO's projections? What is a reasonable estimate of the likely range of the budget margin for the out-years? Where do Congressional experts differ from OMB on the fiscal year 1979 outlook? These hearings could culminate in a report advising the administration on the technical aspects of its projections as well as giving the Committee's majority view of the needed fiscal policy for the coming year and on the division of the long-run margin.

This proposal has several advantages:

The budget presented to you in January will be a comprehensible set of Administration proposals for policy change, clearly labeled and set in a multi-year framework.

Disputes over the magnitude of efficiencies produced by zero-based budgeting can be fought out in December since the primary way for the administration to pad efficiencies is to inflate current service estimates. The Congress will have an opportunity to uncover any such padding in December during the JEC review.

By forcing agencies to go public with their current service estimates (many of which will become the actual budgets of programs), the Congress will begin to build a data base against which "shortfalls" can be measured. Indeed, agencies may be less inclined to inflate outlay estimates if they know that Congressional oversight will be active.

Since the Congress will be acting on the policy proposals in the budget, it should be possible for CBO to keep a running scorecard not only on the fiscal year 1979 budget but on future years as well. This would be a useful first step toward multi-year budgeting.

The goal of setting out budget projections ought to be to display how an administration's long-run program fits within overall economic and budgetary restraints; the Congress, although under no constitutional mandate to propose, should move in the direction of making its decisions under its own long-run plan.

Attachment .

¹ I should note that the final budget presented by President Ford last January took a number of preliminary steps in this direction. See *"The Budget of the United States Government, Fiscal Year 1978,"* especially pp. 8-24.

(Extract from "Setting National Priorities," 1978,,
copyright, 1977, The Brookings Institution)

CHAPTER ELEVEN

Budget Prospects and Process

ROBERT W. HARTMAN

PRESIDENT CARTER, in his election campaign and in his first months in office, has indicated that he will attempt to coordinate policies and to limit spending by setting budgetary targets and by implementing a new budget process. In this chapter, the long-term budget outlook of the Carter administration is reviewed and the new budget process—zero-base budgeting—is evaluated as an instrument in reshaping government priorities.

PART I. PROSPECTS FOR ATTAINING PRESIDENT CARTER'S GOALS

During President Carter's current term in office, he will initiate budgets for fiscal years 1979 through 1982. In his campaign for the presidency, Carter outlined explicit economic, social, and budgetary goals for fiscal year 1981, the last budget he will propose before the 1980 election. He stated that he favored, and expected to achieve, the following goals: limiting federal spending to about 21 percent of gross national product; achieving an unemployment rate of about

The author was aided by helpful comments on earlier drafts from Frank deLeeuw, Arthur Hauptman, Darwin Johnson, Bruce MacLaury, Arthur Okun, John Palmer, Robert Reischauer, David Rowe, and John Schillingburg. Data were generously provided by staff members of the Office of Management and Budget and the Congressional Budget Office. Nancy Osher contributed research and editorial assistance.

4.5 percent; balancing the federal budget; and initiating about \$60 billion worth of new and strengthened social programs and tax cuts.

These goals were attacked not so much for any intrinsic faults but because their consistency was questionable. How could all these good things be achieved simultaneously? Is this a list of dreams or a reasonable plan? From the vantage point of the fall of 1976, Carter's social and economic goals seemed to be quite consistent with his self-imposed goal of a balanced budget for fiscal 1981. The key to making all the new President's goals consistent is the assumption that full employment will be restored by fiscal 1981. Using a 4.5 percent full-employment unemployment rate, and assuming that real output at full employment grows at 3.75 percent a year between fiscal 1976 and 1981 and that inflation averages about 5.5 percent a year,¹ full-employment gross national product would be about \$2.90 trillion in fiscal 1981.

A \$2.90 trillion economy in 1981 could easily allow the attainment of the goals laid out by Carter in 1976: federal revenues would be approximately \$633 billion, about 21.8 percent of gross national product;² if federal spending were held to 21 percent, it would total about \$609 billion, which would be more than covered by estimated receipts, allowing about \$24 billion of tax cuts to balance the budget; federal spending already committed under existing law (current services outlays) would be \$531 billion, leaving "room" for about \$78 billion of new spending.³

1. A common inflation series is used throughout this chapter. It is based on Carter administration forecasts for 1977 and 1978 and House Budget Committee "high growth path" assumptions thereafter (see appendix A).

2. Up from 18.7 percent of actual GNP in fiscal 1976 because personal income taxes rise more than proportionately to national income, because corporate profits taxes were very low in 1976, and because of already legislated increases in social security and unemployment taxes. For derivation of receipts estimates at full employment under various assumptions about productivity and the full-employment unemployment rate, see appendix A.

3. Throughout this chapter, the budget margin—the gap between projected receipts and current services outlays—is divided into a spending increase component and a tax cut component by setting both receipts and outlays at 21 percent of full-employment GNP. Establishing a firm percentage of GNP as a limit on federal spending is obviously an oversimplified way of expressing the intention of "limiting the size of the federal government." It ignores the composition of federal spending (such as purchases of goods and services versus transfer payments), movements in relative prices of public and private goods (see chapter 2), and the fact that tax expenditures, not counted in federal outlays, are often a direct substitute for them (see appendix B). Nonetheless, for purposes of discussion, setting some expenditure target (in relation to output) is more helpful than simply assuming that all of the budget margin would be used for federal spending (because the receipts will be

Thus, in the 1976 campaign, Carter could reasonably promise to achieve his goals for the federal budget. Since that time, however, two factors have arisen to make the budgetary outlook less optimistic: revised estimates of potential gross national product and President Carter's 1978 budget revisions and commitments.

Revisions in Potential GNP

As explained in appendix A, the Council of Economic Advisers has lowered its estimate of how much gross national product would be produced at any given level of the unemployment rate. The principal reason for this revision is that since about 1966 growth in output per man-hour in the economy has declined sharply from the average of the postwar period. Even when corrected for the effects of the business cycle, the council maintains that productivity growth has declined very substantially. As a result, estimates of potential output in fiscal 1981 under the new productivity assumptions are more than 4 percent below earlier estimates based on more favorable productivity assumptions.⁴ In addition, the council has estimated that the changing age and sex composition of the labor force ought to raise the unemployment rate designated as the full-employment unemployment rate. The rate used in the new CEA estimates is 4.9 percent in fiscal 1976, falling to 4.8 percent by 1981, as the proportion of adult males in the labor force begins to rise again by that time.⁵

Revised estimates of full-employment gross national product in 1981 are about \$2.77 trillion, about \$127 billion below the earlier Carter estimate. This cut in projected GNP would result in a gloomier

there) or that it will all be returned to taxpayers (because it belongs to them for private use, unless a special tax is levied to finance a new program). Each of these polar positions on the uses of the margin has its advocates; the division used here is the one advocated by President Carter during his election campaign.

4. The new CEA projections also incorporate revisions in the GNP accounts to reflect prices prevailing in 1972 rather than in 1958, the previous benchmark year. Since sectors with fast output growth tend to have falling relative prices, this revision also lowers measured real growth.

5. These new rates are estimated by assuming that the full-employment unemployment rate was 4.0 percent in 1955 and that the unemployment rates of various age-sex categories remain fixed at the 1955 level. The full-employment unemployment rate rises over time solely because the proportions of the labor force concentrated in high-unemployment-rate age-sex cells is greater than in 1955. If adjustments were also made for worsening relative unemployment rates for women and teenagers, the rate would rise to 5.4 percent in 1976.

picture for President Carter's goals. Federal revenues in 1981, at a 4.8 percent unemployment rate, would be about \$598 billion, a drop of over 5 percent below previous estimates. Limiting federal spending to 21 percent of GNP in 1981 would imply a spending total of \$582 billion, about \$27 billion below the target estimated last fall. Tax cuts would be only \$16 billion. Current services outlays would not be very different from those estimated in late 1976—about \$532 billion.⁶ Thus, the elbow room for greater federal spending would only be about \$50 billion.

While the revised CEA potential output series gives heavy emphasis to reduced productivity growth during the past decade, it does not significantly change previous estimates of growth in the labor force. Since the 1960s labor force participation rates of adult women, in particular, have increased substantially. If these increases continue, it is possible that the added real output stemming from the larger labor force will offset declining productivity growth. In a recent paper, George L. Perry⁷ constructs a model of potential U.S. output that incorporates these recent labor force trends. As a result, Perry's estimate of full-employment⁸ gross national product in fiscal 1981 is \$2.85 trillion, midway between the Carter campaign estimate and the revised CEA series. Under Perry's full-employment output in 1981, federal receipts under the tax laws President Carter inherited would total about \$619 billion (21.7 percent of GNP). This would provide enough revenues to balance the budget at about \$598 billion (21 percent of GNP), provide a \$21 billion tax cut, and initiate about \$66 billion in new programs.

These revisions of potential output clearly affected budget decisions made in the early days of the Carter administration. The revised CEA estimates (which were available at the time Carter made his initial fiscal 1978 budget revisions) implied less room for new undertakings than was indicated during the campaign. The shrunken receipts estimates meant limited flexibility to lower taxes permanently. Whatever long-run estimate of full-employment gross national product is embraced by the Carter administration (at this writing it

6. This estimate corrects for the slightly higher outlays at a 4.8 percent, rather than 4.5 percent, unemployment rate in 1981.

7. "Potential Output and Productivity," *Brookings Papers on Economic Activity*, 1:1977.

8. Perry's full-employment unemployment rate is 5 percent, slightly above the revised CEA estimate.

Budget Prospects and Process

359

Table 11-1. Outlays and Receipts for the Current Services and Ford Budgets, Fiscal Years 1978 and 1981

Billions of dollars

<i>Item</i>	<i>1978</i>	<i>1981^a</i>
<i>Outlays</i>		
Current services	445.4	531.5
Proposed Ford reductions	-12.4	-31.3
Proposed Ford increases	+7.0	+26.7
Ford budget	440.0	527.0
<i>Receipts</i>		
Current tax laws extended	409.5 ^b	595.7
Proposed Ford reductions	-16.3	-46.3
Proposed Ford increases	+1.7	+14.2
Ford budget	394.9	563.6
<i>Budget margin or deficit (-)</i>		
Current services	-35.9	64.2
Ford budget	-45.1	36.6

Sources: Office of Management and Budget and author's estimates.

a. Based on the Council of Economic Advisers 1977 revised series of potential gross national product; see appendix A.

b. Includes reestimates made in February 1977.

has explicitly adopted none), the revisions of the Ford budget were made with the more constraining long-run view of potential output in mind.

President Carter's 1978 Budget Revisions

President Ford's proposed 1978 outlays included substantial increases above current service levels in national defense and several other areas, which were more than offset by proposed reductions, especially in manpower, income security, and health programs.⁹ In addition, President Ford proposed a large permanent tax reduction and a continued reduction of individual income taxes in future years to limit the average tax rate to the level it would reach in 1979. At the same time, he proposed increases in social security taxes.

Table 11-1 summarizes the future implications of the Ford budget proposals. His projected 1981 budget¹⁰ limited federal spending to

9. See chapter 2.

10. President Ford projected an unemployment rate in fiscal 1981 of about 4.8 percent, under the revised CEA potential output assumptions. Thus the debate about the 1981 outlook is about "potential" GNP as well as actual GNP. The projected budget data for President Ford's proposals have been adjusted for higher inflation rates to make them comparable to other data used in this chapter.

about 19 percent of gross national product, slightly less than the amount projected under current law, despite huge defense increases (nearly half of the \$26.7 billion in increases by 1981 was for national defense), by proposing reductions in current entitlement programs. At the same time President Ford countenanced a large reduction in federal receipts by 1981—to nearly 20 percent of gross national product in that year—because his long-run program apparently did not anticipate any major social initiatives.

President Carter's 1978 budget revisions were, therefore, severely constrained. The new President had to ask for a reversal of most of the Ford budget reductions, which were mainly repetitions of earlier cutbacks he had criticized in the campaign. But he was not ready to reverse most of Ford's proposed increases, including most of the critical defense plans, after only a few days in office. In short, Carter's dilemma was that he was committed to a substantial increase in the 1978 budget deficit to spur the economy, and yet had to raise revenues above President Ford's program to have a shot at a balanced budget in the future.

A glance at the long-run implications of the Ford proposals in table 11-1 indicates that undoing his proposed reductions and accepting some of his increases would alone raise 1981 expenditures beyond Carter's limits even without any stimulus program. Accepting permanent tax cuts to stimulate the economy would drive receipts below Carter's spending target in 1981.

The long-run implications of President Carter's 1978 budget revisions are summarized in table 11-2. Defense spending in 1978 was reduced slightly, but no explicit decision was made about future outlays; the estimate in the table eliminates all real growth in defense purchases beyond 1978. By reversing most of President Ford's budget reductions, especially in the labor, health, and income security areas—many of which were designed by the outgoing President to save huge sums of money in the future—President Carter implicitly drove up 1981 outlays into the \$550 billion range. For this reason, every attempt was made in designing the 1978 stimulus package and other budget revisions to limit the future spending implications of the new proposals. Nevertheless, the Carter budget revisions added nearly \$25 billion to the Ford proposals, driving up the 1981 spending base to about \$552 billion.

On the tax side, a similar eye to the future conditioned the new

Table 11-2. Carter Revisions to the Ford Budgets, Fiscal Years 1978 and 1981
Billions of dollars

<i>Item</i>	1978	1981	
		<i>Revised Council of Economic Advisers estimate^a</i>	<i>Perry estimate^a</i>
<i>Outlays</i>			
Ford budget	440.0	527.0	527.4
Stimulus program	+7.5	+0.9	+0.9
Defense changes	-0.4	-5.2	-5.2
Reestimates of uncontrollable programs, net ^b	+2.0	+5.4	+5.4
Reversals of Ford proposals and all other changes			
Education, training, employment, social services	+2.7	+3.9	+3.9
Health	+1.3	+9.0	+9.0
Income security	+3.8	+10.5	+10.5
All other	+5.7	+0.3	+0.3
Carter budget revisions	462.6	551.8	552.2
<i>Receipts</i>			
Ford budget	394.9	563.6	578.9
Reversal of Ford tax proposals and reestimates	+15.4	+34.2	+39.7
Stimulus program: personal tax cut	-5.6	-4.6	-4.6
Carter budget revisions	404.7	593.2	614.0
<i>Budget margin or deficit (-)</i>			
Carter budget revisions	-57.9	41.4	61.8

Sources: 1978 data, *The Budget of the United States Government, Fiscal Year 1978*, and Office of Management and Budget, "Current Budget Estimates, April 1977" (processed); 1981 data, *ibid.*, and Congressional Budget Office, backup sheets for data in House Committee on the Budget, *First Concurrent Resolution on the Budget: Fiscal Year 1978*, H. Rept. 95-189 (Government Printing Office, 1977), and author's estimates.

a. See appendix A.

b. Unemployment insurance, social security, and interest.

administration's strategy. President Ford's permanent tax changes were dropped. The stimulus program originally featured a tax rebate concentrated entirely in fiscal 1977, an optional business tax cut in the form of an investment tax credit presumed to terminate in 1980 (both later dropped), and individual income tax cuts that had the virtue of not exhibiting an increasing revenue drain over time.¹¹ Thus, the Carter tax revisions restored most of the revenue to the federal

11. See discussion in chapter 3.

Table 11-3. The Carter Budget Outlook under Alternative Assumptions, Fiscal Year 1981

Amounts in billions of dollars

<i>Basis of estimate</i>	<i>Outlays</i>		<i>Receipts</i>		<i>Margin of receipts over outlays</i>	<i>Use of margin, assuming budget in balance at 21 percent of GNP</i>	
	<i>Amount</i>	<i>Percent of full-employment GNP</i>	<i>Amount</i>	<i>Percent of full-employment GNP</i>		<i>Spending increase</i>	<i>Tax reductions</i>
Old estimates of potential output, 4.5 percent full-employment unemployment rate, mid-1976 spending levels and tax laws ^a	531	18.3	633	21.8	102	78	24
Adjusted for new estimates of potential output and full-employment unemployment rate ^a							
Revised Council of Economic Advisers series	532	19.2	598	21.6	66	50	16
Perry series	532	18.7	619	21.7	87	66	21
Adjusted for Carter fiscal 1978 budget revisions							
Revised CEA series	552	19.9	593	21.4	41	30	11
Perry series	552	19.4	614	21.6	62	46	16
Adjusted for payroll tax proposals							
Revised CEA series	552	19.9	604	21.8	51	30	21
Perry series	552	19.4	625	21.9	72	46	26

Sources: Appendix A and author's estimates. Figures are rounded.
a. The old and new estimates are explained in appendix A.

tax base that President Ford would have eliminated. Projected revenues for 1981, however, are heavily dependent on which of the new full-employment targets President Carter adopts. Under the revised CEA estimates, receipts would be \$593 billion, while the Perry estimate of potential output would yield \$614 billion.

President Carter's Social Security Proposals

On May 9, 1977, the Carter administration proposed far-reaching changes in the social security tax laws. Aside from some proposals that transfer monies from one government account to another, several proposals would have a significant impact on fiscal 1981 federal revenues.

The administration proposed \$10.6 billion in payroll tax increases. First, raising the payroll tax base for employers to the entire amount of wages and salaries in three steps between 1979 and 1981 would add \$9.2 billion to federal receipts in fiscal 1981. Second, increasing the tax rate on the self-employed from 7.0 percent to 7.5 percent in 1979 would raise \$0.4 billion in 1981. Third, increasing the wage base subject to employee payroll taxes by \$600 above currently scheduled increases in both 1979 and 1981 would raise federal receipts by \$1.0 billion in 1981.

The Implications of the Budget Choices

The transformation of the budget outlook facing President Carter is summarized in table 11-3. From what seemed, in the fall of 1976, the relatively easy task of deciding how to allocate as much as \$78 billion in new spending among competing social programs has evolved the more difficult task of squeezing social priorities into the \$30 billion to \$46 billion spending room above current service levels. The new President's revision of President Ford's final budget accounts for \$20 billion of this shrinkage, while the revised full-employment gross national product estimates, in lowering the spending target, supplied the rest.

The new estimates of potential GNP and the tax cuts proposed in Carter's budget revisions cut the 1981 revenue potential to nearly 21 percent of GNP. However, his social security tax proposals have hiked revenue potential in 1981 back up to the point where a net tax

reduction of \$21 billion to \$26 billion would still be consistent with balancing the budget. While the prospects of achieving the new administration's aims are considerably less sanguine than they were during the campaign, it does appear that new spending programs combined with tax cuts totaling about \$60 billion may still be feasible.

Adjusting the Budget Projection Assumptions

This bare outline of budgetary prospects must be qualified in several ways. Many alternative procedures for projecting outlays and receipts are possible; unfortunately, many of these qualifications make the budget outlook worse, not better.

Outlays

First, in projecting 1981 budget outlays implied by current programs, many arbitrary and politically unrealistic assumptions are made. For example, the projections discussed thus far adjust federal spending for anticipated inflation only in those programs where such adjustments are required by law.¹² If outlay increases were so limited, there would be a steady erosion in the purchasing power of federal grants-in-aid that are not indexed, such as aid to education, and a decline in real services in nondefense operating programs, such as the national park service. If all these other programs were adjusted to maintain the 1978 level of real services, an additional \$15 billion in spending would be required in 1981.¹³

Second, the projections made here delete some \$5 billion in 1981 outlays that represent real growth implied by President Ford's national defense program. The debate on defense spending has narrowed to *how much* real growth we need.¹⁴ It is probably prudent to

12. Principally entitlement programs that are indexed and pay for federal employees. In addition, this chapter uses the practice of the Office of Management and Budget of adjusting procurement and operations and maintenance programs in the Department of Defense for inflation because appropriations for these programs include estimates of anticipated inflation.

13. These adjustments include maintaining the 1978 value of grants and other federal purchases, a cost-of-living increase for veterans' benefits, and the effect of these adjustments on federal interest costs. The estimates are from the Congressional Budget Office, reported in backup sheets for House Committee on the Budget, *First Concurrent Resolution on the Budget: Fiscal Year 1978*, H. Rept. 95-189 (Government Printing Office, 1977).

14. See chapter 4.

Table 11-4. Effect of Alternative Assumptions on the Budget Margin, Fiscal Year 1981
Billions of dollars

<i>Item</i>	<i>Use of margin^a</i>	
	<i>Spending increase</i>	<i>Tax reductions</i>
Total margin implied by Carter's 1978 budget revisions and payroll tax proposals	30-46	21-26
<i>Alternative assumptions</i>		
Adjust for inflation in nonindexed programs	-15	...
Adjust for real growth in defense spending as in Ford budget	-5	...
Adjust individual income taxes		
Limit taxes to 9 percent of GNP	...	-42 to -48
Eliminate rate increase due to inflation occurring after 1978	...	-21 to -22

Sources: Line 1, table 11-3; other lines, Congressional Budget Office and author's estimates.

a. The first entry is implied by the revised CEA estimate of potential GNP and the second by Perry's estimate.

plan to use some of the elbow room in the budget for these inflation and defense adjustments (see table 11-4).

Receipts

The projections of taxes in budget planning exercises always start with the revenue implications of existing tax provisions; this has been done here, modifying 1981 receipts only for President Carter's increased standard deduction and payroll tax proposals.

These projections are probably an unrealistic view of likely congressional behavior, however. Individual income tax receipts would grow from 8.9 percent of gross national product in 1978 to about 10.5 percent in 1981 if current laws are unchanged, because inflation and recovery will raise average effective tax rates. In the past, upward drifts in personal income tax rates have been offset by tax reduction laws. President Ford's budget followed this precedent by proposing to freeze effective tax rates at the level they would reach in 1979 (about 9 percent of GNP). This would result in a reduction in taxes of \$42 billion to \$48 billion by 1981,¹⁵ pushing the new administration's receipts well below its target for a balanced budget at 21 percent of GNP in 1981. Even limiting tax reductions to eliminating

15. The smaller reduction is implied by the revised CEA estimate of potential GNP and the larger by Perry's estimate.

the higher tax rates due solely to post-1978 inflation would necessitate a tax cut of \$21 billion to \$22 billion by 1981 (see table 11-4).

Summary

The upshot of these adjustments to the budget outlook can be summarized as follows. On the spending side of the budget, if President Carter is to limit spending to 21 percent of full-employment gross national product in 1981, new program initiatives will be limited to \$10 billion to \$26 billion unless inflation adjustments are withheld and real defense growth is stopped. The only other way to find resources to finance new initiatives—such as welfare reform, which alone could cost \$25 billion¹⁶—is to cut back expenditures on existing programs.¹⁷ President Carter hopes to do this with the aid of a new budget process, which is evaluated in the second part of this chapter.

On the receipts side of the budget, the goal of budget balance is equivalent to limiting taxes to 21 percent of gross national product.¹⁸ Existing tax laws, supplemented by President Carter's payroll tax increase, would yield receipts about \$25 billion above that percentage. This excess in receipts, however, is just about the amount necessary to provide a tax cut offsetting the individual income tax rate increases produced by inflation between 1978 and 1981. This, in large part, explains why President Carter strongly opposed permanent tax cuts in the early days of his administration. In order to make a strong tax reform palatable, the President will need every spare dollar for tax reduction (over and above any gains from reform). The 1981 excess is big enough for one (but only one) significant tax cut; any larger tax cut would eat into the shrinking spending margin.

Questioning the Basic Economic Assumptions

The budget projections, and the conclusions drawn from them, are only as good as the assumptions on which they are based. Many people would question some of the underlying assumptions about in-

16. See chapter 8.

17. If the Carter administration chooses to support a large-scale national health insurance program, most of its costs would have to be financed through new taxes.

18. President Carter's energy tax proposals are potentially so large that it is impossible to integrate them with an overall budget plan. The package includes provisions to rebate all taxes collected, and thus becomes a separate balanced budget. In any event, Carter's campaign promises on the budget ignored energy taxes and rebates.

flation and the ability of the economy to reach full employment under a balanced budget target.

Inflation

The price increases assumed in this chapter show a steady decline from about 6 percent between fiscal years 1977 and 1978 to 5.1 percent a year between fiscal 1979 and 1981. But a case could be made for changing these assumptions, either up or down.

The case for revising the inflation adjustment upward is straightforward. As the unemployment rate drops from the 7.0 percent range in mid-1977 to the assumed 5.0 percent range in 1981, one would normally expect that labor and product markets would tighten. An optimistic view would be that markets are so slack at the start of the period that tightening would have no appreciable effect on the rate of inflation. But "no appreciable effect" implies a constant inflation rate (about 6 percent throughout the fiscal 1978-81 period), not the decelerating rates assumed in the present projections. Further, according to this view, if one adds to the tightening of demand the administration's energy tax proposals, and the likelihood that world commodity prices will rise as the industrial economies simultaneously recover from slack conditions, the chances for a decelerating inflation seem small.

The contrary view—that the inflation rate will be lower—is taken by the Carter administration. When the administration announced its anti-inflation program in the spring of 1977, it also enunciated the goal of reaching a 4 percent inflation rate by the end of 1979. The case for such deceleration of inflation, despite a return to full capacity in labor and product markets, is based on several considerations. First is the belief that the mid-1977 inflation rate is still echoing the double-digit inflation rate of 1974. As 1974 recedes in the memory of labor-management negotiators and as relative wages and prices adjust to the big hike in energy prices, the underlying inflation rate could recede. Second, it is argued that price advances in slack markets, characteristic of the 1975 recession, are partly due to business fears of the reimposition of price controls in some form. The Carter administration's anti-inflation program carefully avoids any hint of price controls in the future.¹⁹ If this policy, therefore, has the intended psychological effect on price setters, inflation could be trimmed.

19. See chapter 3.

Third, efforts are underway both domestically and internationally to create buffer stocks of various commodities, which could moderate at least the most extreme upward movements in prices (for instance, coffee) that contributed to inflation in the past. Finally, it is argued that even though aggregate demand in the U.S. economy is moving up to eliminate slack, the fact that the administration is planning to accomplish this through a balanced budget would decelerate inflation. This claim is based on the belief that a dollar's worth of demand from government sources is inherently more inflationary than a dollar's worth of private demand.²⁰

The implications of these alternative inflation assumptions for the budget projections are widely misunderstood. For example, although achieving President Carter's goal of 4 percent inflation would be welcome news for the economy, it would, ironically, reduce the budget margin. This is because federal revenues are much more responsive to inflation than are outlays in programs automatically adjusted for inflation. If inflation were held to 4 percent beginning in early 1980, the projections of federal revenues by fiscal 1981 would fall by \$16 billion, while outlays in indexed programs would decline by only \$7 billion. This would reduce the margin between receipts and outlays by \$9 billion out of the \$51 billion to \$72 billion estimated in table 11-3. If the anti-inflation program succeeds, in other words, providing \$60 billion in additional expenditures or tax cuts and still balancing the budget would be considerably more difficult. Conversely, any quickening of inflation would pour receipts into Washington faster than indexed programs would ship them out, thereby at least temporarily improving the federal deficit.²¹

The major conclusion that ought to be drawn from this is certainly not that inflation is good—only a single-minded goal of balancing the budget could produce that answer—but rather that an unanticipated change in the rate of inflation requires a rethinking of budgetary and economic goals. This point will be considered after outlining the debate over the unemployment rate assumptions.

20. A variant on this point is that even if there is no difference in the inflationary impact of public versus private demand (as most economists believe), as long as major corporation leaders believe that deficits are *the* cause of inflation, they will act accordingly and raise prices even in weak markets, until they observe budget balance.

21. How Congress would adjust programs that do not have automatic inflation adjustments could reverse these effects, but such reactions are problematic and would take time.

Unemployment

The projections discussed earlier in this chapter assumed that a full-employment economy would be reached by fiscal 1981, despite the administration's intention to move from a very stimulative budget in 1978 to less stimulative fiscal policy with a balanced budget in 1981. The question is whether moving to a balanced budget in 1981 is compatible with demand sufficient to sustain full employment in that year.

DEMAND PESSIMISTS. One group of pessimists argues that this scenario will not work because private demand will not take up the slack created as the federal government's demand growth ebbs. This view is largely based on the observation that the real growth rate over the period 1978–81 required for full employment, especially when coupled with the recovery phase of the business cycle from 1975 to 1977, would imply an unprecedented period of rapid growth of output, greatly in excess of the average rates in either the 1960s or early 1970s. Thus, for example, under Perry's definition of full-employment gross national product, annual real growth would have to average 6.2 percent between 1978 and 1981.²² While this rate would represent a postwar high, it is important to remember that never in the 1960s or early 1970s did the economy start so far below its potential—however measured—as it was in 1975 and 1976. So an uncommonly strong growth rate would be built on an uncommonly large reserve of unused productive capacity. Such a situation is unprecedented all around, and historical averages do not help much in predicting whether such rapid growth is feasible.

A more sophisticated version of the thesis that the nonfederal sector's underlying demand is too weak to compensate for a more restrictive fiscal policy is based on an analysis of these other components of demand. Aside from federal purchases of goods and services, aggregate demand consists of consumption, investment, state and local government spending, and net exports. If federal spending on goods and services rises yearly at a real rate of 2.7 to 3.6 percent,²³ while real gross national product must grow at a 5.2 to 6.2 percent rate,

22. The average annual growth requirement for the revised CEA version of potential output is 5.2 percent.

23. This is the annual rate of growth of total federal outlays in 1978–81 needed to reach 21 percent of GNP in 1981 under the revised CEA and Perry series, respectively. "Real" rates here mean deflated by the GNP deflator.

some or all nonfederal demands must grow faster than real GNP. With federal individual income taxes rising rapidly, real consumption is likely to grow even less than real GNP. This means that the burden of filling the aggregate demand gap falls disproportionately on domestic investment (about 14 percent of GNP in 1976), state and local spending (about 13 percent), and net exports (about 1 percent).

Although net exports would boom if the members of the Organization of Petroleum Exporting Countries accelerated spending out of their balance-of-payments surpluses, the net export sector is too small to supply the needed rises in demand to replace a shrinking federal sector. State and local government spending does not hold out much hope either. The major forces that drove up these expenditures in the past (growth of school and college enrollments and the catch-up effort in public employee wages) have waned, and these governments are under pressure to enlarge budget surpluses to provide for future pension liabilities.²⁴

In the end, the attainment of full employment by 1981 under a balanced budget depends on a buoyant level of private domestic investment. Specifically, it appears that real investment expenditures would have to grow about 4 percent per year faster than real gross national product (depending on exactly what assumptions are made about other spending sectors) in order to sustain a fully employed economy in 1981.²⁵ Such a growth of investment is not out of line with postwar experience. In the 1961–65 upswing, for example, the annual rate of growth of real investment exceeded that of real gross national product by over 4 percentage points per year, about what would be required in a 1978–81 upswing. Alternatively, if investment were to grow at 10 percent a year in 1978–81, the ratio of investment to gross national product (under Perry's estimates) in fiscal 1981 would be about 15 percent,²⁶ well under the ratio in calendar year 1973, the last boom year.

24. See Henry Owen and Charles L. Schultze, eds., *Setting National Priorities: The Next Ten Years* (Brookings Institution, 1976), chap. 9.

25. This exercise can be continued ad infinitum. One can argue that inventory investment cannot grow in excess of GNP for any length of time and that residential construction is already booming in the base year, so that all the stimulus must come from plant and equipment spending. While this conclusion is qualitatively correct—business fixed investment is the key sector—the chance of error in estimating it by successive removal of best guesses in other sectors is great.

26. This assumes that the ratio of real investment to real GNP in 1978 will be the same as in 1976, which is probably a lower bound.

Thus, it is by no means inconceivable that nonfederal demand will grow fast enough to make up for a tightening federal budget and produce a fully employed economy. Whether such rapid growth materializes will depend on many factors, not the least of which is cooperation from the monetary authorities in preventing a tightening of the cost and availability of credit. But assuming such monetary ease is problematic; the pessimists' case cannot be ruled out.

DEMAND OPTIMISTS. The pessimistic position essentially argues that if the economy were to approach full employment, the amount of saving that the private sector (including here state and local governments and the foreign sector) wishes to undertake will exceed private investment demand. The opposite view is that as full employment is approached, private investment demand will exceed private saving. There will then be increased bidding for labor, capital, and other resources and inflation will accelerate before full employment is reached. According to this view, the underlying strength of private demand will first show itself as a "shortage of capital," with willing investors unable to find funds to borrow as full employment is approached.

This description of the state of nonfederal demand fits previous postwar episodes of full employment much better than the alternative view. The full-employment economies of 1955, 1966, and 1973 were all followed by increased rates of inflation and credit squeezes; in all three of these years the federal budget in the national income and product accounts was very close to being in balance. There is, of course, no certainty that future instances of full employment with a balanced budget will set off such inflationary forces, but any energy program that forces retrofitting of buildings, conversion to new energy sources, and rapid replacement of gas guzzlers would increase the prospects for this kind of strong private investment demand.

Budget Making under Uncertainty

The uncertainties about the economic assumptions underlying the budget projections discussed in this chapter cannot be resolved now. In reality, economic forecasting is in no position now to predict the weakness or strength of demand in fiscal 1981 or to pinpoint the inflation rate that will follow from any given unemployment rate. There is inadequate evidence now to reject the kinds of assumptions behind the projections laid out above. And yet the President and the

Congress must make decisions now that will affect the budget several years hence. The trick to rational budget planning is to retain enough flexibility, as to both goals and budget commitments, to allow for reassessment of plans as more information becomes available.

Thus, the early decisions of the Carter administration—to limit revenue losses and to minimize the long-run spending effects of initial decisions—were based on the supposition that there was relatively little spending room in the future and that future tax revenue should be saved for tax reform. This strategy seems warranted on the basis of the budget projections already discussed. But, as noted, the economic assumptions may be wrong.

As time passes, new information about the economy will become available. On the one hand, the nonfederal economy may prove weaker than expected: unemployment may not drop off and incomes may not rise as anticipated. Such an outcome would make both reaching full employment and balancing the budget less likely. The administration will, in that case, have to choose what is more important to the nation; balancing the budget is by no means the obvious choice. Indeed, if nonfederal demand proves to be so weak, a good case can be made for planning a deficit at full employment. This would mean boosting spending or increasing tax reductions above initial plans. There is no reason to make such a policy shift now; but since such a change is not unlikely to be needed it is a mistake to commit the nation to a balanced budget in such a way that future revisions cannot be made.

On the other hand, accumulating evidence may indicate that while unemployment rates are declining according to plan, inflation is higher than expected. If high rates of inflation seem to be due to a general buoyancy of demand as a 5 percent unemployment rate is approached, the proper fiscal policy would call for planning a budget surplus at that level of unemployment, allowing government savings to supplement private savings and alleviating inflationary pressures.²⁷ This kind of revised budget plan (which is equivalent to aiming for budget balance at a higher unemployment rate than the one originally designated as the full-employment unemployment rate) requires that

27. Planning for a full-employment surplus may be favored on other grounds as well. The share of private investment in full-employment GNP can be increased by pursuing an easier monetary policy combined with a tighter fiscal policy. To the extent that one believes that there are institutional and tax forces driving investment below its socially optimal level, such a change in mix of policies would be warranted.

the spending side of the budget not be so fully committed as to make future expenditure slowdowns impossible. It also implies that some flexibility on the tax side be maintained: all the planned tax reductions should not be committed in advance.

Worst of all, if inflation were to proceed at a more rapid pace than initially assumed and high unemployment persisted as well, a thorough reworking of economic policies as well as budgetary goals would be called for. Under such a persistent "stagflation," the mild anti-inflation program of the Carter administration would certainly have to be reconsidered. Aggregate fiscal policy alone cannot remedy stagflation. In the light of the economic outlook after anti-inflation policies were adjusted, there would be every reason to revise the goals set for budget balance and federal share of gross national product that were based on assumptions that failed to materialize. Once again, the time to make these decisions is when the evidence is in—not now.

This concept of a continually revised budget plan is in contrast to the only two alternatives possible for dealing with the uncertainty of the economic future. One is to forget planning altogether and base current budget decisions on short-term fiscal considerations only. This strategy is very close to what the federal government has done in the past. It leads to adoption of programs with unexpected future consequences and to spending programs in times of recession whose only virtue is speed. In short, it means abandoning the conscious setting of priorities.

The second strategy is to develop budget plans according to a worst-case set of assumptions—to act as if there were a weak non-federal sector and a very poor trade-off between inflation and lowering unemployment. Such assumptions would probably mean raising unemployment rate targets (say, to 5.5 percent) and proceeding very cautiously on any spending programs for the long run. This strategy has the virtue of being almost sure of self-fulfillment. If the federal government pulls in its reins drastically, unemployment is sure to remain high, although price rises will probably be less than the worst-case projection. This approach really implies throwing in the towel on achieving economic and social goals.

Thus, given the alternatives, and despite the uncertainty of the assumptions, the long-view approach taken by the Carter administration seems to represent a reasonable way to make budget decisions.

Table 11-5. The Budget Outlook, Fiscal Years 1978-81

Amounts in billions of dollars

<i>Item</i>	<i>1978</i>	<i>1979^a</i>	<i>1980^a</i>	<i>1981^a</i>
<i>Outlays</i>				
Current policy ^b	463	496	528	567
Target level ^c	463	500-504	540-549	582-598
As percent of GNP	22.6	22.0	21.5	21.0
<i>Receipts</i>				
Current policy ^d	405	465-470	530-542	604-625
Target level ^e	405	457-461	516-525	582-598
As percent of GNP	19.8	20.2	20.6	21.0
<i>Planning margin or deficit (-)</i>				
Current policy	-58	-31 to -26	2-14	37-58
<i>Target path^f</i>				
Spending room	...	4-8	12-21	15-31
Tax reduction	...	8-9	14-17	21-26 ^f
Actual surplus or deficit (-)	-58	-43	-24	0

Source: Author's estimates, as explained in notes. Figures are rounded.

a. The first entry is implied by the revised CEA estimate of potential GNP and the second by Perry's estimate; see appendix A.

b. Based on data from Congressional Budget Office, backup sheets for data in House Committee on the Budget, *First Concurrent Resolution on the Budget: Fiscal Year 1978*, adjusted to include inflation adjustments for nonindexed as well as indexed programs.

c. Estimated by charting a constant annual rate of growth of outlays or receipts to reach 21 percent of GNP in fiscal 1981.

d. Estimated from GNP using constant real growth from fiscal 1978 to 1981 of 5.2 percent and 6.2 percent to reach revised CEA and Perry potential outputs, respectively, and price assumptions from appendix A. Receipts have been adjusted to include President Carter's proposed increased standard deduction and his social security tax increase proposals made in May 1977.

e. Spending room or tax reduction is the difference between the target level and current policy estimates of outlays or receipts.

f. Based on difference between current policy and target level receipts before rounding.

But it is the first step; the budget plans will need continual revision and the budgetary goals, including budget balance, will need continual reevaluation. The next step for the Carter administration will be the fiscal 1979 budget, which promises to be a very difficult one.

The 1979 Budget

The Carter administration will submit its first full-fledged budget for fiscal 1979 in January 1978. Table 11-5 presents estimates of the numbers behind the decisions that will have to be made in the course of preparing that budget. "Current policy" outlays—including inflation adjustments for nonindexed as well as indexed programs (see

table 11-4)—are projected to rise to \$496 billion in 1979.²⁸ Receipts will depend on how well the economy recovers. Table 11-5 illustrates the path of receipts assuming a smooth recovery from fiscal 1978 to both the Council of Economic Advisers revised potential output and Perry's estimate of potential output in 1981, with the former showing lower receipts due to lower expectations of output growth.²⁹ Current policy receipts include President Carter's increased standard deduction and social security tax increase proposals.³⁰ Under these assumptions, the budget deficit would range from \$26 billion to \$31 billion in fiscal 1979.

If a current policy budget were pursued through 1981, a surplus ranging from \$37 billion to \$58 billion would occur. Since the Carter administration has called for a balanced budget at 21 percent of gross national product in 1981, spending programs above current policies of \$15 billion to \$31 billion would be undertaken and tax reductions of \$21 billion to \$26 billion would be in place by 1981. A "target level" for outlays and receipts can therefore be estimated by charting a constant growth path so that each reaches 21 percent of GNP in 1981. This implies an outlay total of \$500 billion to \$504 billion and receipts of \$457 billion to \$461 billion in 1979 (table 11-5).

Thus, as the Carter administration decides during 1977 what levels to propose in its fiscal 1979 budget, its choices are quite constrained. If the economy proceeds on the course assumed in these projections, 1979 outlays might include \$4 billion to \$8 billion in new initiatives above existing programs.³¹ Even this amount of spending room could be eroded by congressional action to raise the administration's 1978 outlay proposals, by delays to fiscal 1979 in spending for the new public works and public service employment programs, by any provision for real defense growth, and by any catching up of expenditures in programs that exhibited a shortfall in fiscal 1977.

28. The noncompulsory inflation adjustments are \$4 billion, \$9 billion, and \$15 billion in 1979, 1980, and 1981, respectively. The current policy estimates do not include real growth in defense expenditures.

29. Real GNP is assumed to grow at an annual rate of 5.2 percent in the revised CEA estimates and of 6.2 percent in the Perry estimates between 1978 and 1981.

30. The social security proposals add \$2 billion, \$6 billion, and \$11 billion for fiscal years 1979, 1980, 1981, respectively.

31. This is the difference between the target level of outlays of \$500 billion to \$504 billion and current policy outlays of \$496 billion. It is shown as "spending room" in table 11-5.

In any event, the fiscal 1979 outlay target that is consistent with the administration's long-run plan does not leave much room for new initiatives. Moreover, the 1979 target outlay level represents growth of 8-9 percent over fiscal 1978, a considerable slowdown from the 13 percent increase in the previous fiscal year.

On the receipts side, a smooth path to budget balance in fiscal 1981 would allow \$8 billion to \$9 billion in tax reductions in 1979. This raises two problems for the Carter administration. First, the initial reaction to President Carter's \$11 billion tax rebate proposal suggests that a tax cut of this size will be derided as inadequate. Since the political chances of the administration's tax reform package will probably be dependent on the net tax reduction accompanying it, this limited tax reduction flexibility may jeopardize tax reform. There will thus be pressures to enlarge the tax reduction in fiscal 1979. But this raises the second problem: if both outlays and taxes are keyed to budget balance in fiscal 1981, the actual budget deficit in 1979 will be \$43 billion.³² Even though this deficit is consistent with a balanced budget in 1981, the administration will have a tough time explaining why, in the second fiscal year after 1977, its deficit is down by only about \$6 billion.

The economy never performs exactly as anticipated. The planning budget shown in table 11-5 can be used to illustrate how the administration might react to changes in the economy. If recovery proves sluggish in 1977, one would expect an acceleration of the timetable for new spending initiatives and tax reductions. Such changes might jeopardize the prospects for a balanced budget in fiscal 1981, but they would help in meeting the goal of reaching full employment by that year. On the other hand, in the course of planning the fiscal 1979 budget the economy may improve more rapidly than expected and inflation may turn up. In that case, one would expect a strong push from the White House to restrain the 1979 budget to somewhere near current policy levels, postponing tax reductions and new programs to later years. Such a move would make it unlikely that \$60 billion in new initiatives could materialize by 1981.

One matter of concern—though it is endemic to the federal budget process—is that all these budget decisions will have to be made

32. This deficit results from 1979 receipts and outlays of \$461 billion and \$504 billion, respectively, in the Perry estimates, and \$457 billion and \$500 billion, respectively, in the revised CEA estimates (table 11-5).

by late 1977, yet the proper fiscal policy depends on forecasts of the economy as late as September 30, 1979, the end of fiscal 1979. This means that the President must try to chart a course to his long-term goals using imperfect instruments under conditions of poor visibility.

PART II. NEW DIMENSIONS IN THE BUDGET PROCESS

President Carter's difficult budget choices over the next few years would be eased if the future costs of existing programs were lower. In that case, the administration could propose a higher level of spending for new programs (or for high-priority old programs) at any desired level of total federal spending. This section evaluates President Carter's choice of a budget process to help weed out low-priority expenditures and contrasts it with other new developments in federal budgeting.

The Composition of Current Services Spending in Fiscal 1981

Before discussing the process to be used to identify areas of budgetary saving, it is important to understand the composition of the \$552 billion in spending projected for fiscal 1981 after President Carter's 1978 budget revisions (table 11-3). A useful way to divide up that total is to look first at the 1978 spending level of \$463 billion and then at the projected increase in outlays from that level.

The shares of President Carter's 1978 budget, according to type of spending, are shown in table 11-6. Whatever process is used to examine the existing budget base ought to be well-suited to an intelligent examination of transfers, grants-in-aid, and national defense programs, for these represent 80 percent of current spending. Unfortunately, there is some reason to question whether the new executive branch budget process for examining the budget base is well adapted to these types of spending.

The other component of the projected \$552 billion in spending for 1981 is the *increase* of \$89 billion in expenditures under existing programs between 1978 and 1981. Table 11-7 lists the principal components of these changes. Four broad program areas account for virtually all of the projected spending increase, with the rest of the

Table 11-6. Composition of Budget Outlays by Type of Spending, Fiscal Year 1978

<i>Type of outlay</i>	<i>Amount (billions of dollars)</i>	<i>Percent of total</i>
Transfer payments ^a	200	43
Grants-in-aid ^b	56	12
National defense	113	24
Net interest	32	7
Other federal operating programs	62	13
Total	463	100

Sources: Office of Management and Budget, "Current Budget Estimates, April 1977," and author's estimates.

a. Office of Management and Budget's "nondefense payments for individuals."

b. Excluding those supporting transfer payments.

budget consisting largely of offsetting smaller increases and decreases.

Social security accounts for 35 percent of the projected expenditure increase. About half of this projected rise is due to the automatic cost-of-living indexation of beneficiaries' monthly payments and half to the growing numbers and higher earnings histories of incoming beneficiaries. Medicare and Medicaid account for another 21 percent of rising expenditures. The key factors in this increase are the expected rise in medical care prices and, especially for Medicaid, a projected large increase in utilization of higher-cost services over the period. Federal employee pay and retirement programs account for 22 percent of expected outlay growth. Since employment is projected to remain approximately constant during the period, all of the rise in pay is attributable to growing wage rates, based on comparability to private sector pay. Retirement costs are subject to the same factors as social security.

National defense increases make up 33 percent of the projected increase in federal spending between 1978 and 1981. Pay increases and pensions for retired personnel (not including veterans pensions under the Veterans Administration) account for about 11 percent of total federal outlay growth. Most of the remaining 22 percent is attributable to inflation in existing purchases and to an accelerated rise in these purchases as a result of the rapid appropriations increases since 1975.³³

One approach to cutting into the projected 1981 budget base is to focus on the increases in spending between now and then, on the

33. See chapter 4.

Table 11-7. Components of Increase in Federal Outlays, Fiscal Years 1978-81

Item	Increase, 1978-81	
	Amount (billions of dollars)	Percent of total
Total outlays, 1978	463	...
<i>Plus: sources of increase</i>		
Social security	31	35
Medicare and Medicaid	18	21
Federal employees pay and retirement	20	22
Civilian agency pay	5	5
Department of Defense pay	7	8
Civilian retirement and disability and military retirement	8	9
National defense (net of pay and retirement)	20	22
Reduction in unemployment compensation and in countercyclical programs	-13	-14
All other	13	14
Total	89	100
<i>Equals: projected 1981 outlays</i>	552	...

Sources: Congressional Budget Office and author's estimates.

premise that it is politically easier to *prevent* a spending increase than to take away something already in hand. The listing of projected spending increases suggests possible fruitful areas for paring, such as price and cost controls in health programs and changes in the rules governing federal employee pay and in determining social security benefits. The national defense sector is so huge that the simple inflation adjustment for purchases accounts for over \$10 billion in outlay growth, not to mention whatever might be added later for real growth. Apparently, such a selective approach to trimming the budget was rejected by the Carter administration in favor of a comprehensive view of federal spending.

Zero-Base Budgeting

Zero-base budgeting (ZBB) is the name given to a technique of budgetary decisionmaking developed in 1969 for a large corporation. The technique has been used by several state and local governments, notably Georgia, where Governor Carter adopted the process in the preparation of his 1973 budget.

The essence of zero-base budgeting is that it forces program managers to define a minimum level of effort (below the current level)

and incremental levels of effort above the minimum for each program. These levels of effort are then ranked by management in decreasing order of priority to indicate the agency's willingness to undertake various levels of effort in each program as the agency budget rises. A cutoff line is established and levels of effort above the line are approved. Those below the line are not funded. If the minimum level of effort of any program falls below the budget line, that entire program is wiped out.

In an executive order dated February 14, 1977, President Carter directed the heads of executive departments and agencies to implement this zero-base budgeting process in the fiscal year 1979 budget. The initial directive to federal agencies³⁴ specifies that each "decision unit," the program or organizational entity for which budgets are prepared, prepare the following materials.

Decision unit overview. Among other things, this includes a statement of major objectives, the "ultimate realistic outputs or accomplishments expected," as well as a description of the feasible alternative ways of accomplishing them. The method proposed for the budget year is identified, and expected accomplishments of the decision unit are described, using both quantitative and qualitative measures of results.

Decision packages. In addition to identifying information, each decision package must contain an activity description, resource requirements, a short-term objective, and a statement of impact on major objectives. These packages must show the added service at each level of effort, including the following: Minimum level, defined as the level below which the activities can no longer be conducted effectively; this must be below the current level (unless operation below that level is impossible). Current level (unless the total requested for the decision unit is below the current level): a concept similar to the current services level described in chapter 2. The decision unit estimates the budget required to maintain the current year level of activity. When appropriate, it may also include a level or levels between the minimum and current levels; and any additional increments desired above the current level.

Ranking sheet. Each review level prepares a ranking sheet that lists the various levels of minimums and increments in descending

34. The following is paraphrased (or quoted directly) from Office of Management and Budget, "Zero-Base Budgeting," Bulletin 77-9 (April 19, 1977; processed).

order of priority to submit to the next higher review level. Higher level review may result in the addition or deletion of decision packages and the revision of decision packages or rankings. Some or all of the initial decision packages may be consolidated.³⁵

Advantages

The advantages of this approach are that it will allow agencies, the Office of Management and Budget, and the President to see the consequences of funding programs below current service levels and to replace some currently built-in costs with new programs or large increments in other existing programs. The process in principle gives no special preference to "old" budget dollars in their competition with "new" ones. Advocates of zero-base budgeting frequently contrast it with "incremental budgeting," which, they contend, takes the current service level as a given base, and considers only positive increments to the base. To some extent this picture of incrementalism does represent how budgeting has been done in the federal government.³⁶ By treating all parts of the budget comprehensively and equally, zero-base budgeting may uncover unnoticed waste and avoid the special advantages that may have accrued to old standby programs.

Many of the other advantages that are claimed for zero-base budgeting do not seem to require its elaborate ranking format, but may still be of value. One such claim is that ZBB improves the information that managers need to make budgetary decisions.³⁷ Another is that ZBB integrates planning, budgeting, and operational decisionmaking into one process. Finally, by requiring that a common methodology be followed all the way down to the lowest levels of each agency, zero-base budgeting offers the prospect of involving more people in

35. There are some hints of flexibility in OMB's approach. Although all agencies in the executive branch whose budgets are subject to presidential review are required to go through the same zero-base budgeting exercise, selected special issues will be identified by the agencies for more traditional studies (issue papers) when decision packages are not appropriate. These will also influence budget decisions.

36. One feature of past budget practice that limited rigid incrementalism was that the dollar estimates of current service levels were regarded as inaccurate. ZBB may, ironically, strengthen an incremental approach by furnishing better current service estimates.

37. According to about two-thirds of the budget analysts in the government of the State of Georgia, ZBB has brought about such an improvement. George S. Minnier and Roger H. Hermanson, "A Look at Zero-Base Budgeting: The Georgia Experience," *Atlanta Economic Review*, vol. 26 (July-August 1976), p 9.

budgeting and taking advantage of the expertise of program managers.

One purported advantage of zero-base budgeting in the operation of state and local governments is quite inapplicable to the federal budget. ZBB is suited to "allowing for quick budget adjustments or resource shifts during the year, if necessary when revenue falls short."³⁸ This advantage presumably stems from the ease of moving the budget cutoff line up the priority listing, eliminating the lowest ranked programs.³⁹ In the federal government, however, revenue shortfalls do not necessitate spending level cutbacks, because, unlike state and local governments, the federal government has no requirement for a balanced budget. (Indeed, a revenue shortfall caused by a weak economy is often a reason to raise spending.) Moreover, budget adjustments during a year generally mean going back to Congress for revised appropriations. A President, unlike a business executive, cannot reprogram funds.

Disadvantages

Several criticisms about the suitability of zero-base budgeting for the federal budget process have been made.⁴⁰

WASTE OF MANAGERIAL RESOURCES. A great deal of top management's time in the federal government is spent on the budget; changes in the budget process that improve the efficiency of that time are therefore valuable. The executive branch has been moving toward economizing on decisionmaker's time by taking the current service level as the base of the budget, concentrating executive attention on small changes (positive *and* negative) from that base. Zero-base budgeting, in principle, spreads managerial time over each dollar in a program's budget. But the gain in discovering a very inferior program (one whose minimum level is ranked low) must be weighed against the possible loss of executive time that might better be spent in careful study of small changes from the current service base.

38. Jimmy Carter, "Zero-Base Budgeting," *Nation's Business*, vol. 65 (January 1977), p. 26.

39. In fact this does not seem to be the experience in Georgia where changing budget levels in 1974 and 1975 led to the submission of entirely new decision packages. See Minnier and Hermanson, "A Look at Zero-Base Budgeting," p. 9. Peter A. Pyhrr seems to claim the opposite; see "The Zero-Base Approach to Government Budgeting," *Public Administration Review*, vol. 37 (January-February 1977), p. 7.

40. Many of these issues are raised by Robert N. Anthony, "Zero-Base Budgeting Is a Fraud," *Wall Street Journal*, April 27, 1977, p. 26.

In practice, however, because an overwhelming majority of programs are not really under serious challenge and will not be scaled back to zero, the zero-base budgeting process in federal agencies is quite likely ultimately to be reduced to examining the same small changes in the base that traditionally constitute executive review of the budget.⁴¹ This would mean that the budget process would essentially be dealing with the traditional issues, but at a high cost in resources spent in compiling comprehensive lists and in scarce managerial time diverted from relevant decisions.

INAPPROPRIATENESS. It is significant that all the successes claimed for zero-base budgeting are in *direct* operational programs, in which a state government or a business actually delivers a service (such as vocational rehabilitation). This is because it is relatively easy to define an output (people of various types rehabilitated), to analyze alternative methods of attaining the output (institutional training, television courses, vouchers to purchase training), and to define levels of effort associated with the levels of output. Programs can be successfully studied one at a time because they produce results independent of other activities. Zero-base budgeting helps this kind of analysis by isolating how much extra output the government can provide for an increment of cost, and it may aid in identifying duplicative programs.

But most of the domestic federal budget is spent on *indirect* operations, such as transfer payments and grants to state and local governments. These are not as well-suited to the zero-base budgeting approach. Grants, for example, are interdependent; how much Washington pays for state and local education should be dependent on how much it pays for state and local health care assistance, since both grant programs are partly designed to offset the fiscal burdens of state and local governments. Moreover, there are no clear "minimum levels" or discrete increments comparable to those in direct operating programs; the minimum level of general revenue sharing, for instance, is zero, and each dollar above the minimum constitutes a possible program level. Transfer payments are similarly sensibly analyzed in terms of an overall policy of alleviating poverty and compensating for income variations, such as those occasioned by

41. This is acknowledged by Peter Pyhrr, the developer of ZBB. He points out that at Texas Instruments, top management concentrated on funding levels between 70 and 110 percent of the current year's expenditure. Peter A. Pyhrr, *Zero-Base Budgeting: A Practical Management Tool for Evaluating Expenses* (Wiley, 1973), p. 96.

unemployment. Building a coherent transfer payment budget involves constructing a mosaic of food stamps, Medicaid, AFDC, unemployment compensation, social security, and so on that is consistent with the overall policy. Consequently, it would not make sense for the Department of Agriculture, which operates the food stamp program, to rank increments in spending in that program against agricultural research, but not against increments in social security, which is run by the Department of Health, Education, and Welfare. This is an inherent problem of government organization, not by any means unique to zero-base budgeting, but the insistence of the new process on making rankings at every level heightens the difficulty.

For the major operating program of the federal government, national defense, the emphasis of zero-base budgeting on examining basic objectives is a helpful characteristic, but its failure to emphasize a multiyear approach to spending (discussed below) may limit its usefulness in military procurement, research, and construction programs.

GAMESMANSHIP. Another difficulty, again inherent in the budget process but possibly more acute with zero-base budgeting, is that agencies may try to tailor their budget requests so that reductions are difficult to make. A story is told that when the Department of the Interior was asked what would have to be given up if its budget were cut by 5 percent, the secretary responded, "We'd have to close the Washington Monument." Under ZBB, there is every incentive to load questionable functions into the minimum level (highest priority) part of a decision package set and position the politically most attractive activities in the zone where the agency manager thinks a higher-level decisionmaker will actually be trading off one program against another. This kind of gamesmanship can obviously be overcome by astute oversight as budgets pass through bureaus, agencies, departments, and OMB, but especially because of the newness of ZBB and the flood of new forms, oversight may not be very keen for some time to come.⁴²

MYOPIC BIAS. Finally, zero-base budgeting focuses on the budget for the upcoming year; in so doing, it diverts attention from the

42. For an imaginative example of how a bureaucrat might turn ZBB into an exercise to maximize his budget, see James Q. Wilson, "Zero-Based Budgeting Comes to Washington," *The Alternative: An American Spectator*, vol. 10 (February 1977), p. 5.

long-run consequences of current actions (very important in defense, construction, and entitlement programs) and the need to regulate current-year decisionmaking by future-year goals. While, in principle, a budget process encompassing both ZBB (intensive examination of existing programs) and multiyear budgeting (which tends to emphasize examination of increments and future-year goals) is conceivable, it is very difficult to make such a procedure comprehensible and workable.⁴³ In terms of the goal of identifying program reductions that eliminate waste and are politically feasible, there is much to be said against the myopia of the ZBB approach. Large changes in program funding in a single year almost always cause dislocations—people lose entitlements they had come to expect, or states are faced with prospective budget deficits as a result of abrupt federal fund cutbacks—which is a major reason why so few programs have been eliminated in the past. By contrast, a multiyear approach has a chance to reduce the growth in the program base. In fact, before the decision to implement zero-base budgeting was announced, there was every reason to expect a shift in both the executive branch and Congress to multiyear budgeting.

Multiyear Budgeting

In a report issued on January 19, 1977, the Office of Management and Budget recommended to the Congress that “The Federal Government . . . have appropriations requested and enacted in the context of explicit longer-range plans. Specifically, target amounts should be included in the budget, but not enacted as appropriations, for the two years beyond the budget year. Also, the Congress should include target amounts for these years in their concurrent resolutions.”⁴⁴ The Congressional Budget Office later endorsed the same principle.⁴⁵

The primary motivation for these proposals is not explicitly to find

43. In Georgia, ZBB originally did require managers to make projections of decision package costs. Pyhrr, however, recommended that the requirement be abandoned, except in unusual cases. See Pyhrr, *Zero-Base Budgeting*, pp. 132–33. The OMB bulletin on ZBB does require multi-year data, but it is not clear how the future costs are to be reflected in current year decisions.

44. Office of Management and Budget, “A Study of the Advisability of Submitting the President’s Budget and Enacting Budget Authority in Advance of the Current Timetable” (January 19, 1977; processed), pp. 5–6.

45. Congressional Budget Office, *Advance Budgeting: A Report to the Congress* (Government Printing Office, 1977).

ways to reduce the size of the budget. Rather, multiyear budgeting is intended to force all federal decisionmakers—agencies, the President, and the Congress—to develop current budgets in terms of long-range goals and constraints and to ensure that the future impact of current year decisions is fully understood. In providing a budget process that is amenable to reducing the budget base, multiyear budgeting has some advantages.

Setting out a multiyear plan, as was done in the first section of this chapter, inevitably turns attention to those components of the base that are growing either rapidly or by large amounts. This can help in identifying where the budget can be reduced without taking away existing benefits.

Multiyear budgeting would facilitate some radical reforms by allowing packaging of reform proposals. In a multiyear context, the political drawbacks of eliminating programs are lessened; the gradual phaseout of a grant program can be coupled with phasing in a new (or expanded old) program. Elimination of an operating program—for example, procurement of a particular piece of military hardware—can be linked to a new program—a better piece of hardware—so as to minimize dislocation in nonfederal institutions. Multiyear budgeting provides a mechanism for such joint actions because it constitutes a form of budgetary commitment by the executive branch of the federal government—that is, a functioning multiyear budget would show the policy decisions made by the administration and how they planned to implement them. This makes it possible to “guarantee” (barring some unforeseen circumstance) that, although program X will be phased out, program Y will, over time, compensate most of those who suffer from the termination of program X. Such combined packages may represent a feasible method for getting the political backing necessary for enactment of program reductions.

On the congressional side, the proposal to include expenditure targets for future years in each congressional concurrent resolution should hold back the most egregious types of uncontrolled spending. For example, in the past large new entitlement programs were often started late in a year, thus showing small initial costs. If expenditure targets for future years were already on the books, such an entitlement program could be challenged by recourse to the targets. While this procedure would not be foolproof—the future target is as

likely to be amended as the offending program—it could pave the way for more conscious forward planning in the Congress and the restraint such planning exerts on untoward spending growth.

Sunset Laws

Senator Edmund Muskie and others have proposed the Sunset Act of 1977. This law would require that each program of the federal government be reauthorized⁴⁶ at least every five years, that such reauthorization be based on a comprehensive and simultaneous review of other programs in its budget function or subfunction (such as national defense or public assistance), and that if a program is *not* explicitly reauthorized, it automatically terminates (fades into the sunset). The law also would apply to federal tax expenditures—the special tax treatment for certain types of income or expenditure. The Carter administration is supporting the sunset act, with some proposed amendments.⁴⁷

The sunset law is intended to concentrate attention on the fundamental rationale for a program or for a whole governmental function, rather than on incremental changes in it. But, unlike zero-base budgeting, the sunset law would be divorced from the budget process proper. In the legislative context, this separation is appropriate because basic policy is supposed to be made in the authorization process, not in the budget or appropriations phase. An attractive feature of the sunset approach is that it would allow taxes and outlays for a particular function to be jointly reviewed and evaluated, thus encouraging trade-offs between the programs of different agencies and between different mechanisms (tax expenditures or spending) for achieving the same objective.

The principal difficulty with the sunset approach is that it is too comprehensive. To reexamine, from the bottom, every budget func-

46. An authorization is legislation that establishes the legal authority for the federal government to engage in an activity. Once an activity is authorized, "budget authority"—usually an appropriation law—may be passed and the activity undertaken.

47. See "Statement of Bert Lance, Director of the Office of Management and Budget, on the Sunset Act of 1977, before the Senate Subcommittee on Intergovernmental Affairs" (OMB release, March 22, 1977; processed). Interestingly, one of the administration's objections to the bill is that the requirements for information "may overload the Executive branch with requests at the same time that it is attempting to carry out the annual zero base budgeting efforts" (*ibid.*, p. 4).

tion every five years means examining anywhere from 1,000 to 100,000 programs or activities.⁴⁸ This would spread very thin the available analytical manpower to perform the evaluations and might consume a disproportionate amount of congressional time. On the other hand, there are government activities and tax features that have gone unexamined for many years, and sunset laws may be the only way to bring them out of the closet.

Selectivity as a Guide for Program Review

One lesson ought to be learned from this review of budgeting processes: the federal government and its budget are very complex and varied. This means that the appropriate method for finding budget reductions should be specially designed approaches in different areas.

One promising way to restrain the growth of the federal budget is to get at the causes of the major expenditure increases built into current programs. This requires careful study and evaluation in those few programs or expenditure categories that exhibit the large increases.

Waste, duplication, and inefficiency in existing programs may require radical rethinking of governmental roles and functions. Such comprehensive reviews should be undertaken on a selective basis where there is a priori knowledge of inefficiency. Such selectivity would concentrate top-level managerial time on promising ventures. In the executive branch, this can probably best be achieved through full-scale reviews of selected activities, with the full participation of the departments, OMB, and the President. In the Congress, sunset provisions may be required in certain areas where legislation is rarely reviewed in order to provoke the needed reexaminations. Most programs, however, are reexamined regularly by Congress, and comprehensive sunset laws do not seem necessary, nor is annual rejustification of the fundamentals of programs required across-the-board in budget reviews.

Taking a long-run approach to federal spending and taxing is essential for budget control and implementation of new priorities. The most serious defect in current budget procedures is the absence

48. The low estimate is by supporters of the legislation and the high one from the Senate Rules and Administration Committee, which is critical of the proposal. See Richard E. Cohen, "Taking Up the Tools to Tame the Bureaucracy: Sunset Legislation," *National Journal*, vol. 9 (April 2, 1977), p. 518.

of a multiyear context for presidential proposals or congressional budget resolutions. This can be remedied by a multiyear federal budget, the first step of which could be a presidential budget encompassing three fiscal years and congressional action to incorporate the last two of these years' budgets into its concurrent resolutions.

Studies and changes in the budget process will at best allow the government to identify less urgent expenditures and come up with better alternatives. One of the dangers of an excessive focus on process changes is that it deflects interest and energies from policy-making.⁴⁹ In many areas of federal spending, knowledge of wasteful and duplicative programs already exists; the difficulty in terminating such weak programs is that special interest groups influence the executive branch or the Congress, or both, to maintain them. The political strength of these groups has been the major stumbling block to progress in making government more efficient. Thus, any process for identifying wasteful tax provisions or spending programs will need a political follow-up by a strong-willed president.⁵⁰ President Carter's early proposals to terminate a number of water resource programs may be a clue to his determination to spend some political chips on efficiency. Buried in OMB's directive on zero-base budgeting is a hint of what may be its real purpose; one of the objectives listed is to "provide a credible rationale for reallocating resources, especially from old activities to new activities." Taken in this sense, zero-base budgeting may be just a way for the President to demonstrate the fair and evenhanded way he came to his budgetary decisions. Whether zero-base budgeting will be a political success in persuading the Congress and the public to reorder national priorities remains to be seen.

49. The fear that process may overwhelm policy in the Carter administration is provocatively argued by Jack Knott and Aaron Wildavsky, "Jimmy Carter's Theory of Governing," *Wilson Quarterly*, vol. 1 (Winter 1977), pp. 49-67.

50. The relations between budget process and expenditure reduction are spelled out in greater detail in Robert W. Hartman, "Next Steps in Budget Reform: Zero-Base Review and the Budgetary Process," *Policy Analysis*, vol. 3 (Summer 1977).

Representative HAMILTON. Thank you very much, Mr. Hartman. We will proceed with the other statements.

Mr. Gordon, will you proceed with your statement. Your statement will be entered into the record in full.

**STATEMENT OF ROBERT J. GORDON, PROFESSOR OF ECONOMICS,
NORTHWESTERN UNIVERSITY**

Mr. GORDON. If the Carter administration's economic goals are realized, on election eve 1980 the economy will be in the best shape in more than a decade. Unemployment will have declined to 5 percent, inflation will have dropped to an annual rate of 4 percent, and the Federal budget for fiscal year 1981 will be balanced. The reduction in unemployment will be achieved by a sustained 5.5 percent average growth rate of real GNP, so the election eve economy will be in its 68th consecutive month of economic expansion, a record exceeded only by the boom of the 1960's.

Sadly, the Carter nirvana will not be achieved. All signs point to a speedup in the inflation rate, not a slowing down. And if inflation fails to decelerate on schedule, then the other components of the package are in jeopardy. Real output will not grow fast enough to achieve either the unemployment target or the balanced-budget goal.

This gloomy outlook is not based on wild or unsupported speculation, but on a few simple economic relationships which tend to remain valid year after year. Using the same approach in April 1974 I forecast the incompatibility of the Nixon goals for that year and the inevitability of a recession. The only good news I can bring you today is that, while we are not about to enter economic paradise, neither are we about to return to the 1974 calamity of double-digit inflation together with a collapsing economy. More likely is an unhappy middle ground, with both inflation and unemployment remaining too high.

FORECASTING METHODS

The most frequently cited forecasts are produced by large-scale econometric models, which have the advantage of internal consistency, availability of detail, and the input of many man-years of effort by specialized researchers. The only trouble is that for a layman or outsider, it is very hard to understand what is going on inside the large models.

I would predict that we will have some argument today, because I think that Mr. Fair's forecast, based on his own large economic model, is highly implausible, but we will get to that in the discussion period. I prefer to keep tabs on the large models by using a much simpler approach based on just five economic relationships:

One. First, we start with a relationship which has been very reliable for 15 years, that is, that the growth of nominal spending, or current dollar GNP, tends to average out—over a period of several years—very close to the growth of the money supply concept M_2 , which is regulated by the Federal Reserve. Over the past 7 years, for instance, GNP has grown at an average rate of 9.3 percent, and M_2 at 9.7 percent.

Two. Spending growth in turn is divided by definition between inflation and real GNP growth, so if we can predict inflation, we automat-

ically know how rapidly real GNP will grow for any given behavior of the Federal Reserve.

Three. Unemployment can be predicted very accurately once we know real GNP growth—the unemployment rate tends to fall when real GNP grows faster than 3.5 percent per year and vice versa.

Four. This leaves the big question, predicting inflation. The economywide inflation rate follows quite closely the growth of average wage earnings, minus an allowance for a historical productivity growth rate of about 2 percent.

Five. Finally, the best way to predict wage growth is simply to look at how wages and prices have been behaving recently, and then add an allowance for an acceleration of wage growth when the economy is expanding rapidly, or a deceleration when the economy is slipping into recession.

The first three relationships are not the subject of any major scientific or ideological controversy among economists. The last two, the prediction of prices and wages is the subject of my own econometric research, the results of which have just been published by the Brookings Institution,¹ which is appended to my statement.

The job of the computer in this research is really to calculate how much of an effect the economic expansion has on prices and wages, that is, how much prices and wages will speed up or slow down depending on different economic conditions.

MONEY AND INFLATION

Some economists and journalists claim that the only information required to predict inflation is the recent growth rate of the money supply. This is a half truth. In the long run, over a decade or two, price inflation and monetary growth are closely related. But over a shorter period of 1 to 3 years it is not enough to say that "only money matters." Part of any extra money created by the Federal Reserve will go into higher prices, but the remainder will boost real output, create jobs, and reduce unemployment. Without further information, we do not know how the effect of money creation will go to raising prices and how much will stimulate real output growth.

The events of the past 5 years confirm that the right way to proceed is to predict inflation first, by the method I have just described, then obtain GNP growth as a "residual" equal to the growth in money creation minus inflation. In 1974, for example, double-digit inflation used up all of the available money, and more besides, forcing real GNP to plummet and unemployment to skyrocket. The "only money matters" approach fails miserably to explain why inflation accelerated so much in the 1974 episode. My statistical tests indicate that monetary policy, including the infamous monetary acceleration which occurred before the 1972 election, can only explain about one-sixth of the acceleration of inflation in 1974. We will get to the other five-sixths in a minute.

PRICES, WAGES, AND THE PACE OF RECOVERY

Money growth explains spending growth, but not the division of that spending growth between inflation and growth in real output.

¹ "Can the Inflation of the 1970's Be Explained?" Brookings Papers on Economic Activity, vol. 7 (1977, No. 1), pp. 253-279. See p. 190.

Instead, the most successful approach to forecasting inflation is remarkably simple: Inflation depends mainly on inertia and the pace of economic expansion.

One. *Inertia*.—The best way to forecast the behavior of prices and wages tomorrow is to start from their behavior over the recent past. Price inflation can be explained by the average change in wages over the past 2 years, and most of the growth of wages can be explained by the behavior of prices over the past 2 years. This wage-price-wage spiral is the single greatest obstacle to achieving a slowdown of the inflation rate. A remarkable example of this inertia is the growth of average hourly earnings, which have been stuck in a narrow band between 6 and 8 percent for 8 of the past 10 years.

Two. *Pace of expansion*.—The most recent research indicates that prices and wages accelerate faster than their recent behavior when the economy is expanding rapidly, whereas inflation tends to slow down when the economy is sinking into a recession. Firms hold sales more often and offer deeper discounts and rebates when they are trying to work off excessive inventories, as in the winter of 1975.

Price increases tend to be delayed until periods of rapid economic expansion occur. In fact, the speed of expansion seems to matter more than the total amount of slack in the economy.

Three. *Other factors*.—Given the inflation rate inherited from the recent past, and the current pace of expansion, what else influences the inflation rate? Clearly, prices are pushed up when a drought or freeze cuts back on food supplies, or when an oil cartel is formed. These so-called supply shocks in oil and food explain about half of the acceleration of inflation in 1974.

The remaining half resulted from the termination of price controls, demonstrating once again that any temporary success of controls in moderating inflation is offset by a worsening of inflation when controls came off. The introduction of controls in 1971 made a larger share of money creation available to support real GNP growth and helped to create the economic boom of 1972-73. In the same way, the termination of controls in 1974 soaked up money which otherwise could have supported real output and thus made the recession worse. In short, controls aggravated economic instability in the 1970's, explaining in part why unemployment fell so low in 1973 and rose so high in 1975.

Finally, the Government itself influences the inflation rate. Higher State and local sales taxes raise the price level directly. Almost as direct is an increase in the social security payroll tax—either the employer or the employee share—which raises pretax payroll costs and is passed as an increase in prices.

PREDICTIONS FOR THE LATE 1970'S

Since inertia is such a powerful influence on inflation, half the job of forecasting is over before it begins. The inflation spiral starts off at the 5.5-6.0 percent pace of the last 2 years. Whether inflation accelerates above that rate depends on the speed of economic expansion.

In my paper I have some examples of different expansion paths of economic recovery. For instance, a year of real GNP expansion at 7.5 percent would boost the underlying inflation rate from 5.5 to 7.0 percent by next summer, while a policy of sluggish growth and no further

decline in unemployment would allow inflation to slow down gradually, reaching 4 percent by 1980 and 2 percent by 1986.

This is the crux of the case against the administration. To achieve the 4 percent inflation target, unemployment must remain in the current 7 percent range. But to achieve the 5 percent unemployment target, inflation will not slow down but rather will speed up a bit to the range between 6 to 7 percent.

Worse yet, these forecasts ignore the impact of any of the cost-boosting measures which the administration has proposed. The energy package will make inflation worse than forecast. The hikes in social security taxes will make inflation worse. Any movement to trade restrictions and quotas will make inflation worse; and, finally, the refusal of Germany and Japan to expand their economies faster will make our inflation worse, as a result of the recent depreciation of the dollar caused by our large trade deficit.

Finally, if we are willing to accept the modest acceleration of inflation which is likely over the next 3 years, can the economic recovery be sustained? In 1974, after all, a surge of inflation triggered a deep recession. The answer depends on the response of the Federal Reserve. The growth of the money supply—concept M_2 —over the past 6 months, if allowed to continue over the next 3 years, is not enough to provide fuel for the predicted inflation rate plus the real economic expansion needed to achieve the administration's unemployment target.

A temporary, 2-year acceleration in money followed by a return to the present growth rate would guarantee the survival of the expansion, while leaving Congress and the administration to grapple with inflation.

POLICY RECOMMENDATIONS

My recommendation today is exactly the same as in mid-1971, just before the abortive control program was announced: The United States can live with a steady 6 or 7 percent inflation, if the Government cooperates. When prices and wages go up together, neither wage nor profit earners are harmed. The losers are the savers who are prevented by regulation Q from receiving an interest return adequate to compensate them for inflation. The biggest single policy contribution would be the abolition of regulations which control interest rates and restrict competition among financial institutions. In addition, the Government should issue a savings bond with a cost-of-living escalator.

But the Government can do more than just help people live with inflation. Government regulations make prices higher than necessary. Every opportunity to deregulate airlines, trucking, telecommunications, and other industries should be welcomed. Tariffs, quotas, and voluntary agreements in international trade should be ended, with mobility and retraining subsidies to help displaced employees of non-competitive firms and industries. A lower minimum wage for teenagers should be introduced, not only to reduce the price of services but also to provide jobs for minority teenagers whose plight was dramatized by the recent events in New York City.

And, finally, let me offer a recommendation relevant to the immediate deliberations of Congress in the area of tax reform. Indirect taxes,

especially sales taxes and social security payroll taxes, are not only regressive but also they raise prices. Direct income taxes have a much smaller inflationary effect.

A major shift in the U.S. tax system away from indirect taxes toward the personal income tax and, in particular, a shift toward the personal income tax for the financing of social security, would eliminate the continuing upward pressure on business costs caused by payroll tax hikes; and a much needed shift in the legal retirement age from 65 to 70 would go far to eliminate the social security financing problems which have made those tax increases necessary.

[The paper attached to Mr. Gordon's statement follows:]

ROBERT J. GORDON

Northwestern University

Can the Inflation of the 1970s be Explained?

BY MANY STANDARDS inflation has been a "surprise" during the past six years. Errors in forecasting inflation have increased markedly compared with earlier periods. For instance, during the interval 1971:3 to 1975:4 the root mean-square error of the Livingston panel of economists in forecasting the consumer price index six months ahead was 3.5 percentage points at an annual rate, compared with an error of 1.6 percentage points over the previous seventeen years.¹ Not only did the panel forecasters fail to predict the increased variance of the inflation rate in the 1970s, but also they fell far short in predicting the cumulative total price change between 1971 and 1976—24.0 percent compared with the actual change of 34.0 percent.² Most of the error occurred during the four quarters of 1974,

Note: This research has been supported by the National Science Foundation. I am grateful to my research assistant, Joseph Peek, for his superb efficiency in compiling and creating the complex data base on which the paper depends. Helpful suggestions were received from participants in seminars at Northwestern, the University of California at Berkeley, and the Federal Reserve Banks of San Francisco and Philadelphia.

1. The Livingston forecasts were obtained from John A. Carlson, "A Study of Price Forecasts," *Annals of Economic and Social Measurement*, vol. 6 (Winter 1977), table 1, pp. 33-34. I calculated the errors by comparing the six-month-ahead forecasts with the change in the consumer price index in the two relevant quarters. For instance, Carlson's calculation of the predicted quarterly rate of change between December 1973 and June 1974 is compared with the average quarterly rate of change of the CPI in the first and second quarters of 1974. The "previous seventeen years" runs from 1954:1 to 1971:2.

2. The actual figure refers to the sum of the quarterly rates of change of the CPI in the interval 1971:3 through 1976:2. The forecast figure is the sum of the six-month predicted changes calculated by Carlson from the Livingston panel data for the ten surveys between June 1971 and December 1975.

with an actual increase of 11.6 percent, almost twice the 6.0 percent increase forecast six months in advance.³

In searching for an explanation for this inflation, this paper can be likened to an investigative report following a railroad or airline crash. The news of the disaster—in this case, the failure to forecast inflation accurately—was reported long ago and by now is well known. But what can we say beyond the fact that the disaster occurred? Just as transportation investigations attempt to determine which specific parts of the machine failed, and to recommend improvements, so here the relationship of the inflation rate to other important economic variables is studied to determine as precisely as possible what was different about the experience of the 1970s, and what lessons can be learned from past mistakes. Which theories and structural relationships relevant for predicting inflation remain intact, and which require surgery or euthanasia? What are the implications for policy?

Most econometric models base their inflation forecasts on structural price and wage equations, either a single pair for the aggregate economy, or a larger set of disaggregated equations. In my own past work on inflation, I have specified and estimated aggregate price and wage equations, and have studied the sensitivity of the results to alternative specifications, estimation methods, and sample periods. This paper investigates the performance of my price-wage model in tracking the inflation of the 1970s, and studies the implications of its successes and failures for the future conduct of economic policy.

The paper is divided into three sections, one on the price equation, one on the wage equation, and one on dynamic simulations in which the two equations interact.

1. *Structural price equation.* An equation that explains price change with wage change as a predetermined variable is a component of almost all large-scale econometric models of the U.S. economy. In a previous paper I argued that the total increase in prices relative to wages between mid-1971 and late 1975 was almost exactly what would have been predicted by a structural price equation fitted to the 1954–71 period, and

3. The errors for the forecasts from five large-scale models compiled by McNees were similar. The four-quarter-ahead forecast made in 1973:4 for the change in the GNP deflator to 1974:4 was 6.04 percent; the actual was 11.04 percent. See the revised reprint of Stephen K. McNees, "An Evaluation of Economic Forecasts: Extension and Update," *New England Economic Review* (September/October 1976), pp. 30–44.

that the timing of postsample errors was consistent with the hypothesis that prices had been held down by controls in 1971–72 and then rebounded when controls were terminated in 1974.⁴ This paper extends this test through the end of 1976, notes the effects of recent data revisions on the original price equation, and explores alternative explanations of its overprediction of price change in 1975 and 1976.

2. *Structural wage equation.* Can a wage equation specified in 1971 and estimated for pre-1971 data explain the behavior of wage change since 1971? What was the impact of 1973–74 “supply shocks” on wage change, and how should policy respond to future supply shocks?⁵ Has high unemployment during 1975 and 1976 held down wage increases by more or less than would have been expected on the basis of pre-1971 relationships? Finally, can the pre-1971 data or the 1971–76 experience distinguish among the various proxies for labor market tightness used by different econometric investigators?⁶

3. *Dynamic simulations.* How potent are high unemployment and a slack economy in slowing the inflation rate? What would have been the consequences for inflation of an alternative expansionary policy in 1974? Is the Carter administration’s planned economic recovery consistent with its goal of decelerating inflation? A dynamic simulation in which the price and wage equations interact can provide answers to these questions.

Behavior of the Main Variables, 1969–76

Table 1 displays the behavior over the 1969–76 period of several important measures of changes in prices, wages, money, and nominal demand. The figures are annual rates of change. The first column covers the ten quarters prior to the imposition of the controls program in 1971, the second column covers the two quarters influenced by the 1971 freeze, and the next five columns show for the five years 1972–76 the sum of the quarterly rates of change for the four quarters of each year.

The official price indexes displayed in the first four lines uniformly

4. Robert J. Gordon, “The Impact of Aggregate Demand on Prices,” *BPEA*, 3:1975, pp. 613–62.

5. See Robert J. Gordon, “Alternative Responses of Policy to External Supply Shocks,” *BPEA*, 1:1975, pp. 183–204.

6. Robert J. Gordon, “Inflation in Recession and Recovery,” *BPEA*, 1:1971, pp. 105–58.

Table 1. Annual Rates of Change in Major Economic Measures Before, During, and After Wage and Price Controls, 1968:4-1976:4

Percent^a

Measure	Before controls	Freeze	Full controls	Relaxed controls	After controls			Total change,
	1968:4-1971:2	1971:2-1971:4	1971:4-1972:4	1972:4-1973:4	1973:4-1974:4	1974:4-1975:4	1975:4-1976:4	1971:2-1976:4
<i>Price index</i>								
Gross national product	5.24	3.43	4.10	7.30	11.04	6.95	4.55	35.66
Consumption	4.36	3.52	3.43	7.31	11.45	5.86	4.64	34.45
Consumer prices	5.22	3.13	3.38	8.18	11.55	7.13	4.92	36.72
Nonfarm business	4.76	2.88	2.93	5.91	12.14	6.48	4.88	33.78
Nonfood business net of energy	5.06	2.75	3.07	5.33	9.97	6.27	5.12	31.14
<i>Wage index^b</i>								
Compensation per manhour adjusted	6.71	5.55	5.77	7.78	10.68	9.12	7.19	43.31
Hourly earnings adjusted	7.18	5.51	7.16	7.58	9.56	8.03	7.01	42.09
<i>Final demand and money supply</i>								
Nominal final sales	6.65	7.80	10.69	9.40	8.29	10.24	9.16	51.68
M ₁ (currency plus demand deposits)	5.14	4.63	8.15	6.11	4.97	4.30	5.55	31.39
M ₂ (M ₁ plus time deposits)	6.95	7.78	10.75	8.56	7.47	8.07	10.41	49.15

Sources: With the exceptions noted, the data are from U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-74: Statistical Tables* (GPO, 1977), and *Survey of Current Business*. The consumer price index and money supply are official data from the U.S. Bureau of Labor Statistics and the Federal Reserve Board, respectively.

The deflator for nonfood business product net of energy and the adjusted measures for compensation per manhour are constructed using the methodology explained in Robert J. Gordon, "The Impact of Aggregate Demand on Prices," *BPEA*, 3:1975, pp. 613-62. Adjusted hourly earnings is constructed as explained in Robert J. Gordon, "Inflation in Recession and Recovery," *BPEA*, 1:1971, pp. 153-54. The sources for the last three measures are extensions of those given in the previous papers cited here and incorporate the 1976 Department of Commerce revisions of the national income accounts.

a. Calculated as sums of quarterly rates of change, converted to annual rates in first two columns.

b. Adjusted for overtime and shifts in the interindustry employment mix; for hourly earnings, also adjusted for fringe benefits.

record little price change in late 1971 and 1972, double-digit inflation in 1974, and a return in 1976 to rates similar to or below those of 1969–71. The fifth line displays the “nonfood, net of energy” deflator that I developed earlier, as recomputed from the revised national income accounts and extended to the end of 1976.⁷ This index misses double-digit inflation in 1974 by only a hair.

Two wage indexes are displayed next. The first is compensation per manhour, with an adjustment for overtime and shifts in the interindustry employment mix; this is used as an independent variable in the structural price equation. The second is the official index of adjusted hourly earnings compiled by the Bureau of Labor Statistics, further adjusted here to include fringe benefits; this is the dependent variable in the wage equation. The most notable difference between wage and price behavior over this period has been the lower variability of wage change—less slowdown during late 1971 and 1972, less acceleration in 1974, and less deceleration between 1974 and 1976. As in the case of prices, wage change in 1976 returned to roughly the same rate as in 1969–71—a bit higher for compensation, and a bit lower for average hourly earnings.

The final section of the table displays the growth of final demand and two measures of the money supply. In none of these was growth nearly as variable as price change. The difference between the minimum and maximum annual rates of change in the 1972–76 period was 2.4 percentage points for demand, 3.8 for M_1 , 3.3 for M_2 , but 6.9 for the GNP deflator and 8.2 for the CPI. Simple reduced-form regressions in which price change is regressed on a distributed lag of past changes in money or final sales confirm that virtually none of the variance of inflation in the 1970s can be attributed to the behavior of money or final sales. When estimated for 1954–71, and extrapolated to 1976, such reduced-form regressions can explain at most one-sixth of the acceleration of inflation from the 5 percent range in 1969–71 to double digits in 1974, and the subsequent deceleration back to 5 percent in 1976.

Structural Price Equations

In an earlier paper I estimated structural price equations that exhibited relatively strong effects of aggregate demand on the price

7. Gordon, “Impact of Aggregate Demand,” pp. 622–29, 656–60.

"markup," that is, on the relationship of the aggregate price level to the aggregate wage level. These equations appeared able to explain the cumulative 1971–75 inflation using coefficients estimated through 1971:2. Although the postsample prediction errors were large, their timing was consistent with the interpretation that the controls had temporarily held down the price level. In table 2, the first column lists the coefficients of a version of the "core" equation as published in 1975.⁸

The specification of the various price equations presented in table 2 corresponds to that derived in my 1975 paper. The price level net of excise and sales taxes is marked up over total cost by a margin that depends on the level of excess demand for commodities. Total cost in turn consists of unit labor cost, materials prices, and the user cost of capital. After each variable is transformed into a percentage rate of change, and when technical change is assumed to be labor-augmenting, an equation is derived in which the rate of change of prices depends on each of the variables listed in table 2: (1) the rate of change of an excise-tax term; (2) the rate of change of the relative price of materials; (3) the deviation of the growth rate of actual productivity from its trend; (4) the rate of change of wages minus the trend growth rate of productivity—"trend unit labor cost"; (5) the rate of change of the relative price of capital goods; and (6) a proxy for the excess demand for commodities, either the rate of change of the ratio of unfilled orders to capacity (UFO/C), or the rate of change of the gap between actual and potential output.

While in the earlier paper equations including the two alternative proxies were essentially identical, the same cannot be said of the equations reestimated with new data from the 1976 revision of the national income accounts. The data revisions reduce the statistical significance of most variables when either demand proxy is used, but the version using UFO/C is affected most adversely (compare columns 2 and 3). The output-gap equation is superior on almost every count, with a lower standard error of estimate and higher t ratios on every independent variable.

In contrast to the initial core equation, which tracked the cumulative postsample price change very closely, both of the new equations in columns 2 and 3 overpredict inflation during 1971–76 very substantially. The problem is not that inflation has been mysteriously low over the five-year extrapolation interval, but rather that the sum of coefficients on

8. See *ibid.*, pp. 634–35, for the equations, and p. 639 for an illustration of the prediction errors of one equation.

labor cost (line 4) is so far above 1.0 that a significant overprediction builds up. The same cumulative postsample overprediction is exhibited in column 4, where both demand variables are excluded. An interesting feature of the no-demand version is the higher coefficient on materials prices, which in the postsample extrapolation captures more of the 1974 upsurge in prices and allows the equation to achieve a lower postsample root mean-square error. But the higher coefficient on materials prices adds to the overprediction of the equation in column 4, offsetting the lower coefficient on labor cost.

The postsample performance of the best equation—that in column 3—is markedly improved when the sum of coefficients on labor cost is constrained to equal precisely 1.0. The constrained equation in column 5 fits the sample period about as well as the unconstrained version. While the root mean-square extrapolation error is only slightly improved in the constrained version, the cumulative overprediction disappears.

The actual change in the deflator for nonfood product net of energy and the predicted value from the constrained equation of column 5 are displayed in figure 1. A comparison of the curve marked "actual" (solid line) and that labeled "fitted values (1954:2–1971:2 sample period)" (dotted line) reveals that the equation underpredicts inflation at the end of its sample period in early 1971, but then overpredicts in late 1971 and throughout 1972 by a cumulative 2.44 percentage points. If interpreted as a measure of the effect of the controls program, that figure lies at the low end of the range estimated in my previous papers.

Next, the cumulative underprediction error in the two years ending in 1975:1 is 6.13 percentage points, more than double the 1971–72 overprediction. That finding is not consistent with my previous interpretation that all of the 1973–75 underprediction can be attributed to the effect of the unwinding of controls. A more plausible interpretation is that the equation goes astray by exaggerating the lag between wage and price changes in an abnormal period in which firms recognized that controls had ended and reacted to postcontrol wage increases by passing them forward to customers much faster than they normally would have done.

A final puzzle is why the inflation rate in 1976 was consistently below the prediction of the equations—in figure 1 the cumulative overprediction is 0.92 percent. One way to isolate any recent change is to examine the predictions of a similar structural price equation reestimated through the end of 1976.

Table 2. Structural Price Equations and Extrapolation Errors, Alternative Variants^a

<i>Independent variable (quarterly rate of change) and regression statistic</i>	<i>Sample period and type of equation</i>						
	<i>1954:2-1971:2</i>				<i>1954:2-1976:4</i>		
	<i>Original equation</i>		<i>UFO/C replaced with gap (3)</i>	<i>Demand variables excluded (4)</i>	<i>Constrained coefficient on trend unit labor cost^b (5)</i>	<i>Uncon- strained with gap (6)</i>	<i>Constrained coefficient on trend unit labor cost^b (7)</i>
<i>As published in 1975 (1)</i>	<i>With revised data (2)</i>						
<i>Independent variable</i>							
1. Indirect tax rate	0.402 (2.09)	0.048 (0.22)	0.271 (1.31)	0.148 (0.68)	0.427 (2.18)	0.239 (1.21)	0.212 (1.11)
2. Materials prices	0.025 (1.46)	0.014 (0.69)	0.019 (1.13)	0.043 (2.52)	0.026 (1.74)	0.035 (2.91)	0.031 (2.98)
3. Deviation of productivity from trend	-0.024 (-0.77)	-0.049 (-1.12)	-0.118 (-2.11)	-0.047 (-1.03)	-0.093 (-1.70)	-0.145 (-2.91)	-0.152 (-3.18)
4. Trend unit labor cost	1.090 ^c (19.2)	1.076 ^c (19.9)	1.074 ^c (20.96)	1.021 ^c (20.0)	1.000 ^c ...	0.963 ^c (20.59)	1.000 ^c ...
Mean lag	[4.8]	[5.3]	[4.8]	[4.3]	[4.8]	[3.2]	[3.2]
5. Relative price of capital goods	0.401 ^c (3.37)	0.290 ^c (2.07)	0.385 ^c (2.75)	0.235 ^c (1.66)	0.499 ^c (4.34)	0.134 ^c (1.05)	0.088 ^c (0.84)

6. Ratio of unfilled orders to capacity	0.065 ^o (2.74)	0.052 ^o (2.08)	...	...	...	...	...
7. Output gap	...	...	-0.324 ^o (-3.27)	...	-0.256 ^o (-3.05)	-0.195 ^o (-2.15)	-0.218 ^o (-2.72)
8. Dummy = 1.0, 1971:3-1972:4	...	...	...	...	...	-0.330 (-2.73)	-0.350 (-3.10)
9. Dummy = 1.0, 1974:2-1975:1	...	...	...	...	...	0.510 (2.28)	0.460 (2.21)
<i>Regression statistic</i>							
10. Standard error	0.207	0.244	0.235	0.254	0.234	0.261	0.259
11. Postsample root mean-square error (1971-76)	...	0.599	0.676	0.507	0.667	...	...
12. Cumulative error	...	-4.61	-3.65	-4.68	0.77	...	...

Sources: Column 1, Gordon, "Impact of Aggregate Demand on Prices," table 3, equation 3.5; for the other columns, the equations were reestimated using revised and extended data from the sources in *ibid.*, appendix B. The methods used to construct the variables are identical to those used in *ibid.*

All distributed lags in this paper are estimated by the polynomial distributed-lag technique, with the lag coefficients constrained to lie along a third-degree polynomial, and with the far end constrained to be zero. The lag length is allowed to extend over twelve quarters on line 4 and eight quarters elsewhere.

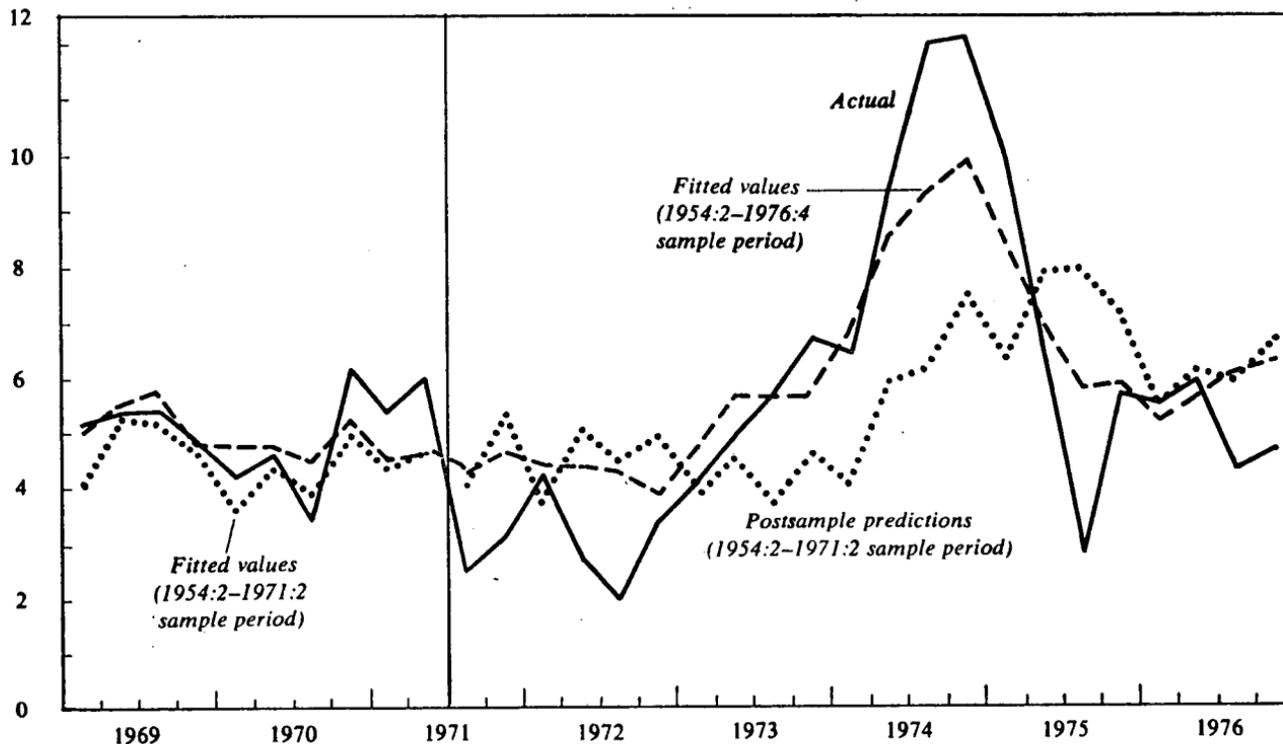
a. The dependent variable is the deflator for nonfood business product net of energy. The numbers in parentheses are *t* ratios.

b. The constraint is applied in columns 5 and 7 by taking the distributed-lag coefficients estimated in columns 3 and 6, respectively, dividing each coefficient by the sum of the coefficients, and subtracting the result from the dependent variable.

c. The figure is the sum of a set of distributed-lag coefficients, and the number in parentheses below is the *t* ratio indicating the statistical significance of the sum of the coefficients.

Figure 1. Actual and Predicted Change in Deflator for Nonfood Business Product Net of Energy Using the Specifications of the Structural Price Equations, 1969-76

Annual rate of change in percent



Sources: Actual, see table 2 sources; predicted and fitted, table 2, columns 5 and 7.

Column 6 in table 2 reports the coefficients of the extended equation. The effect of price controls is captured by two dummy variables, one covering the six-quarter interval beginning in 1971:3, and the second covering the four-quarter interval beginning in 1974:2. The coefficients of the dummy variables are highly significant and cumulate to a value of -1.98 percent of the controls period and $+2.04$ for the postcontrols rebound (there is no constraint imposed to force these cumulative totals to equal each other).

Column 7 amends column 6 by constraining the sum of the coefficients on trend unit labor cost to equal 1.0. To highlight the differing time paths of the two sets of predictions, based on columns 5 and 7, respectively, fitted values for the extended equation are displayed in figure 1 with the impact of the dummy variables excluded. The major differences occur in the 1973–75 period, when the extended equation does a much better job of capturing the timing of the acceleration and subsequent deceleration of inflation. This performance is achieved by three shifts in coefficients when the equation is extended. First, the coefficients on labor cost shift sufficiently to reduce the mean lag by 1.6 quarters.⁹ This allows more of the postcontrols, 1974 bulge in wage change to influence price change in 1974, rather than in 1975. Second, the coefficient on materials prices is higher, which raises predicted inflation in 1973–74 while reducing it in 1975. Third, the coefficient on current productivity change is higher, allowing the negative values of productivity change in late 1973 and throughout 1974 to boost predicted price change.

What is the proper interpretation of the shifts in coefficients when the sample period is extended? Any coefficient in a time-series regression is sensitive to conditions inside the sample period. Thus it is not surprising that an equation estimated for the relatively placid 1954–71 period misses some aspects of the timing of pricing decisions by firms during 1971–76,

9. The mean lag of 4.8 quarters in the 1954–71 equation seems unreasonably long. When that sample period is split in half, the mean lag falls to 2.9 quarters for 1954–62 but rises to 8.1 quarters for 1963–71. A close examination of the data leads me to suspect that erratic movements of the series on compensation per manhour (*CMH*) in the latter period forced the computer to "stretch out" the lags. The alternative wage index, average hourly earnings (*AHE*), moved more smoothly and actually is more successful as the wage variable for the equation in column 5. It cuts the standard error from 0.234 to 0.213, and the mean lag from 4.8 to 4.0 quarters. I now believe that, despite its narrower scope, *AHE* is the preferable wage variable for price (as well as wage) equations, returning to a judgment reflected in my 1971 paper.

a period that included price and wage controls, a tremendous surge in materials prices, and an unprecedented slump in productivity.

Structural Wage Equations

Structural wage and price equations suitable for estimating the surprising aspects of the 1971–76 inflation are contained in a paper that I wrote in early 1971.¹⁰ While the specification of the structural *price* equations reported in table 2 and figure 1 was altered somewhat in 1975 and thus incorporates knowledge of events to that point, no such reevaluation of the 1971 *wage* equations has yet been carried out.¹¹ Thus this section on wage behavior in the last five years can identify genuine “surprises” relative to 1971 expectations.

The first column of table 3 presents the relevant statistics of the “final” 1971 wage equation.¹² The dependent variable is the *two-quarter* rate of change in a private hourly earnings index, the *AHE* variable mentioned above, which is adjusted by the Bureau of Labor Statistics to exclude the effects of changes in overtime and of interindustry employment shifts, and which incorporates as well an adjustment to include the effects of changes in fringe benefits (including employer contributions for social security).

Coefficients for two of the independent variables in the equations are not listed in table 3, the constant term and the constrained effect of changes in the social security tax rate. The first three listed independent variables are proxies for labor market tightness—unemployment dispersion among demographic subgroups, the “disguised unemployment rate” (the difference between the actual labor force and its trend), and the “unemployment rate of hours” (the difference between private hours per week and its trend). The official unemployment rate does not appear in the equation; the three labor market variables are all correlated with it and incorporate its influence. Although only current values of the three variables are included in the wage equation, each of the three reacts to changes in output with a differing lag pattern, allowing output changes and thus

10. “Inflation in Recession and Recovery.”

11. Detailed comparisons of the performance of the 1971 wage equations with alternative versions proposed by other authors are contained in Robert J. Gordon, “Wage-Price Controls and the Shifting Phillips Curve,” *BPEA*, 2:1972, pp. 385–421.

12. This information is copied from “Inflation in Recession and Recovery,” table 1, equation 11.

changes in labor market conditions to influence wages with a distributed lag.

Two price variables are listed (lines 6 and 7). The first is a distributed lag of past changes in the personal consumption deflator, with lag weights obtained from a separate regression of the nominal interest rate on past inflation. The second is the difference between changes in the "product price" (nonfarm deflator) and the consumption deflator. The final variable (line 9) is the rate of change in the employee-tax variable, the sum of the effective tax rate on personal income and the employee's effective social security tax rate.¹³

Data revisions between 1971 and 1976 alter the coefficients and their statistical significance, as is evident in comparing column 1, which is based on the original data, and column 2, which is based on the most recently revised data. Ironically, the "natural rate hypothesis," in the form of a coefficient of unity on price inflation, is vindicated by the revisions in the official data. The unemployment-dispersion variable becomes insignificant while the coefficient on inflation increases in lines 6 and 7; as I showed in 1972, the dispersion variable and high coefficients on inflation are substitute explanations of wage change in the 1954-70 sample period.¹⁴

When the sample period is extended by two quarters, in column 3, coefficients shift further but the results are reasonably satisfactory. Although the unemployment-dispersion variable has faded away, the coefficient of the disguised-unemployment variable remains significant and that of unemployment of hours is considerably increased and enhanced in statistical significance as compared with column 1. The coefficients on the price variables strongly indicate that wage change fully incorporates changes in price inflation and that it is influenced by changes in product prices, not consumer prices.

13. The 1971 specification, with the social security tax appearing both as a constraint on the left-hand side of the equation and as part of the employee-tax variable on the right-hand side, allows measurement error to bias downward the coefficient on the employee-tax variable. In columns 2 through 7 this bias is eliminated by defining the employee-tax variable as the two-quarter change in $1/(1 - \tau_p)$, where τ_p is the effective personal income tax rate. This and the replacement of the nonfarm deflator by the deflator for nonfood business product net of energy are the only changes in specification in moving from column 1 to column 2. Each equation includes a constant term and a social security tax constraint, not shown in table 3.

14. See my "Wage-Price Controls," figure 1, p. 402.

Table 3. Structural Wage Equations and Extrapolation Errors, Alternative Variants^a

<i>Independent variable and regression statistic</i>	<i>Sample period and type of equation</i>							
	<i>1954:1-1970:4</i>		<i>1954:1-1971:2</i>				<i>1954:1-1976:4</i>	
	<i>Original equation</i>		<i>Original specifi- cation</i>	<i>Constrained sum of co- efficients on price</i>	<i>Output gap</i>		<i>Original specifi- cation</i>	<i>Output- gap version</i>
	<i>As published in 1971</i>	<i>With revised data</i>			<i>Uncon- strained prices</i>	<i>Con- strained prices</i>		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<i>Independent variable</i>								
1. Unemployment dispersion	0.018 (2.3)	0.019 (0.86)	-0.009 (-0.39)	-0.016 (-0.86)	...	...	0.005 (0.25)	...
2. Disguised unemployment rate	-0.278 (-4.3)	-0.111 (-1.57)	-0.170 (-2.63)	-0.153 (-2.52)	...	...	-0.187 (-2.85)	...
3. Unemployment rate of hours	-0.086 (-1.0)	-0.133 (-2.34)	-0.162 (-2.79)	-0.043 (-0.78)	...	...	-0.144 (-2.78)	...
4. Output gap	...	...	...	...	-0.011 (-1.04)	-0.008 (-1.31)	...	-0.023 (-2.89)
5. Change in output gap	...	...	...	...	-0.069 (-2.71)	-0.063 (-2.70)	...	-0.055 (-2.14)
6. Change in consumption deflator	0.600 ^b (4.0)	1.006 ^b (8.67)	1.085 ^b (11.55)	...	...	...	...	...
7. Change in product price minus consumption deflator	0.596 ^a (2.8)	1.343 ^a (5.41)	0.974 ^a (6.69)	-0.220 ^a (-1.55)	-0.067 ^a (-0.38)	-0.035 ^a (-0.27)	-0.110 ^a (-0.87)	-0.103 ^a (-0.80)

8. Change in product price	...	...	...	1.000 ^d	1.136 ^e (15.81)	1.000 ^d	0.939 ^e (16.95)	1.008 ^e (22.06)
9. Change in employee tax rate	0.169 (3.3)	0.080 (1.24)	0.061 (0.96)	0.064 (1.08)	0.061 (1.03)	0.032 (0.54)	0.035 (0.72)	0.035 (0.74)
10. Dummy = 1.0, 1971:3-1972:4	...	...	...	...	...	...	0.331 (2.37)	0.312 (2.25)
11. Dummy = 1.0, 1974:2-1975:1	...	...	...	...	...	...	0.018 (0.06)	-0.012 (-0.04)
<i>Regression statistic</i>								
12. Standard error	0.261	0.278	0.275	0.271	0.263	0.267	0.299	0.303
13. Root mean-square error (1971-76) ^e	...	...	0.754 1.059	0.664 0.913	0.644 0.962	0.539 0.807	...	...
14. Cumulative error (actual minus predicted) ^e	...	...	-2.91 -13.05	-1.30 -7.03	-4.23 -11.17	0.11 -6.70	...	...

Sources: Column 1, Gordon, "Inflation in Recession and Recovery," table 1, equation 11; for the other columns the equations were reestimated using revised and extended data from the sources in *ibid.*, pp. 155-58. See table 1 above for sources for revised national income accounts data. The gap variable is the same as table 2 above, line 7. The data used for the product-price variable are those for the deflator for private nonfood business product net of energy—that is, the dependent variable in table 2.

a. The dependent variable is the two-quarter rate of change in the private hourly earnings index. The numbers in parentheses are *t* ratios.

b. Lag coefficients estimated from an equation relating the nominal interest rate to past price change reported in "Inflation in Recession and Recovery," appendix A (cited in sources). This set of lag coefficients remains unchanged in columns 1 through 3.

c. The sum of a series of distributed-lag coefficients estimated by the polynomial-distributed-lag method, with details of estimation the same as in table 2. The lag length is eight quarters in line 7 and twelve quarters in line 8.

d. The sum of a series of twelve lag coefficients is constrained to equal 1.0.

e. The upper figure in each column is derived from an equation using the deflator for private nonfood business product net of energy. The coefficients reported in lines 1-11 for equations in columns 2-8 are all from equations using that deflator. The lower figure is derived from an equation using the deflator for private nonfarm business as the product price.

As in the case of the structural price equations, the postsample extrapolation errors of the wage equation are vastly larger than the in-sample standard error (lines 12 and 13 of column 3). Two separate extrapolations are performed; the lower figures in lines 13 and 14 result from using the nonfarm business deflator as the "product price" while the upper figures result from using the deflator of nonfood business product net of energy.¹⁵ The cumulative overprediction given in line 14 is much higher when the nonfarm deflator is used. This is the first indication of a conclusion that emerges very strongly in this section: *none* of the 1973–74 inflation in food and energy prices "got into" wages, and all pre-1971 wage equations that allow any influence of food and energy prices drastically overpredict the cumulative 1971–76 wage increase.

Just as the postsample extrapolations of the structural price equation were superior when the sum of labor-cost coefficients was constrained to be 1.0, the extrapolations of the wage equation improve when the sum of the price coefficients is constrained to be 1.0. The constraint is introduced by changing the arrangement of the price variables. Since the result in column 3 indicates that only the product price "matters"—since the 1.085 coefficient on the consumption deflator in line 6 is virtually cancelled by the 0.974 coefficient on "minus" the consumption deflator in line 7—the product price is entered directly in line 8 with the sum of coefficients constrained to equal 1.0. Now the size of the coefficient on line 7 measures (with reverse sign) the separate influence of the consumption deflator; a coefficient of 0.0 would indicate that only product prices matter, and a coefficient of -1.0 that only consumption prices matter.

The constrained equation in column 4 fits the sample period slightly better than the unconstrained version does, and achieves a marked improvement in the postsample root mean-square error. The cumulative postsample overprediction is cut to slightly more than 1 percentage point when the deflator for nonfood business product net of energy is used as the product price. Nevertheless, the postsample performance is by no means perfect, as is clear in figure 2 from a comparison of the solid, "actual," line with the dotted line representing the postsample predictions of column 4. The equation underpredicts in 1972 and 1973. Although the similar underprediction in the four quarters prior to controls in 1970–71

15. The coefficients in columns 2 through 8 are based on the deflator for nonfood business product net of energy.

complicates the verdict, the performance suggests that the controls program did not reduce wage change at all; beyond that, wage change during the controls program did not even reflect the deceleration of prices. The other major error in the extrapolation is a substantial overprediction of wage change during 1975 and 1976. A possible interpretation of the pattern of these errors is presented below.

The strong evidence that product prices and not consumer prices matter suggests that the major determinant of wage behavior is the demand for labor by firms, not the needs of workers or union aggressiveness. That, in turn, raises the question of whether wage changes depend basically on demand conditions in the product market rather than exclusively in the labor market.

Considerable experimentation with lag structures suggests that the effect of the commodity market on wages can be represented by a pair of proxies for excess demand: (1) the gap between actual and potential output, and (2) the first difference in the gap (the same variable used in the price equation).¹⁶ When the pair of output-gap variables replaces the three labor market variables of the original specification, the standard errors of estimate improve slightly (compare columns 3 and 5). The same holds true for a comparison of the respective versions with constrained price coefficients in columns 4 and 6. The postsample performance of the constrained output-gap version in column 6 is markedly better than that reported in column 4 by the criteria of both the root mean-square error and the cumulative error. When the product price is represented by the deflator for nonfood business product net of energy, the output equation in column 6 can track cumulative wage change between 1971 and 1976 to within 0.1 percent.

The output-gap equation in column 6 is remarkable in attributing virtually all of the impact of the demand for commodities on wages to the *change* in the output gap. The coefficient on the level of the output gap is

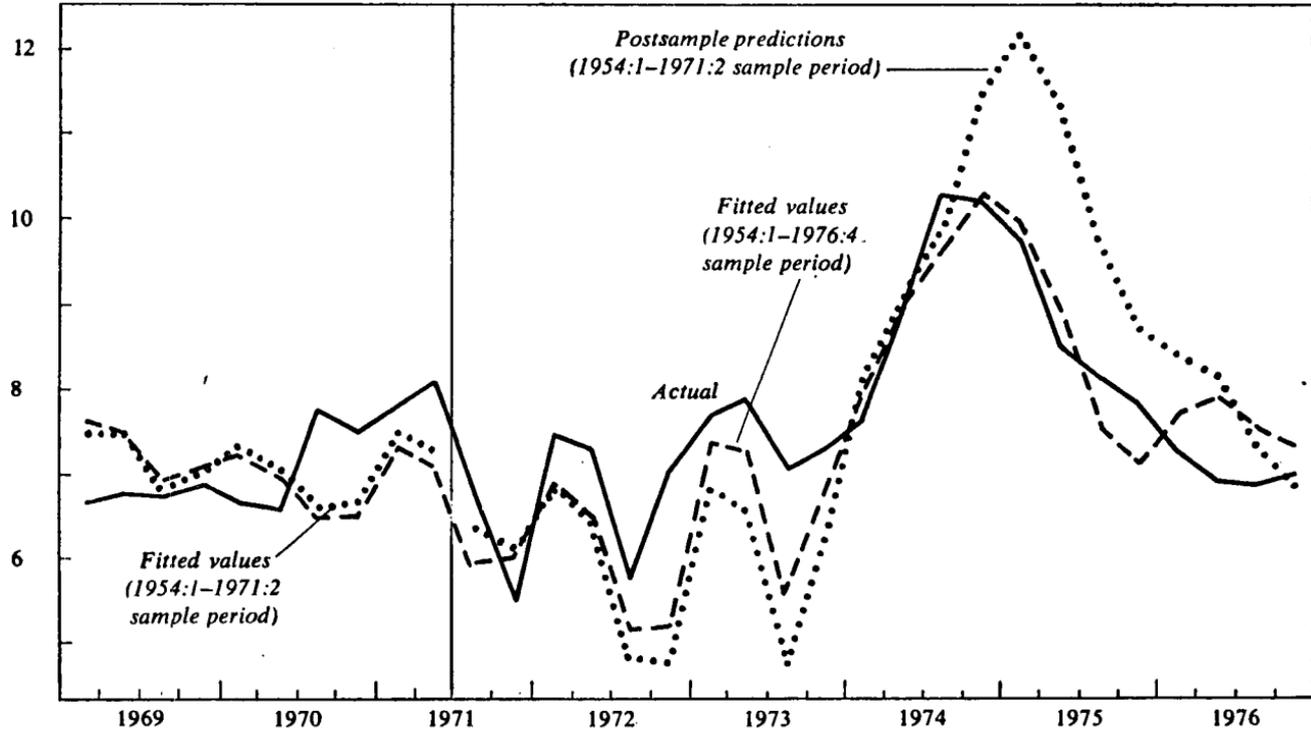
16. The output gap is equal to potential output minus actual output, with the difference divided by potential output. The level of potential output is a trend that equals actual output when unemployment equals the natural rate of unemployment. Details of the methodology for estimating the natural unemployment rate are contained in Robert J. Gordon, "Structural Unemployment and the Productivity of Women," in Karl Brunner and Allan H. Meltzer, eds., *Stabilization of the Domestic and International Economy*, Carnegie-Rochester Conference Series on Public Policy, vol. 5 (Amsterdam: North-Holland, 1977), pp. 181-229.

so small, and so weak statistically, that it plays only a trivial role, implying that an economy with output gaps of 6 percent and -6 percent would have almost exactly the same rates of wage inflation, given the rate of price inflation. This implication of the output-gap version in column 6 conflicts with the vast body of previous research, including the original specification in columns 1 and 4, in which the dominant labor market variable is disguised unemployment, which tends to be correlated more with the *level* of total unemployment than with its rate of change.

Finally, in constructing table 3, I extended the sample period of the wage equations to the end of 1976. Results for the unconstrained versions are shown in columns 7 and 8. Dummy variables for the controls are included in the equation for the same time intervals as in table 2, and imply not only that controls in 1971-72 did not hold down wages, but that wages increased *more* than would have been expected in light of the moderating impact of the controls on price inflation. The improvement in fit in the extended version with the original specification is evident in the contrast between the dotted and dashed lines in figure 2. At the cost of only a slight deterioration in the tracking of wage change in 1969-71, the extended equation is able to cut drastically the overprediction of wage change in 1975.

Other than the inclusion of dummy variables, the main difference in the extended equation in column 8 is a marked increase in the absolute value of the coefficient on the level of the output gap. The recession appears to have been more effective during 1975-76 in holding down wage change than would have been predicted from the sample period ending in 1971:2. The output-gap equations estimated for the 1954-71 period tend to exhibit a relatively flat short-run Phillips curve, because of the influence of the rapid wage change during the recession of 1970-71. Equations estimated to the full 1954-76 period display a higher coefficient on the level of the output gap, reflecting the reduced rates of wage change in 1975-76. The same contrast is evident in a comparison of the coefficient on the unemployment of hours in columns 4 and 7, the two equations that are plotted in figure 2. Is it the 1970-71 period that should be considered the outlier, or 1975-76? Some previous research suggests an unusual spread in 1970-71 between union and nonunion wage change which may be associated with the timing of union negotiations over the 1967-71 period. Based on this evidence, I tend to favor the interpretation that the 1970-71

Figure 2. Actual and Predicted Change in Adjusted Hourly Earnings Index Using the Specifications of the Structural Wage Equations, 1969-76
Annual rate of change in percent



Sources: Actual, see table 3 sources; predicted and fitted, table 3, columns 4 and 7.

period was unusual, and hence to prefer the coefficients in the extended equations in columns 7 and 8.

Some authors have developed models of wage-setting behavior in which wage change depends not on price change, as in table 3, but only on the past behavior of wages. While it is plausible to argue that both firms and workers base wage changes on wage changes recently granted to comparable employees in other firms or industries, both theory and the data decisively support a role for price change.¹⁷ When a distributed lag on past changes in wage rates is substituted for price change in the 1954–71 period, using the specification of column 5 in table 3, the sum of squared residuals *triples*. For the longer 1954–76 period, the sum of squared residuals rises by 59 percent. Further, the pattern of residuals indicates that the “wage-wage” version cannot explain any of the acceleration of wage change between 1973 and 1974.

Policy Simulations

A dynamic simulation of the wage and price equations, which allows for the effects of wages on prices and prices on wages, provides an assessment of the inflationary implications of alternative paths of economic recovery and of the required duration of a “stable prices at any cost” policy that *prevents* recovery and maintains today’s output gap.

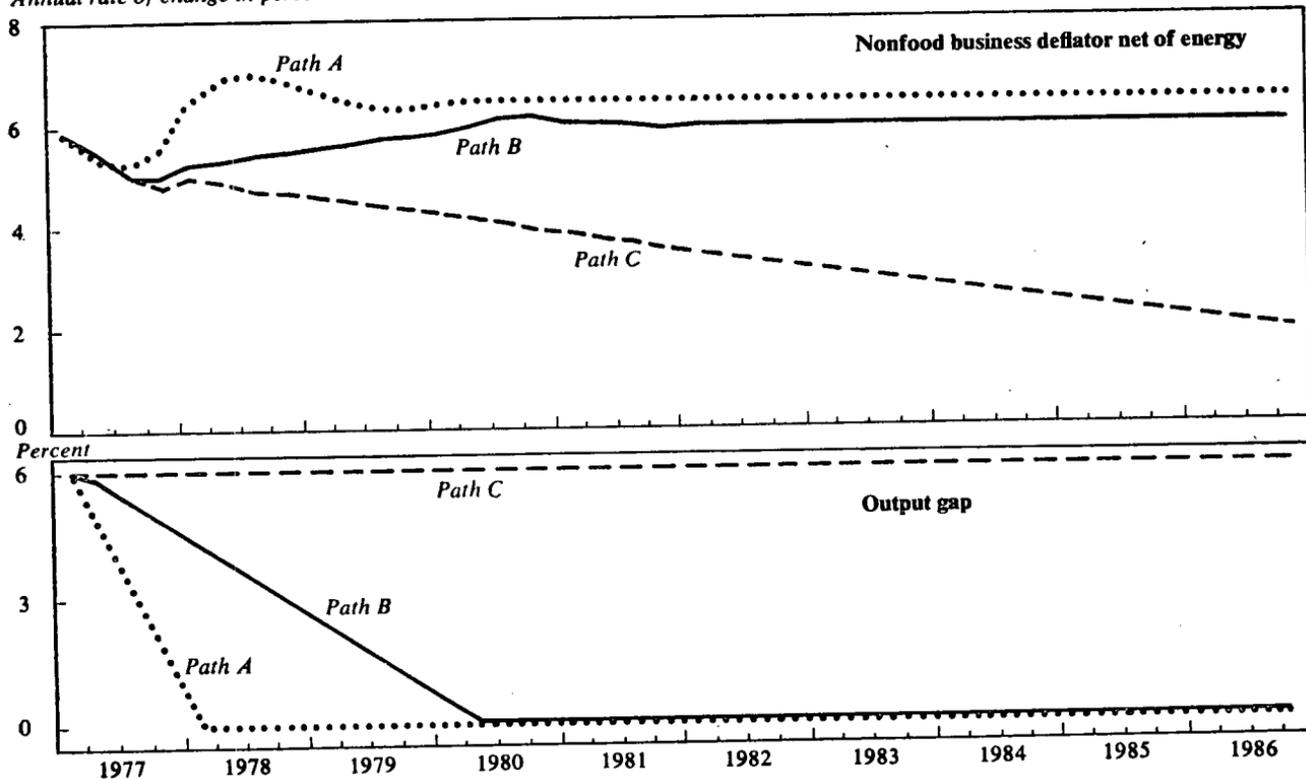
Policy simulations with a two-equation wage-price model have both disadvantages and advantages as compared to simulations using the large-scale forecasting models. The main disadvantage is that the specification must be restricted to rely (largely if not entirely) on a single exogenous variable—for example, the output gap—which “drives” the simulation. Offsetting advantages are that the simulation results may be more easily studied, interpreted, and understood, and that the equations that underlie the simulations are similarly “open for inspection.”

The policy simulations derive alternative paths of inflation in the nonfood sector net of energy implied by alternative exogenous paths of the output gap. Since relative energy prices are likely to rise over the next few years, the corresponding paths for the GNP deflator would all lie above that presented in figure 3.

17. See particularly Robert E. Hall, “The Process of Inflation in the Labor Market,” *BPEA*, 2:1974, pp. 343–93, and my criticisms of that paper, pp. 394–99.

Figure 3. Inflation Implied by Various Paths of Output, 1977:1-1986:4

Annual rate of change in percent



Source: Based on table 2, column 7, and table 3, column 8.

Because the previous analysis leads to the conclusion that the extended-period price equation contains a more plausible lag pattern on trend unit labor cost, and that the steeper Phillips curve in the extended-period wage equation is likely to be more accurate, the simulations presented here are based on the price equation in table 2, column 7, and the wage equation in table 3, column 8. The wage equation that uses the output gap rather than the unemployment variables of the original specification is employed to avoid the problem of creating equations that link those unemployment variables to the output gap.

Tax rates were all assumed to remain unchanged at their values in 1976:4, and the change in the relative prices of capital and consumption goods was set equal to zero in all simulations. Simple equations were developed to relate changes in materials prices and the change in the productivity deviation to the change in the output gap. Further adjustments were made to ensure that the inflation rate would neither accelerate nor decelerate when the output gap was zero. To obtain this result in dynamic simulations, it is not enough to constrain the sum of coefficients on wages in the price equation, and on prices in the wage equation, to be equal to 1.0. Three other important restrictions must be imposed: First, the trend rate of productivity growth in the price equation must be set equal to the constant term in the wage equation. This switch, from 1.96 to 2.13 percent annually, is small enough to be acceptable and within the range of the standard error in the equation originally used to estimate the productivity trend. Second, the growth rate of the wage variable in the price equation must equal that of the wage variable in the wage equation. Third, there must be no change in relative materials prices.

Figure 3 corresponds to these assumptions and displays three combinations of inflation and unemployment. Path A is an implausibly rapid recovery that reduces the output gap from its 6.2 percent rate at the end of 1976 to zero by 1978:1. At first inflation is predicted to slow down moderately, benefitting from the lagged influence of low rates of change in wages and prices in 1976, but then an acceleration begins. The "rate of change" effects of a rapidly falling output gap push inflation close to 7 percent in late 1978, followed by an adjustment to the long-run "steady state" rate of 6.4 percent.

A slower recovery, path B, reaches a zero gap in 1980 (the quarter before the next presidential election), rather than in early 1978. Slower growth has both transitory and permanent benefits. Inflation is lower by

as much as 1.3 percentage points at an annual rate in late 1978, and the long-run "steady state" rate of inflation is 0.4 point slower.¹⁸

Since path B corresponds most closely to the recovery path apparently desired by the Carter administration, this "optimistic" simulation conflicts with the administration's avowed aim of reducing unemployment while simultaneously achieving a deceleration of inflation to 4 percent. Even on the optimistic assumption of zero change in relative energy and food prices, the administration's policy goals are inconsistent.

The third alternative in figure 3, path C, shows the rate of deceleration of inflation that would obtain if the output gap were held permanently at 6.2 percent. The inflation rate would fall rapidly during 1977, reflecting the delayed impact of the lower-than-predicted actual rates of wage and price change during 1976. Subsequently, a further modest slowdown of inflation would occur, beginning with a 0.24 percentage point drop in the inflation rate in 1978, widening to a deceleration of 0.36 percentage point per year in 1986. This turtle-like deceleration of inflation reflects the extremely weak effect of a high output gap on wage behavior, and the absence of any effect of a maintained gap on price behavior.

In my own judgment, the assumptions underlying the simulations reflected in the figure lean toward the optimistic side. First, as noted above, they ignore the prospect of rising relative prices of energy over the years ahead. Second, they assume no upward trend in relative materials prices, in contrast with the actually observed trend of 2.0 percent a year for 1963-76 (adjusted to a constant output gap). Third, they assume that compensation per manhour and average hourly earnings will grow at equal rates, when in fact the former has outpaced the latter by 0.3 percentage point a year on average since mid-1971. If that trend were assumed to continue, it would put added upward pressure on the price equation for any path of average hourly earnings predicted by the wage equation. Alternative, more pessimistic, assumptions could easily add 1 to 2 points to the inflation rate by 1980 and as much as 3 to 4 points by 1986.

18. As an example of a more optimistic conclusion, a "control solution" recently published by Data Resources, Inc., predicted that the economy could reach 5.5 percent unemployment in 1980, a path roughly equivalent to my path B, with only a 5.4 percent change in the GNP deflator in 1980. See Otto Eckstein and others, *Economic Issues and Parameters of the Next 4 Years* (Data Resources, Inc., 1977), table 6, p. 30, solution "CONTROL1229."

Conclusion

All approaches fail to explain the increased variance of inflation during 1971–76 as compared to the pre-1971 period. But overall, the *cumulative* amount of inflation since 1971 can be explained—even overexplained—by established econometric procedures. Both the structural price and the structural wage equations can track the cumulative change in the prices of nonfood business product net of energy and in wages to within a percentage point, once they incorporate the sensible constraint that sums of coefficients of prices on wages and wages on prices equal unity.

The analysis of this paper leads to the following interesting conclusions.

First, the short-run Phillips curve relating wage change to unemployment or the output gap may well be steeper than implied by equations estimated for sample periods ending in 1971. While this result helps to explain why wage changes were so moderate in 1976, it implies that a rapid economic recovery may bring about a greater acceleration in inflation than some commentators appear to anticipate.

Second, the speed of recovery matters, in both the price and the wage equations. It is the rate of change of the output gap that influences the rate of change of prices relative to wages, and there is also a partial impact from the speed of the change in output in the output-gap version of the wage equations.

Third, the ability of product prices and the output gap alone to explain wage behavior suggests that the demand for labor by firms is the main determinant of wages, and that autonomous actions or reactions by workers have little impact.

Fourth, as in previous papers, I conclude that price controls worked temporarily, with a decline in the price level followed by a rebound, but that wage controls had if anything a perverse effect. Why the effectiveness of the controls program should have been limited to prices is a puzzle that others may be better able to answer. The implications for wage guidelines or jawboning are not reassuring.

Fifth, none of the increases in food or oil prices in 1973–74 appears to have been incorporated into wages. In the context of my previous study of supply shocks, this implies that policymakers could have stimulated nominal income growth to accommodate some of the effect of food and oil prices without setting off an endless inflationary spiral. But the strong

demand effects exhibited in the equations of this paper suggest that such a policy of accommodation would have substantially lessened the deceleration of inflation between 1974 and 1976.¹⁹

Sixth, perhaps most important, the outlook for inflation is rather grim. Despite the continuing output gap, the statistical evidence presented above indicates that any further deceleration in inflation is highly unlikely. On the contrary, it points to the probability of some acceleration as the economy continues its recovery. While the extent of that acceleration will depend on the speed of the recovery, inflation rates of 6 or 7 percent seem likely for the next several years, compared with the 5 percent rate during 1976. Any serious effort to eliminate inflation through demand restraint would be exceedingly costly; a strategy of maintaining the late 1976 output gap might bring the inflation rate down to 2 percent by the mid-eighties, but only through a loss of output that would substantially exceed \$1 trillion.

Finally, as a corollary to this unpleasant verdict, the recovery itself is likely to require a maintained growth of monetary aggregates above rates that now seem acceptable to the Federal Reserve, in order to finance an annual growth of nominal gross national product of 12 or 13 percent during the rest of the decade. How the makers of monetary policy will react to this dilemma remains to be seen.

Discussion

SEVERAL participants commented on the substantial differences between the coefficients in the price and wage equations fitted through 1971 and those for the period as a whole. They questioned the stability of the underlying structure in light of these changes. George Perry noted, in particular, the much greater role played by the level of the output gap in the full-period estimate of the wage equation. Franco Modigliani cautioned against drawing the inference that consumer prices do not matter on the

19. A hypothetical accommodative policy that maintained the output gap at zero in 1974-76 would have caused substantial extra inflation, reaching a peak in mid-1975 of 3.8 percentage points over that which actually occurred, and then tapering off to an excess of 2.0 percentage points in late 1976. This conclusion is based on a dynamic simulation of the same equations as are used in figure 3.

basis of revised data and updated equations when the earlier evidence suggested otherwise.

Arthur Okun remarked that path C in figure 3 implied extremely asymmetrical effects of excess demand and excess supply. According to the simulation, it takes a 6 percent GNP gap for a whole decade to eliminate an inflation rate that resulted from much smaller excesses over potential in the past. Yet there is no nonlinearity in the equations used for that simulation. Gordon responded that the apparent asymmetry resulted from the contribution to inflation in the past of variables other than excess demand—particularly tax rates and materials prices—which are artificially held constant in the simulations of figure 3. Perry commented that over the years growing awareness of inflation may have caused the price effects on wages to rise, in line with Michael Wachter's analysis of a shifting Phillips curve. Okun suggested that any advocate of extreme demand restraint would have a far more optimistic view than path C, relying on a "hawkish" policy stance to reverse inflationary expectations. He reminded the group that William Fellner had developed that line of argument in detail.

Pentti Kouri was somewhat surprised to see that such a small role was assigned to consumer prices in U.S. wage behavior during the recent period, unlike other industrial countries. In the United Kingdom and Italy, in particular, deteriorations in the terms of trade had induced wage demands aimed at sustaining previous real wage levels. Perry recalled, however, that in his research on European wage behavior he had found that value-added and wage-wage effects dominated those of consumer prices. Modigliani disagreed with Perry over the importance of consumer prices, especially in the case of Italian wage behavior. Wachter suggested that food and fuel inflation might have ultimately gotten into wages in the United States if not for the severity of the recent recession. He found it quite plausible that price feedbacks on wages interact with demand conditions.

Edmund Phelps believed that the nonfood nonfarm deflator may have performed better than the consumer price index because the former is a proxy for lagged wage changes. He would prefer to see a lagged wage term used instead of prices; he felt that, on theoretical grounds, the appropriate variable is the expected rate of wage change, which should have a coefficient of unity given labor demand and supply. Gordon reported, however, that in tests he conducted lagged prices performed better than

lagged wages. Christopher Sims expressed some amusement that the best wage equation had no labor market variables in it. This result conformed with his belief that wage and price equations cannot be distinguished as applying to different categories of behavior. It was preferable to consider them as interesting statistical reduced-form summaries of the dynamic relationships among the variables.

Wachter found it implausible that disguised unemployment, which is composed largely of marginal workers, could exert the major influence on wage changes attributed to it by Gordon's wage equation. He also observed that the small demand effects in the early price equations meant that together the wage and price equations formed an almost purely autoregressive system, in which prices and wages fed upon each other without being influenced significantly by demand.

Gordon supported Sims' interpretation that the wage and price equations represented reduced-form summaries of dynamic relationships. Many different variables shared the major cyclical movements of the sample period, preventing statistical discrimination among finely differentiated hypotheses. As Gordon saw Wachter's criticism of the disguised unemployment variable, it attempted to place a structural interpretation on a variable that simply represented a generalized demand effect and that performed no better or worse than the output gap, an alternative proxy. Gordon concluded that, even when the wage and price equations were viewed as reduced forms, several conclusions emerged strongly, particularly the important role of inertia in the wage-price process, and of the *rate of change* of output. On the other hand, no confidence could be placed on the impact of the *level* of output without an informed judgment on unusual aspects of the 1970 and 1973–75 recessions.

Representative HAMILTON. Thank you very much, Mr. Gordon. I think you have given us a few matters to reflect on, and I am sure we will discuss those in a few minutes.

We will conclude the statements with the presentation by Mr. Fair, then we will open it up for questions and discussion.

Mr. Fair, your statement will be entered into the record in full. You may proceed.

**STATEMENT OF RAY C. FAIR, ASSOCIATE PROFESSOR OF
ECONOMICS, YALE UNIVERSITY**

Mr. FAIR. I have prepared for this hearing a forecast of the U.S. economy through 1980 using an econometric model that I have recently developed. Included with my statement is a detailed description of this forecast. I will not go through all the numbers in the forecast, but will highlight a few of the important results from my work.

I should say, with respect to Bob Gordon's testimony, that it is not obvious to me that my results differ in significant ways from his. His approach is different from mine in the sense that it is more casual: he does not have an econometric model. But from what I heard so far, I think my results would not be inconsistent with the basic thrust of his remarks.

I have actually made three different forecasts, corresponding to three different assumptions about monetary policy. For the first forecast, monetary policy is explained within the model. I have estimated an equation that explains the behavior of the Fed, and this equation was included in the model for the first forecast. The equation is one in which the Fed is estimated to "lean against the wind" as the economy expands and/or as inflation increases, where "leaning against the wind" takes the form of an increase in the bill rate; the short-term interest rate in the model. In other words, the equation states that the Fed causes the bill rate to rise in response to an increase in real economic activity and/or to an increase in inflation. This equation explains past fluctuations in the bill rate fairly well, and it is my best guess as to the future course of monetary policy.

For the second and third forecasts the Fed equation is not included in the model. Instead, for the second forecast the Fed is assumed to behave by keeping the bill rate unchanged from its present value, 4.8 percent in the second quarter of 1977; and for the third forecast the Fed is assumed to behave by keeping the growth rate of the money supply— M_1 —each quarter at an annual rate of 6.5 percent. The 6.5 figure is an upper limit to the planned increase in the growth rate of M_1 , as announced by the Fed.

Regarding fiscal policy, I assumed no change in the tax laws that are now on the books. My Government expenditure numbers are consistent with those presented in the OMB "mid-session review of the 1978 budget," which was released on July 1, 1977. The numbers in this document only go through 1979, and in constructing my Government numbers for 1980 I was guided by the numbers in the latest CBO report of July 1977, on its 5-year budget projections.

I should state also in regard to Bob Hartman's testimony that in a model like mine the Government budget is explained within the model. I am not working backward by assuming a balanced budget, but in

fact predicting the budget, given the Government expenditure numbers, the tax laws, and the other exogenous variables in the model.

The results are quite easy to summarize. If the Fed behaves by keeping the bill rate unchanged, full employment and balanced Federal budget are reached by 1980. The reason for this fairly optimistic forecast is that there is considerable fiscal stimulation now projected for the next 5 or 6 quarters. If you will look to table 5, which presents the Government budget numbers, or to table 2, which presents the change in total real purchases by the State, local and Federal government sectors, there is considerable stimulation between now and the end of 1978; much more than we have had recently.

This stimulus includes a large increase in grant in aid to State and local governments, which I have assumed for this forecast are passed on by the State and local governments into increased spending. So, in short, the fiscal stimulus between now and the end of 1980 is fairly strong, and if the Fed behaves by not having the bill rate rise in response to this, then the administration's goals with respect to full employment and a balanced budget are predicted to be achieved by 1980.

If, on the other hand, the Fed behaves as I predict it will, the expansion is aborted near the end of 1978, and the Federal budget deficit in 1980 is still fairly large, \$32.4 billion. The expansion is aborted in this case because the Fed is predicted to cause the bill rate to rise in response to the expanding economy—to about 7 percent by the end of 1978 and to about 8 percent by the end of 1980. In this case, the unemployment rate never falls below 6.1 percent and by the end of 1980 it is back up to 6.5 percent.

If, finally, the Fed behaves by keeping the growth rate of M_1 at 6.5 percent, the expansion is aborted almost immediately. The bill rate rises to 13.1 percent in the third quarter of 1977 and stays roughly at this level throughout the period. By the end of 1980 the unemployment rate is 9.8 percent and the Federal deficit is \$86.8 billion.

In the full-employment, balanced-budget case, inflation is about 1 percentage point higher by the end of 1980 than it is in the case in which the Fed behaves as I predict it will.

The price one pays for this case in terms of extra inflation is thus about 1 percentage point, according to the model. The inflation rate in this case is about 5.5 percent at the end of 1980, compared to about 4.5 percent in the case in which the Fed behaves as I predict it will. Inflation rates are between about 5 and 6 percent throughout this period according to the model, but about 1 percentage point higher by the end of 1980 if the Fed behaves by keeping the bill rate unchanged. These numbers may be slightly lower than Bob Gordon would expect, but the thrust of my remarks would not change if one had somewhat higher values of the rate of inflation from what the model is predicting. The case in which the Fed keeps the growth rate of M_1 at 6.5 percent, the inflation rate is about 0.2 percentage points less by the end of 1980 than it is in the case in which the Fed behaves as I predict it will.

The results from any econometric model must be interpreted with considerable caution, and my model is no exception to this. I have not subjectively adjusted any of the results from the model, and so what you have before you are as pure as a set of results from a model as I can achieve. Some subjectivity does come in my choice of the Govern-

ment expenditure numbers, but here I have stayed very close to the current OMB and CBO numbers.

My own personal impression of the results is that they seem quite reasonable with the exception of the predicted inflation rate in 1977 III, which seems too low, and the predicted growth rate of imports throughout the period, which seems too high. Adjusting these two results would not, however, affect the overall results and the conclusions to be drawn from them in any significant way.

It is thus my conclusion from this exercise that the administration's goals for 1980 will not be achieved if the Fed behaves as it has in the past. The model predicts that the Fed will cause the bill rate to rise from its present level as the economy expands and as inflation continues to be higher than its historic average. This rise in the bill rate will in turn abort the expansion before full employment and a balanced budget are reached. The model predicts that the goals can be achieved if the Fed departs from this pattern of behavior and instead behaves by keeping the bill rate unchanged from its present level.

As a final remark, it seems quite unlikely to me that the Fed will behave by keeping the growth rate of M_1 at 6.5 percent. This is clearly an extreme policy, and although I do not yet have an equation that explains congressional behavior, my prediction is that the Fed would lose its independence if it behaved in this way and that the Fed knows this.

I should also add with respect to my Government numbers in table 5 that my predicted deficit for 1979 is in basic agreement with the OMB predicted deficit except for receipts from corporate profits and indirect business taxes. I have by 1979 considerably less revenue, generated from corporate profits and indirect business taxes than does the OMB. The OMB predictions seem too high to me.

[The attachment to Mr. Fair's statement follows:]

FORECAST I—JULY 23, 1977

(By Ray C. Fair)

FORECAST PERIOD: 1977-III—1980-IV

Model: The model is described in [1]. The coefficient estimates used for this forecast are presented in [3]. The model has been reestimated through 1977 I on the basis of data available as of July 1, 1977.

Data: Forecast based on data available as of July 21, 1977, including the revised national-income-accounts (NIA) data that were released on July 21, 1977. Data on most of the variables in the model were available for 1977 II, although for some variables guessed values for 1977 II had to be used.

Assumptions About Monetary Policy:

A=Behavior of the Fed is endogenous, as estimated and discussed in [2]. (Equation (1) in [2], reestimated through 1977 I, was used.)

B=Bill rate unchanged from its 1977 II value.

C= M_1 constrained to grow at an annual rate of 6.5 percent throughout the period.

Assumptions About Fiscal Policy:

No change in current tax laws.

Exogenous government expenditure numbers consistent with those presented in the OMB "Mid-Session Review of the 1978 Budget," July 1, 1977. The NIA translation of the numbers in this document were supplied to me for fiscal years 1977, 1978, and 1979 and for quarters 1977 III—1978 IV by the CEA. In estimating the government numbers for 1980, I was guided by the numbers in the two CBO documents: "Five-Year Budget Projections: Fiscal Years 1978-1982," December 1976, and "Update to Five-Year Budget Projections: Fiscal Years 1978-1982," July 1977.

Assumptions About The Foreign Sector :

Import price index (PIM) set to grow at an annual rate of 4.0 percent throughout the period. Real value of exports (EX) set to grow at an annual rate of 10.4 percent throughout the period.

Other Information :

Aside from PIM, EX, and various fiscal-policy variables, there are no other important hard-to-forecast exogenous variables in the model. The version of the model used for the forecast differs slightly from the model as presented in [1]. A few definitions have been added to the model to allow the Fed behavioral equation to be added and to allow the government sector to be separated into a Federal government sector and a State and Local government sector. Also, an equation explaining depreciation of the firm sector (DEP) has been added (before DEP was exogenous), and a few small changes were made as a result of the complete revision of the NIA data in 1976. All these changes are explained in [3]. No constant-term or other subjective adjustments were applied to the model for this forecast.

Forecast Results : Presented in Tables 1-5 for Monetary Policy A and in Table 6 for Monetary Policies B and C. A computer printout of all the results, including all the exogenous-variable values, is available from the author upon request.

Discussion of Results : Monetary Policy A :

1. Strong real growth through the middle of 1978 because in part of Strong Federal fiscal stimulus. (See %XG in Table 2 and the expenditure numbers in Table 4.) The Fed is predicted to cause the bill rate to rise to about 7.0 percent by the middle of 1978 (Table 1). Real growth is much lower in 1979 and 1980 because in part of less fiscal stimulus and because in part of the higher values of the bill rate. The unemployment rate falls to 6.1 percent by the middle of 1978 and then rises gradually to 6.5 percent by the end of 1980 (Table 1).

2. Part of the Federal fiscal stimulus takes the form of an increase in grants in aid to S&L governments (Table 4). S&L governments are currently running a large surplus (Table 1). This surplus is estimated to get even larger in the next few quarters as a result of the large grant-in-aid increases. By the end of 1978, however, the surplus is predicted to be down to its current level, and then by the end of 1980 it is predicted to be down to about 40 percent of its current level. In other words, the S&L governments are assumed, with a slight lag, to spend the grants in aid.

3. The Federal budget is not balanced by 1980. The predicted deficit in fiscal year 1980 is 32.4 billion dollars (Table 4). For fiscal 1979 the model is predicting a deficit of 39.6, which compares to the OMB predicted deficit of 21.4 (a discrepancy of 18.2). Although the model for fiscal year 1979 is predicting 5.4 more in personal tax receipts than is OMB, it is predicting 16.7 less in corporate tax receipts and 7.6 less in indirect business taxes. These differences account for most of the 18.2 discrepancy ($-5.4 + 16.7 + 7.6 = 18.9$).

4. The GNP deflator (Table 1) is affected by government pay increases, and a better measure of the aggregate inflation rate in %PX in Table 3. The rate of inflation stays about 5 percent throughout the period, although by the end of 1980 it is around 4.5 percent. The real wage rate, WF/PX, increases faster than its historic trend rate throughout the period. Its historic trend rate is about 1.7 percent. (A regression of $\log(WF/PX)$ on a constant and time for the 1954 I-1977 I period yields an estimated coefficient for time of 0.004138, which at an annual rate is 1.67 percent.) Although not shown in Table 3, the real wage is currently below its trend line by a fairly large amount. The larger-than-trend increases in the real wage do, however, cause it to be back on the trend line by the end of 1980. This larger-than-average growth rate of the real wage throughout the period is one reason that profits do not increase between now and the end of 1979 as much as one might otherwise expect.

5. Imports are predicted to rise substantially throughout the period. They are predicted to increase on average faster than the 10.4 percent annual rate assumed for exports (Table 2). This results in a worsening of the U.S. balance of payments on current account (net foreign investment in Table 1).

6. The financial saving of each sector is presented in Table 5. The large savers during the period are the household and foreign sectors, and the large dissavers are the firm and Federal government sectors. The household savings rate rises from the current 7.0 percent to 8.1 percent by 1980 (Table 1), which is due in part to the higher values of the interest rates.

Monetary Policy B : 1. Full employment and a balanced Federal budget by 1980 (Table 6). Inflation rate about 1.0 percentage points higher by 1980 than

it was in the case of Monetary Policy A in Table 1. Household savings rate now falls rather than rises. The U.S. balance of payments on current account is about 10 billion dollars worse at an annual rate than it was before. The growth of the money supply is about 1.5 percentage points higher than it was before. The growth rate of M_1 by the end of 1980 is now 9.1 percent compared to 7.5 percent in the case of Monetary Policy A.

Monetary Policy C: 1. Bill rate jumps to 13.1 percent in the first quarter and then stays roughly there (Table 6). The unemployment rate rises to 9.8 percent by the end of 1980. The Federal government deficit by this time is about 85 billion dollars. The inflation rate is about 0.2 percentage points lower by 1980 than it was in the case of Monetary Policy A in Table 1. The household savings rate is up to 11.8 percent by the end of 1980 in response to the higher interest rates.

REFERENCES

[1] Fair, Ray C., *A Model of Macroeconomic Activity. Volume II: The Empirical Model* (Cambridge: Ballinger Publishing Co., 1976).

[2] ———, "The Sensitivity of Fiscal-Policy Effects to Assumptions About the Behavior of the Federal Reserve," Cowles Foundation Discussion Paper No. 446, revised June 1977.

[3] ———, "The Fair Model as of July 1, 1977."

TABLE 1.—FORECAST RESULTS FOR SELECTED VARIABLES
 MONETARY POLICY A
 (FEDERAL BEHAVES ACCORDING TO AN ESTIMATED EQUATION)

Quarter	Real GNP		GNP deflator		Unemploy- ment rate (UR)	Bill rate (RBILL)	Money supply (percent M1)	Federal surplus or deficit (-)	S. & L. surplus or deficit (-)	Personal savings rate	Net foreign investment (- SAVR)	Before tax profits (=F)
	GNPR	Percent GNPR	GNPD	Percent GNPD								
1977: II ¹	1,331.5	6.4	140.36	6.6	7.0	4.8	9.9	-45.3	24.9	7.0	-17.4	150.9
1977:												
III.....	1,353.4	6.7	141.70	3.9	6.7	5.3	11.4	-57.1	28.2	7.2	-18.6	149.4
IV.....	1,374.6	6.4	143.47	5.1	6.5	5.7	10.9	-58.4	30.3	7.4	-19.2	154.5
1978:												
I.....	1,397.1	6.7	145.15	4.8	6.3	6.1	10.5	-56.0	32.5	7.2	-21.5	159.0
II.....	1,417.7	6.0	146.92	5.0	6.2	6.5	10.1	-54.3	32.4	7.3	-23.3	163.4
III.....	1,434.4	4.8	148.73	5.0	6.1	6.8	9.7	-49.2	29.2	7.5	-24.3	163.7
IV.....	1,447.6	3.7	150.79	5.7	6.1	7.1	9.5	-45.2	25.3	7.7	-24.8	160.7
1979:												
I.....	1,461.0	3.8	152.63	5.0	6.1	7.3	9.2	-40.9	20.6	7.7	-25.3	158.8
II.....	1,473.1	3.3	154.47	4.9	6.1	7.4	8.9	-37.5	17.8	7.8	-25.2	155.4
III.....	1,484.7	3.2	156.31	4.8	6.2	7.6	8.6	-34.8	15.1	7.8	-24.9	151.6
IV.....	1,495.8	3.0	158.46	5.6	6.2	7.7	9.5	-35.4	12.6	8.0	-24.4	147.1
1980:												
I.....	1,507.3	3.1	160.29	4.7	6.3	7.7	8.2	-33.7	10.7	8.1	-23.8	143.3
II.....	1,519.7	3.3	162.12	4.7	6.3	7.8	8.0	-30.8	9.5	7.9	-23.2	140.5
III.....	1,528.8	2.4	163.90	4.5	6.4	7.9	7.7	-29.7	10.0	8.0	-21.4	133.0
IV.....	1,537.2	2.2	165.95	5.1	6.5	7.9	7.5	-29.5	9.7	8.1	-19.5	124.7

¹ Actual data.

Notes: Percent means percentage change at an annual rate. All flow data are at an annual rate.

Federal and S. & L. Government budgets are on an NIA basis. See [1] and [3] for further definition of the variables.

TABLE 2.—FORECAST RESULTS FOR COMPONENTS OF REAL GNP
MONETARY POLICY A
(In percent)

Quarter	CS ¹	CN ²	CD ³	IH ⁴	INV ⁵	ΔVI ⁶	IM ⁷	Exog. EX ⁸	Exog. XG ⁹
1977: II ¹⁰	2.0	1.2	3.9	45.2	13.9	2.9	2.8	0.4	23.4
1977:									
III.....	4.4	1.7	14.3	2.5	11.2	1.1	12.2	10.4	24.2
IV.....	4.2	2.0	14.4	3.8	14.9	1.2	11.3	10.4	14.7
1978:									
I.....	4.0	2.0	12.8	9.8	14.3	.7	15.3	10.4	22.0
II.....	3.7	2.1	10.8	10.2	13.7	1.1	14.0	10.4	14.9
III.....	3.5	2.0	8.6	8.7	11.7	-.7	12.3	10.4	7.5
IV.....	3.4	1.7	7.2	6.5	9.4	-.2	10.9	10.4	3.3
1979:									
I.....	3.2	1.6	6.5	5.3	7.6	-1.0	11.1	10.4	9.4
II.....	3.1	1.5	6.0	4.5	5.9	-.6	10.1	10.4	6.2
III.....	3.1	1.5	5.7	4.1	4.6	-.8	9.8	10.4	6.6
IV.....	3.0	1.5	5.6	3.9	4.0	-.7	9.3	10.4	4.9
1980:									
I.....	3.0	1.5	5.5	3.9	3.4	-.7	9.2	10.4	6.4
II.....	2.9	1.5	5.3	3.9	3.3	-.5	9.2	10.4	8.2
III.....	2.8	1.6	5.5	3.9	2.3	-.4	7.6	10.4	-2.1
IV.....	2.9	1.9	5.7	4.1	1.3	-.7	7.4	10.4	-2.1

- ¹ CS—Consumption expenditures, services.
² CN—Consumption expenditures, nondurable goods.
³ CD—Consumption expenditures, durable goods.
⁴ IH—Residential fixed investment, household sector.
⁵ INV—Nonresidential fixed investment, firm sector.
⁶ ΔVI—Change in inventory investment, firm sector.
⁷ IM—Imports.
⁸ EX—Exports.
⁹ XG—Government purchases of goods, Federal and S. & L.
¹⁰ Actual data.

Notes: Percent means percentage change at an annual rate. All flow data are at an annual rate. Federal and S. & L. Government budgets are on an NIA basis. See [1] and [3] for further definition of the variables. Units of these variables are billions of 1972 dollars.

TABLE 3.—FORECAST RESULTS FOR SOME OTHER VARIABLES
MONETARY POLICY A
(In percent)

Quarter	PX ¹	WF ²	WF ² PX ¹	TLF ₁ ³	TLF ₂ ⁴	EMPL ⁵	RAAA ⁶	RMORT
1977: II ¹⁰	6.8	6.0	-0.8	3.0	5.6	6.1	8.0	8.6
1977:								
III.....	3.8	7.1	3.1	.1	1.8	2.4	8.1	8.6
IV.....	4.3	7.8	3.4	.8	2.3	2.5	8.1	8.6
1978:								
I.....	4.6	8.2	3.4	1.1	2.6	2.8	8.2	8.5
II.....	4.8	8.3	3.3	1.3	2.9	3.0	8.2	8.5
III.....	4.9	8.3	3.2	1.2	3.1	2.9	8.3	8.5
IV.....	4.9	8.2	3.1	1.1	3.2	2.5	8.4	8.6
1979:								
I.....	4.9	8.0	3.0	1.1	3.3	2.4	8.5	8.6
II.....	4.9	7.9	2.9	1.0	3.3	2.3	8.6	8.7
III.....	4.8	7.7	2.8	1.0	3.3	2.2	8.7	8.8
IV.....	4.8	7.6	2.7	1.0	3.2	2.2	8.8	8.8
1980:								
I.....	4.7	7.4	2.6	1.0	3.2	2.1	8.8	8.9
II.....	4.6	7.3	2.6	1.0	3.1	2.2	8.9	9.0
III.....	4.5	7.2	2.5	1.0	3.1	2.0	9.0	9.0
IV.....	4.4	7.0	2.5	1.0	3.0	1.8	9.1	9.0

- ¹ PX—Price deflator for total sales of the firm sector.
² WF—Wage rate, adjusted for overtime and interindustry employment shifts.
³ TLF₁—Total labor force of males 25 to 54.
⁴ TLF₂—Total labor force of all others 16 and over.
⁵ EMPL—Total civilian employment.
⁶ RAAA—Aaa bond rate.
⁷ RMORT—Mortgage rate.
⁸ Actual data.

Notes: Percent means percentage change at an annual rate. All flow data are at an annual rate. Federal and S. & L. Government budgets are on an NIA basis. See [1] and [3] for further definition of the variables.

TABLE 4.—FORECAST RESULTS FOR FEDERAL GOVERNMENT VARIABLES

MONETARY POLICY A

Quarter	Receipts					Expenditures						Surplus or deficit (—)	ΔVBG, ¹
	Personal tax	Corporate tax	Cont. SI	IBT	Total	Purchases G & S	Transaction Payments	GIA	Net Interest	Sub.	Total		
1977:II ² -----	168.7	57.2	118.0	24.7	368.6	143.3	170.3	63.6	30.2	6.5	413.9	-45.3	39.8
1977:III-----	173.1	57.0	121.3	25.2	376.6	148.0	178.8	69.1	30.3	7.4	433.6	-57.1	55.2
1977:IV-----	181.1	58.8	124.9	25.8	390.5	154.0	181.7	75.1	30.6	7.5	448.9	-58.4	55.9
1978:I-----	188.9	60.4	133.1	26.4	408.7	160.1	184.8	81.1	31.1	7.7	464.7	-56.0	53.3
1978:II-----	197.1	61.9	137.1	27.0	423.2	164.0	188.8	85.1	31.7	7.9	477.5	-54.3	51.5
1978:III-----	205.4	62.3	141.0	27.6	436.2	168.1	193.8	83.1	32.3	8.1	485.4	-49.2	46.1
1978:IV-----	214.1	61.6	144.6	28.1	448.5	172.1	198.0	82.1	33.0	8.5	493.7	-45.2	41.7
1979:I-----	222.3	61.3	148.2	28.7	460.5	176.1	201.8	81.0	33.7	8.8	501.3	-40.9	37.2
1979:II-----	230.5	60.5	151.8	29.2	472.0	179.9	205.6	80.5	34.4	9.1	509.4	-37.5	33.6
1979:III-----	238.8	59.6	155.3	29.8	483.4	183.8	209.4	80.5	35.1	9.4	518.2	-34.8	30.7
1979:IV-----	248.2	58.5	158.7	30.4	495.8	189.7	212.5	82.5	35.8	9.8	531.2	-35.4	31.0
1980:I-----	256.8	57.6	162.2	30.9	507.5	193.5	217.5	83.5	36.4	10.2	541.2	-33.7	29.1
1980:II-----	265.7	57.0	165.8	31.5	520.0	197.4	221.6	84.0	37.1	10.6	550.8	-30.8	26.2
1980:III-----	274.4	55.0	169.2	32.1	530.6	201.2	225.8	84.5	37.8	11.0	560.3	-29.7	24.7
1980:IV-----	284.1	52.8	172.4	32.6	541.9	207.0	230.0	84.5	38.4	11.5	571.4	-29.5	24.2
Fiscal year 1977-----	167.2	56.2	115.8	24.5	363.7	140.5	171.5	60.1	29.6	6.5	413.1	-49.5	-----
Fiscal year 1978-----	193.1	60.8	134.0	26.7	414.6	161.6	187.3	81.1	31.4	7.8	469.1	-54.5	-----
Fiscal year 1979-----	226.4	60.7	150.0	29.0	466.1	178.0	203.7	81.1	34.1	9.0	505.7	-39.6	-----
Fiscal year 1980-----	261.3	57.0	164.0	31.2	513.5	195.5	219.6	83.6	36.8	10.4	545.9	-32.4	-----
OMB numbers (July 1 budget update):													
Fiscal year 1977-----	166.2	60.3	116.9	24.7	368.0	141.2	172.7	64.8	29.0	7.4	415.1	-47.1	-----
Fiscal year 1978-----	185.3	70.2	133.3	29.2	418.8	161.5	187.4	81.1	31.7	7.8	469.5	-50.7	-----
Fiscal year 1979-----	221.0	77.4	148.9	36.6	484.8	177.6	203.7	80.9	34.9	9.1	506.2	-21.4	-----
Fiscal year 1980-----	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)

¹ ΔVBG—Change in the amount of Federal Government securities outstanding, annual rate. Assumed Federal pay increases in October: 1977 equals 4.9 percent, 1978 equals 5 percent, 1979 equals 6.5 percent, 1980 equals 6 percent. (These are the numbers in the OMB July 1 budget update.)
² Actual data.

³ Not available.

Notes: Percent means percentage change at an annual rate. All flow data are at an annual rate Federal and S. & L. Government budgets are on an NIA basis. See [1] and [3] for further definition of the variables. All data are on an NIA basis in billions of current dollars.

TABLE 5.—FORECASTED FINANCIAL SAVING OF EACH SECTOR
MONETARY POLICY A

Quarter	Household (SAVH)	Firm (CF)	Financial (SAVB)	Foreign (SAVR) ¹	Federal Government (SAVG ₁) ²	S. & L. Government (SAVG ₂) ³
1977: II ⁴	43.1	-24.6	-0.5	17.4	-47.9	12.6
1977:						
III.....	49.4	-23.4	-6	18.6	-59.7	15.8
IV.....	54.1	-29.5	-7	19.2	-61.0	17.9
1978:						
I.....	52.5	-34.7	-9	21.5	-58.6	20.1
II.....	54.8	-40.2	-1.0	23.3	-56.9	20.0
III.....	58.3	-46.6	-1.1	24.3	-51.8	16.8
IV.....	63.5	-52.4	-1.2	24.8	-47.7	13.0
1979:						
I.....	66.3	-55.1	-1.3	25.3	-43.3	8.2
II.....	69.2	-58.5	-1.4	25.2	-39.9	5.4
III.....	72.1	-61.0	-1.6	24.9	-37.2	2.7
IV.....	78.3	-63.5	-1.7	24.4	-37.8	.3
1980:						
I.....	81.0	-65.3	-1.8	23.8	-36.0	-1.7
II.....	81.5	-66.7	-2.0	23.2	-33.1	-2.8
III.....	86.0	-71.0	-2.1	21.4	-31.9	-2.3
IV.....	90.7	-73.5	-2.3	19.5	-31.7	-2.6

¹ SAVR—Minus net foreign investment in table 1.

² SAVG₁—Federal Government budget surplus or deficit (-) on NIA basis minus Federal Government insurance credits to households plus current surplus of federally sponsored credit agencies plus current surplus of monetary authorities plus sales of mineral rights.

³ SAVG₂—S. & L. Government budget surplus or deficit (-) on NIA basis minus S. & L. Government retirement credits to households.

⁴ Actual data.

Notes: Percent means percentage change at an annual rate. All flow data are at an annual rate. Federal and S. & L. Government budgets are on an NIA basis. See [1] and [3] for further definition of the variables. The sum of the savings across sectors is zero except for rounding.

TABLE 6.—FORECAST RESULTS FOR SELECTED VARIABLES
MONETARY POLICY B (UNCHANGED BILL RATE)

Quarter	Real GNP		GNP deflator		Unemployment rate (UR)	Bill rate (RBILL)	Money supply (percent M1)	Federal surplus or deficit (—)	S. & L. surplus or deficit (—)	Personal savings rate	Net foreign investment (— SAVR)	Before tax profits (μF)
	GNPR	Percent GNPR	GNPD	Percent GNPD								
1977: II 1-----	1,331.5	6.4	140.36	6.6	7.0	4.8	9.9	-45.3	24.9	7.0	-17.4	150.9
1977:												
III-----	1,354.0	6.9	141.66	3.8	6.7	4.8	11.9	-57.0	28.3	7.2	-18.8	148.9
IV-----	1,377.5	7.1	143.37	4.9	6.5	4.8	11.8	-57.4	31.0	7.2	-19.9	154.9
1978:												
I-----	1,403.2	7.7	144.98	4.6	6.2	4.8	11.7	-53.6	34.2	6.9	-22.8	160.8
II-----	1,427.8	7.2	146.69	4.8	5.9	4.8	11.6	-50.0	35.3	6.8	-25.3	166.9
III-----	1,448.7	6.0	148.46	4.9	5.6	4.8	11.4	-42.6	33.5	6.8	-27.0	169.3
IV-----	1,466.1	4.9	150.50	5.6	5.4	4.8	11.3	-36.1	31.3	6.9	-28.4	168.7
1979:												
I-----	1,483.4	4.8	152.36	5.0	5.2	4.8	11.0	-29.2	28.1	6.8	-28.7	169.3
II-----	1,499.2	4.3	154.27	5.1	5.0	4.8	10.7	-23.0	27.1	6.7	-30.4	168.5
III-----	1,514.2	4.1	156.24	5.2	4.8	4.8	10.4	-17.3	26.1	6.5	-31.1	167.7
IV-----	1,528.2	3.7	158.59	6.2	4.7	4.8	10.2	-14.7	25.4	6.5	-31.5	166.6
1980:												
I-----	1,542.1	3.7	160.70	5.4	4.5	4.8	9.9	-9.6	25.0	6.3	-31.8	166.5
II-----	1,556.3	3.7	162.93	5.7	4.4	4.8	9.9	-3.0	25.5	5.9	-32.0	168.1
III-----	1,566.7	2.7	165.16	5.6	4.3	4.8	9.3	1.7	27.5	5.7	-31.2	164.3
IV-----	1,575.9	2.4	167.64	6.1	4.4	4.8		4.8	28.5	5.6	-30.4	57.8

MONETARY POLICY C (6.5 PERCENT GROWTH RATE OF M₁)

1977: II ¹	1,331.5	6.4	140.36	6.6	7.0	4.8	9.9	-45.3	24.9	7.0	-17.4	150.9
1977:												
III.....	1,347.2	4.8	142.13	5.1	6.8	13.1	6.5	-58.5	26.9	7.7	-16.7	153.8
IV.....	1,346.3	-0.3	144.04	5.5	7.2	12.8	6.5	-70.8	22.7	8.9	-13.5	140.0
1978:												
I.....	1,355.1	2.6	145.76	4.9	7.6	12.8	6.5	-75.7	20.3	8.8	-13.9	137.7
II.....	1,364.6	2.8	147.62	5.2	7.9	12.9	6.5	-80.0	15.9	9.2	-13.6	138.3
III.....	1,372.4	2.3	149.48	5.1	8.2	12.9	6.5	-80.0	9.1	9.7	-12.7	136.1
IV.....	1,378.3	1.8	151.58	5.7	8.5	13.0	6.5	-80.6	2.0	10.1	-11.5	131.9
1979:												
I.....	1,386.0	2.2	153.41	4.9	8.8	12.8	6.5	-80.5	-5.7	10.4	-10.3	129.8
II.....	1,394.5	2.5	155.22	4.8	9.0	12.7	6.5	-80.5	-10.8	10.7	-8.9	128.0
III.....	1,404.1	2.8	157.02	4.7	9.2	12.5	6.5	-80.6	-15.2	10.9	-7.6	127.0
IV.....	1,413.9	2.8	159.11	5.6	9.3	12.9	6.5	-83.7	-19.1	11.2	-6.1	126.3
1980:												
I.....	1,424.1	2.9	160.93	4.5	9.5	12.8	6.5	-84.8	-22.4	11.4	-4.5	125.3
II.....	1,436.6	3.5	162.70	4.5	9.5	12.8	6.5	-84.3	-24.5	11.4	-3.3	126.7
III.....	1,446.2	2.7	164.42	4.3	9.6	12.6	6.5	-85.1	-24.6	11.6	-0.9	123.7
IV.....	1,455.4	2.6	166.46	5.0	9.8	12.7	6.5	-86.8	-25.5	11.8	1.6	120.8

¹ Actual data.

Notes: Percent means percentage changes at an annual rate. All flow data are at an annual rate. Federal and S. & L. Government budgets are on an NIA basis. See [1] and [3] for further definition of the variables.

Representative HAMILTON. Thank you very much, gentlemen, we appreciate your statements.

I would like to focus, first of all, on anti-inflation policy and get each of you to comment, if you would, on how you view the President's present anti-inflation policy. You have done this to some extent in your statements and I would like you to respond directly with regard to it.

Now, as I understand that policy at the present time, as it has been set out to us in the Congress and other forums, the President has proposed a fairly multifaceted approach to dealing with inflation. It includes a fiscal discipline, of course, and at least one of his principal targets seems to be balancing the budget by 1981.

He also has called for increased efforts by the Council on Wage and Price Stability. There are now occurring consultations between labor and management and Government groups. We don't know what the results of those will be but they are underway.

Specifically, he is talking about some restraints on hospital costs, and perhaps some other areas. He talks, as you do, of deregulation and he has also mentioned some tax incentives for increasing investment.

I think it is fair to say that the policies can be characterized as fairly mild, and yet each of you, in your projections, indicate inflation is going to continue at at least what historically has been very virile rates.

So the question then is, what do you think of this policy, as it so far emerges. What is right with it and what is wrong with it; what do we need to do?

Mr. GORDON. Do you want me to start?

Representative HAMILTON. Yes, sir.

Mr. GORDON. I think it might be useful to run through some of the elements you have outlined as part of this quite mild program.

Jawboning in the Council on Wage and Price Stability is a very mild form of wage and price controls which, as we know, have failed even in their stronger forms both in the United States and in Europe. There is no subject that has been more carefully studied by Congress, and every program—the United Kingdom is an excellent example—winds up with exactly the same dilemma. You hold down prices and wages at the beginning when everybody tries to cooperate, but eventually distortions emerge, skilled workers complain they are not making enough relative to the unskilled worker, the normal adjustments of relative wage rates and relative prices and competitive economy are impeded, and so the controls always break down and this alternation, which the United Kingdom has experienced between tough controls, easy controls, and no controls, is one of the reasons that their economic performance has been so bad.

Businessmen don't know what to expect. I am sure you have heard that one reason that the stock market is low and businessmen won't invest, they are afraid of tougher controls 2 or 3 years from now if, as I am predicting, the administration package doesn't work.

Next, we have fiscal discipline. I don't think you can separate fiscal discipline from the speed of the recovery. If you moderate the growth of Government expenditures and keep taxes high, that is going to slow down the recovery, which means the goal of your recovery won't be met.

I think the right way to look at this is to ask what rates of economic growth are we going to aim for—what unemployment rate do we want

to achieve—and then work somewhat on the micro-economic aspects of inflation. Let's look at the way the Government interpreters write private industry by raising the prices businessmen have to charge in order to produce their product.

In the last 10 years, in addition to the well-known Vietnam deficits, we have had a lot of pollution, safety, and occupational health legislation. All of those have raised the costs for businessmen to produce their products relative to what the wage earner is getting.

So if the wage change is going to stay in its rock solid path of 7, 7½, 8 percent, and on top of that, we raise business costs relative to wages, then how can we expect to see a slowdown in the inflation rate?

In the same way, when the Government raises social security taxes, what does that do? It introduces what is called a wedge between the amount of take-home pay the worker gets and the cost to businessmen of hiring that worker. Unemployment compensation has the same effect.

So whenever Government increases its wedge, it is going to raise the prices businessmen have to charge.

Now, it doesn't automatically follow that shifting over from some of those taxes to the personal income tax would give us something for nothing. Econometric research concludes that increases in personal income taxes do not appear to affect business prices the way the payroll tax does. So that in this area—deregulation, tax changes, and pollution legislation—is one of the rare areas of Government where you can get something for nothing in the sense that you can reduce this wedge between prices and cost and both make the economy grow faster with less inflation than would occur otherwise.

Representative HAMILTON. The others will answer not only to my question but to some of the observations Mr. Gordon made.

Mr. HARTMAN. I would like to comment first on Bob Gordon's point about the administration's program on the social security payroll tax increase and on the energy tax increases that he talks about in his statement.

I would agree with the general conclusion, which is that we ought to move away from indirect taxes toward greater use of the personal income tax, but in the specific instances he mentioned, it wasn't at all clear that those alternatives were available in any form that the Congress would accept. Especially in the social security payroll tax increases, I think the administration did try to right the short-run difficulties of the social security trust fund in a way that had desirable equity effects in full realization that it would worsen inflation. I think we can get too carried away with the inflation goal and look at all social policies by asking only will it worsen inflation. If we do that, one makes some pretty silly choices.

I would like to interpret Bob as saying when we are undertaking new programs or reforming old ones, inflation is one of the considerations that should go into the decision but not to the abandonment of everything else.

Let me comment more specifically on some areas in which the Government has a great deal of leverage on inflation. It turns out there is a close correspondence between the areas of leverage and areas of Government expenditure growth; the outstanding case being medical care.

One of the reasons that Federal budget projections are so high in future years is that medical care prices are expected to rise, so I certainly think that the attention now being paid to trying to gain control over hospital costs is well directed.

It would help the overall inflation rate and would also help to restrain budget growth in the future.

That program doesn't seem to be going very well legislatively and it is quite limited, focusing just on hospital care costs, which is a major element in the total medical care picture.

I think at some point we are going to have to face up to physician fees as well and, although I do not have a recommendation to make on the spot, that is an area in which the Government, I think, can do more than it has done in the past.

I would also note without making any comment as to exactly what ought to be done about it, that the area of pay for Federal Government employees is an often overlooked possible contributor to inflation in the economy. Certainly it is a major contributor to growth of the Government budget and I know the administration is now studying various proposals, such as splitting of professional and managerial workers from clerical and technical workers using different rate schedules. I would certainly think that that kind of look ought to be taken on a very serious basis, although I doubt that within a 3- or 4-year period very much can be done to any underlying inflation rate. But in the long run I think that could be quite an important area for reform.

The area of national defense is the one major function where the Government is actually operating a program in the same way as the private sector. Private sector productivity growth is an important element in controlling the rate of inflation. I would think that the Federal Government has an important role here in trying to curb unnecessary defense expenditures and trying to hold costs, especially in the purchase of goods area, down.

I am a little bit disappointed in the Carter administration's first set of projections. These July projections you have in front of you really say nothing about the long-run national defense picture. The administration took Mr. Ford's projection of January and adjusted it slightly for inflation. There have been no Carter administration long-run proposals and I would imagine they would be with us next January. At that time, the Congress ought to ask some hard questions about possible contributions to inflation from the defense sector.

I would like to make one more amendment or addition to what Bob Gordon talked about, and that is in the whole area of wage and price bargaining. There are some ingenious proposals around for linking grants to cuts in indirect taxes and with getting the agreement of labor and management to restrain themselves in wage agreements. Although I don't really know about the feasibility of all these, let me be more specific.

Arthur Okun of the Brookings Institution has suggested that Congress encourage States to reduce their sales taxes in exchange for Federal grants. Others have suggested linking personal tax cuts with agreements by labor and management leaders to restrain wage and price increases. If such deals can be made everybody could be better off with lower rates of increase in wages and prices.

Let me stop there.

Representative HAMILTON. Mr. Fair.

Mr. FAIR. Yes. I can be fairly brief. The standard way of fighting inflation in the past has been to hold down the level of aggregate economic activity. I think this is clearly what the Fed looks at when it is making its monetary policy decisions. The evidence that I put before you today, and the evidence from most econometric work, is that the trade-off between inflation and real output is not a very good one.

In my case, the tradeoff by the end of 1980, is 1 percentage point less inflation at a cost of 2 percentage points more unemployment. So you do not get very much lowering of the inflation rate if you contract. I would argue that the Fed's projected behavior, as I have predicted here, is a misguided policy, although it does succeed in lowering inflation somewhat.

Regarding the other procedures suggested for lowering the rate of inflation, all have some slight effect on rate of inflation, but my impression is that one does not gain a significant amount of lower inflation from any of them.

Deregulation seems to be the most important of these policies. But, in general, inflation is hard to bring down, and my view is that although one should proceed with some of these micro issues, at least with deregulation, you are not likely to see much in the way of a lower inflation rate from them. You are not likely to see inflation back to 2 percent by 1980 or 1981.

Mr. GORDON. Just one related comment on this, partly related to Ray's statement that micro issues don't matter much, will not add up to having a large effect.

Several people have asked me how do you explain this paradox that the United States got into a 5-percent inflationary spiral by going through the Vietnam period when the unemployment issue was down to 3½-percent range for just 4 years. Just 4 years of excessive activity got us up from virtually no inflation to our current dilemma. Why don't we go and reverse—why can't 4 years of 7-percent unemployment get rid of the whole inflationary spiral? Why isn't it totally symmetric on the upside and downside?

I was very worried about that question because it is a good one, but it leaves out one key fact, and that is that the inflation rate was raised back in the 60's and since then not only by economic activity but also by these increases in payroll tax which year after year have built up.

So you are talking now about much higher payroll taxes than you had back, say, in 1962, 15 years ago, and we haven't unwound that. That is why our situation is so bad and so hard to get rid of.

Representative HAMILTON. Congressman Bolling.

Representative BOLLING. I would like to congratulate the members of the panel for their excellent statements and I am in a situation where I am confronted by very difficult choices. I have a limited amount of time to question and I have so many questions I would like to pursue. I think each of the main points have been very, very well stated. They all interest me.

Given the time problem, I am going to limit myself very severely to discuss perhaps the driest issue of them all, which is the one raised

by Mr. Hartman, which involves a proposed change in the approach, the interlocking approach, of a presentation of the current services budget late in the calendar year, but well before the presentation of the President's budget in mid- or late-January, and its relationship to the activities of the CBO, the Budget Committees and Joint Economic Committee.

The question is an exotic one because I am not confronted with this as theory, I am confronted with it as a practical matter as chairman of the Joint Economic Committee, but also as a person who handled the final conference on behalf of the House on the Budget Act.

I have some memory of why we compromised on this and why we compromised on that in order to get an act, but the question I have, Mr. Hartman, I know you didn't arrive at your conclusion, which seemed a sensible one, without thinking about a great many alternatives. I want to know the alternatives. I hope that is a fair question, but it happens to be a very important one to me because I am engaged in the practical problem of dealing with some of the alternatives.

Mr. HARTMAN. The major alternative I thought about, to be honest about it, is the system as it has worked in the last year or 2 years under the new budget process, in which you receive a current services budget in November. You consider it, and by the time January rolls around when the administration puts forward its full-blown budget, those November numbers are irrelevant because the administration revises them completely in January, and my major goal was to try to make that November estimate a really useful one.

I don't think a 1-year current service budget of the type you have gotten in the past from OMB is a particularly useful step. It doesn't tell you enough about future years, for one thing, but second, and this is more of a technical point, I don't think I am telling tales out of school to say OMB does not pay a lot of attention to the production of its November current services budget. In the past there has been some question as to what any of the numbers mean, because this is not an integral part of their budget process or it hasn't been in the past.

There is no reason why we cannot force OMB to make part of its budget process the consideration of the "real" current services numbers, that is, the ones that are built up from real agency data, and one way to make sure that they are going to produce something in November that has some meaning is to tell them that it is going to be the basis for the January budget. You want the January budget in the form of a base consisting of current services without amendment or, to the extent there is amendment, showing what the reestimates are all about, and then showing the policy changes that the President wants in the January budget.

Now I think this will produce a useful document in that November current services budget, and I have thrown in the notion of it being multiyear because I really think that is the right way for the Congress to think about the budget, not to just look 1 year ahead.

There are partial steps that can be undertaken. For example, I have built in a negotiating position. I don't think you have to project in detail for 5 years, to be honest with you. I think that if next January you received reasonable numbers from the administration on its 1979

proposal, projected 2 years forward to 1980 and 1981—which is not just based on mechanical cranking out of trends or assumptions but actually represents what the administration plan is for presenting to Congress budgets over the 3-year cycle—I would be very satisfied. That would be very much of a forward step.

This is quite consistent with a recent CBO proposal, as I recall, for putting in targets for 2 future years beyond the year in which the budget resolution is being considered. This would be a way of getting future targets. When Congress acts on a particular bill, CBO could be keeping score not only on the budget year but also on how those proposals would affect the next 2 years' worth of spending or taxes depending on what the bill is, and it would allow you to have a somewhat longer run context in which to make decisions. I guess that is an alternative; it is one I prefer to the one I explicitly stated in the statement.

Beyond that, I think I can comment on alternatives but I don't have any that come to mind immediately.

Representative BOLLING. Well, you seemed to indicate that, at least in the experience of the last 2 years, the OMB paid relatively little attention to the creation of a quite limited current services budget that was required to be reported in November. Even though that is the case, would you consider it a significant step backward if the step taken were to eliminate that action and allow the administration OMB to just make the presentation in January?

Mr. HARTMAN. That is in part a question of the congressional calendar that others who are more familiar with time constraints could comment on.

Looked at from the outside with a little bit of knowledge of congressional procedures, I would think that if the November step were eliminated and in January you got a really good presentation from the administration, with current services based on agency data and a policy change budget that was detailed, I would think that that would be a forward step from where we are now.

In other words, I would trade the early date for the better data in January.

Representative BOLLING. What effect would that have, just looked at crudely, on the dates that Congress imposes on itself for final action on the budget process? That might very well mean that we would have to consider changing the fiscal year calendar again.

Mr. HARTMAN. Yes, I was very much struck during the transition from one administration to the other by the fact that there was considerable pressure from Congress for President Carter to revise his budget essentially the day after he stepped into office. So there already is a lot of pressure on the calendar and I am aware of that.

It is my impression, though, that the current November schedule date for the current services budget does not drive the congressional calendar very much, that it is not a crucial element in the key dates of March 15 for the committee report, May 15, for the first concurrent resolution, and so on. The current service date of November 10 doesn't have an awful lot to do with that. So it is not at all clear to me that pushing forward the current service budget to January should necessarily change those dates nor necessarily change the dating of the

fiscal year. I think you would have to make that case on some other ground. I have not thought about that and I would rather not comment today.

I don't think this change alone, however, could be used as a reason for changing the timing of the concurrent resolution during the fiscal year, nor of the fiscal year itself.

Representative BOLLING. I will conclude by asking you to think about and at some point down the line, give us the benefit of your thoughts I am not in a great rush for that. I was in a great rush for the earlier comment.

Thank you very much.

Representative HAMILTON. Thank you very much.

Congressman REUSS.

Representative REUSS. Thank you, Congressman Hamilton.

I am going to concentrate on monetary policy since Mr. Hartman and Mr. Bolling have been talking about budgetary policy. My attention will be on Mr. Fair and Mr. Gordon, neither of whom thinks that anything like a balanced budget and full employment is going to be attained in 1981 if the Federal Reserve keeps to its announced intention, which is currently an M_1 growth pattern of $4\frac{1}{2}$ to $6\frac{1}{2}$ percent, with an M_2 somewhat higher but related to it, and the strong hint that these bands are going to be lowered.

Let me try to synthesize what Messrs. Gordon and Fair are saying and they can disclaim my synthesis. You both say that inflation isn't going to go away, that there are some things you could do but not much, and that if there is going to be "x" amount of inflation, the money supply is going to have to take care of that and whatever additional real growth you want.

And you both suggest that the Federal Reserve for the next couple of years will have to create new M_2 at a level considerably over the present band. You might remind me what the band is. I think it is about—

Mr. GORDON. According to the newspaper today they raised it with an upper limit of up to 10, I believe.

Representative REUSS. I can't hear you.

Mr. GORDON. According to the newspaper story today they have just raised it and the upper limit of the band now is up to 10. But if you ask what is the number that will be necessary to sustain the expansion, I think this comes to one of the areas of disagreement between Mr. Fair and myself, which I alluded to in my oral comments, but which we have not yet delved into.

Representative REUSS. What is that?

Mr. GORDON. Mr. Fair's forecasts, I believe, are must too pessimistic on the amount of current dollar spending that can be financed by growth in $M-1$. If you take his most pessimistic projection he suggests that $6\frac{1}{2}$ percent growth of M_1 —more or less the upper limit of the Fed targets—will create a collapsing economy. In fact, he even predicts that the Treasury bill rate will be up to 13.3 percent in the third quarter of 1977—that is now—and there is no sign of that happening at all.

I think that the error here is one of ignoring changes in the demand for money, that is, the amount of money that people want to hold rela-

tive to total spending which has occurred in the last 3 or 4 years?

Representative REUSS. Velocity?

Mr. GORDON. The velocity of M_1 has been growing faster than anybody predicted. That is one area where Arthur Burns was right. Innovations in financial transactions, types of bank accounts, are continuing. I see no reason why we will not see velocity growing more rapidly than Mr. Fair does.

In particular, if you look at his projections, he is allowing for only a velocity growth of 1 percent, which is much less than we have enjoyed, and that is the right word enjoyed, for the last 3 years.

So I would not be as pessimistic as he is for any given assumption about the Federal Reserve. That still doesn't change my basic outlook that we will have to have more M_2 over the next 3 years than 9½ percent or 10 percent to get the recovery into balance by the end of the first term.

Mr. FAIR. Money supply growth in the second quarter was 9.9 percent. There is no evidence that it is currently at 6.5 percent. So that is why we do not see the bill rate higher than we do now.

Representative REUSS. You are talking about M_2 ?

Mr. FAIR. M_1 is what I am talking about.

Representative REUSS. You just mentioned 9.9 percent.

Mr. FAIR. For M_1 growth.

Representative REUSS. In what period?

Mr. FAIR. Table 1 of my statement. The money supply at the end of the second quarter compared to the money supply at the end of the previous quarter was 9.9 percent higher at an annual rate. There was a huge increase in the money supply growth in April, and this is in the second quarter numbers. My projection of a 13 percent bill rate is on the assumption that the money supply growth is going to be at an annual rate of 6.5 percent, which is not happening.

Representative REUSS. Nobody should predict what is going to happen in the third quarter, that is too extra hazardous a business. I think it would be more useful to look ahead for the next 2 years, where you both do agree that apparently, even with velocity increasing much as it has in recent years, by reason of financial economies, that the projected M_2 band is just not going to be sufficiently productive to take care of the inevitable inflation and enough real growth. Therefore, you are going to have lagging growth, disincentives to investments, and you are not only going to end up, am I right, with more unemployment and less production than the Carter administration is counting on, but with more inflation, because without new capital investment in place you are going to have one capability of reducing prices removed.

Mr. FAIR. That latter result is not consistent with my results. I do get some lowering of the inflation rate if the Fed follows the more restrictive monetary policy, about 1 percentage point by the end of 1980. There is a tradeoff in the model, but otherwise I agree with you.

Representative REUSS. Well, trying to disassemble your model a little bit, what did you put in with respect to higher interest rates? Higher interest rates have their greatest impact on capital investment, housing, plant, and equipment. Higher interest rates, I would think, have two effects going in opposite directions. One slows down business

a bit and thereby causes some marginal businessmen to lower their prices or refrain from raising them. So it is anti-inflationary, but higher interest rates also, and quite soon, diminish the putting into place new plant and equipment and hence we forego a cost reducing activity of no small proportion. How does this machine sort that one out?

Mr. FAIR. Both of those factors are in the model. When the interest rate decreases, it has, on the one hand, a good effect on the rate of inflation: It lowers it for reasons you cite. It also has however, a bad effect: As you lower interest rates you expand the economy, and an expanding economy has—other things being equal—a bad effect on inflation. There is a tradeoff between aggregate demand and inflation. The net effect is, as I said, that by the end of 1980 the inflation ratio is 1 percentage point higher in the case in which the Fed keeps the bill rate unchanged versus the case in which the Fed behaves as I expect it will.

Representative REUSS. I am talking about the bill rate. The Fed's ability to effect that is somewhat indirect. However, they do effect the Federal funds rate.

Mr. FAIR. Through the fund rate. I am using the bill rate as the example of the short-term rate.

Representative REUSS. OK. Then leaving aside minor differences between Mr. Fair and Mr. Gordon as to how severe tight money is going to be, and when it is going to take effect, you both agree that adherence by the Fed to its present upper limit on M_2 , and on M_1 , is going to bollix up the administration's 1981 goals?

Mr. GORDON. I think one useful thing, since you have already heard our testimony, is to look for loopholes in the testimony and to try to see how things might go right.

Let me pose a simple bit of arithmetic. Add together the number 6 plus 6, 6 percent as a consensus estimate of the kind of ongoing inflation we are likely to experience, and another 6 percent for the kind of rate of growth in real output that will have to occur if we are going to get a balanced budget in 1980.

Those add up to 12, and if my first relationship, that between M_2 and income stays valid, that is, the velocity of M_2 is constant, so that we need 12-percent growth in M_2 to achieve that performance, we see the dilemma.

One way that things might go right for a while, this crunch might be put off, would be the beneficial effect of lower food prices or the absence of a food price inflation.

None of these econometric equations purport to predict food prices and, in fact, all my comments refer to a GNP deflator that has been stripped completely both of energy and food prices, so that we can deal with those separately.

Now the outlook for food prices is quite good at the moment. Even coffee is coming down, and while it depends to some extent on the farm program which is passed, we might postpone our problem for a year or more, but that is a one-shot impact. Eventually food prices will move up because it takes labor to produce food. And so we will face this dilemma by next year, even though I think it is quite likely we may not face it this year.

Remember, there is a group of economists, the nonmonetarist group, which has been crying "wolf" now for 2 years. There was testimony back in 1975-76 that if the Fed didn't loosen up on their growth targets the recovery would be aborted then. It certainly hasn't happened in the last year.

Representative REUSS. Arthur Burns outwitted them by conjuring up velocity increases that surprised everyone.

Mr. GORDON. Velocity was the genie coming out of the bottle; he was able to lift it enough to postpone this dilemma. The food price situation is another means that this can be done.

If the Congress succeeds in, or fails in, putting off a decision on the energy program, thus putting off the increasing in energy prices which are inherent in that program, that will go in the opposite direction.

So you see the important thing to remember is that all of these forecasts assume the contribution of current institutions and arrangements. If we change the laws to raise prices, if we raise taxes that will make the outlook look worse. If we go in the opposite direction that will make things better.

Representative REUSS. If I may stick with this a moment more, I now have the story in the morning paper which I hadn't seen before. The Open Market Committee at its June 21 meeting set a 2 month target on M1. They upped the range from 0-to-4 percent, to 2.5 percent, and 6.5 percent, and upped the M-2 range from 3.5 percent to 7.5 percent, to 6 percent to 10 percent, so those are some wide jumps.

I am not a monetarist; you gentlemen clearly are not. Don't you think that Milton Friedman is right when he counsels against wide swings in the money supply? You would say he is too conservative and has too low a target, but don't you think his steady-as-you-go admonition is probably right, so that the Fed could afford to take advice from you nonmonetarists and also from the monetarist on steadiness, and we would be a better Nation for it?

Mr. FAIR. I should say that, in response to the morning's paper, which I haven't seen either, the Fed is behaving quite as I would expect it to behave. It is raising its M-1 targets, or its targets in general, because otherwise the bill rate would have to rise more, than the Fed really wants it to.

It seems to me that what the Fed does mostly is to concentrate on the funds rate and adjust the money supply to achieve a rough target for the funds rate; and thus, for the bill rate and other interest rates in general. I would suggest that if you want to try to control Fed behavior, or to influence Fed behavior, you should push them on what their targets for interest rates are. I think this is more important than to push them on their money supply targets.

Representative REUSS. What do you think, Mr. Gordon?

Mr. GORDON. Actually, this is an area where there has been some work on economic theory that is quite relevant. If the underlying source of the instability in the economy is the demand for goods and services, how much investment—how much consumption he will have in any given quarter, that is where the forecasters make their errors, then, theory tells that the right thing to do is control money supply.

On the other hand, if the source of the instability comes from velocity, that is from the demand for money, then the same analysis tells

us we should control interest rates and let the money supply be whatever is necessary to keep the interest stable.

Unfortunately, both are true. There is, as you know, a great deal of difficulty in predicting from quarter to quarter how velocity will behave. There has certainly been more velocity in the last 3 years and this has bailed the Fed out from the dilemma which the opponents predict would have occurred long before now.

On the other hand, Friedman is certainly right, that an attempt to keep interest rates pegged under some situations will lead to explosive monetary growth because the Fed has to keep pouring in more money to keep the interest rate down. I think the right of approach now is, I hate to say this, but an in-between policy. I think that now is the right time, while we still have some slack in the economy, to push up our monetary growth. But if we are going to have any acceleration, it should be temporary, it should be short lived, and the sooner we do it the better. Because if we accelerate money growth when the economy is extremely prosperous, with tight supply conditions—in circumstances as in 1973—then most of that money is going to cause extra inflation.

At the present time, however, I think most economists would agree some extra monetary growth will mainly fuel real output and get the unemployment rate down faster.

There is a general point which has not been brought up yet, I think it has more cosmic importance, something that differs a great deal from the United States and other countries. That is, we have a great advantage when it comes to stimulating our economy because of our overlapping 3-year wage contracts. That is one institution in this country which is probably most crucial in both helping us and hurting us. It helps us because we can expand the money supply without having an explosion of inflation. Two-thirds of wage negotiations in any 1 year already have happened and they are locked in.

In the United Kingdom or Japan, where there are wage negotiations every year, excessive stimulus from the monetary authority may cause a wage explosion. You may recall what happened in Japan in early 1974.

At the same time, 3-year contracts hurt us because the sluggishness of adjustments of the wage process makes it awfully hard to get the inflation out of the system.

If we had different institutions, I would be more of a hardliner in saying the Fed should work to get rid of inflation. But because we have a built-in inflation and because it takes such a deep recession to get rid of it, I think the right way to go is to reform our institutions so that the small savers are not so badly damaged by what is going on.

Representative REUSS. Thank you very much.

Representative HAMILTON. Congressman Brown.

Representative BROWN of Ohio. Thank you very much. I would like to jump on that last point, Mr. Gordon, if I could. Is it possible the economy could benefit from a tax cut right now and in the short run over the next few years? Should it be permanent or temporary? How big should it be? To whom should it apply?

It occurs to me that we have modified the tax rate rather extensively over the last couple of years, and its impact has fallen upon the middle area of taxpayers; not the middle areas of national average income,

but the middle area of taxpayers. The \$15,000 to \$25,000 range folks. They have taken it on the chin.

Mr. GORDON. You will recall I recommended the Government issue an index bond. I think the other aspect of this program living with inflation, is to index the tax system. You know, of course, the reason the middle income taxpayer is taking it on the chin is because most of the gains in earnings which have occurred in the last decade have been eaten up by inflation. There are people who are suddenly being pushed into higher tax brackets but have no higher quantity of goods and services to show for it.

This problem would be eliminated, of course, if—to the detriment of the Federal deficit and the ability of Congress to raise its expenditures—indexation were applied to the divisions between brackets, the personal exemption, standard deduction, all those features, of the tax system. I am sure you have heard those proposals before. I have never heard an economist argue against them.

Representative BROWN of Ohio. We do not seem to be getting any place. Either economists are terribly influential or the politicians don't understand their economics, or perhaps even worse, the politicians don't understand the politics of that.

Mr. GORDON. I think economists understand the politicians, and that is that politicians hate to release control over something.

Representative BROWN of Ohio. You mean give up a source of money?

Mr. GORDON. I think there are two aspects. Politicians hate to see something made automatic which has previously been in their area of jurisdiction, because that gives up something formerly they had control or power over.

Representative BROWN of Ohio. It has been automatic. We have had inflation, and that inflation rate has resulted in people moving from one tax bracket to the next, and consequently, they pay higher taxes to the Federal Government, and as a result, the politicians get their hands on the money automatically. So it has been automatic. The tax rate has automatically favored the politicians, and they are reluctant to let it be automatic or neutral.

Mr. GORDON. One answer to your question, therefore, is that I am strongly in favor of permanent tax reductions every year, to the extent needed to index the tax system. If you actually have legislation every year instead of making it automatic the effect would be the same. If you reduce the tax rates in every bracket by the equivalent of what would be done by indexing.

Representative BROWN of Ohio. What would that do to the economy? I gather your conclusion is that would be good for the economy.

Mr. GORDON. Let's separate the two different issues. I am not going to avoid responsibility for the recommendation in my statement that we shift from indirect to direct taxation. There is no way you can do that and keep a given deficit without some overall increase in the yield of the personal income tax, if we are going to reduce the burden of the social security tax. I am very much opposed to the social security program which has been proposed this year. The research is very strong on the fact that it doesn't matter whether you put the social security tax on the employer or the employee, it is all part of that

wedge or difference between what the employee gets in his take-home pay and what the firm has to pay gross for the use of that worker.

Those things do contribute to inflation. So I think as part of tax reform, that is the structure of the tax system, you want to look toward not only the kind of reforms that have been talked about so much—horizontal equity and getting rid of the loopholes. When decisions are made, I would strongly recommend tilting over in the direction of higher rates for the personal income tax, and I think we could stand to have a higher effective tax rate on high income people. I would prefer that to take place through a reduction in the loopholes.

Representative BROWN of Ohio. Where do higher income taxpayers begin? You have given a very political answer to the question. You say that you want higher taxes on people whose incomes are higher than yours so you can pay less. I understand the argument there.

Mr. GORDON. I don't agree.

Representative BROWN of Ohio. Where do those higher rates begin?

Mr. GORDON. I have a simple answer to that. Take the income class which divides half the tax revenue. Let's say it is \$17,223, that people making more than that pay half the tax and people making less than that pay half the tax. Raise taxes above that level, reduce taxes below. I happen to be above that level, and I foresee that my taxes will go under that proposal. But I am willing to make a scientific judgment or really a political value judgment that we need a more progressive tax system.

Representative BROWN of Ohio. What worries me is that when you do that, those are the people who tend to save, because the people in the lower level have to live off, with the inflation rates being what they are, and the result is that you don't have the savings that creates jobs and creates the development of new capital, you have an impact on that, you are taking for the Federal Government to make the decision.

I would like to change the subject for a minute. I do want to change the subject if I may, to whomever wishes to get into it. You mentioned the automatic wage contract adjustments for inflation. They are indexed to inflation, and they create inflation. So you look at the index, the automatic increase, and in a major industry wage rates and that helps create next year's inflation.

What about the minimum wage? We are about to do a wonderful job in regards to it, and index the minimum wage at 53 percent of the average industrial wage. Then, I assume, it keeps going up and up and up. Is that a good idea, from the standpoint of where the economy is headed in the future?

Mr. GORDON. In a paper I wrote recently I reviewed the literature on the effect of the minimum wage and it seems to me that the overall effect over the last 20 years of increases in the minimum wage has been to contribute to teenage unemployment. Two things have happened. While the average ratio of the minimum wage to average hourly earnings has not increased, there has been an increase in coverage, so a lot more of the work force in service industries and agriculture and so on are covered than they used to be, and I think that is where the major impact has occurred.

I side with those economists who are in favor of splitting the minimum wage so that we can have an age-related minimum wage.

I recall when I was a student in England there was a sign out in front of Woolworth's that said that they would hire shop girls age 15 for 10 pounds a week, age 16 for 11 pounds a week and so on. There was a whole structure of wages that were directly proportional to age. That must reflect a judgment of the employer that the older person is going to stay around, is more worth training, and has a higher productivity.

I don't see how we can continue to condone a system which keeps forcing up the wage above the productivity of the group that has such a serious unemployment problem. That is not the whole teenage unemployment but it makes it worse.

If you ask any manager of a McDonald's restaurant whether the number of girls behind cash registers at any one time depends on the minimum wage he has to pay, and I would be very surprised if he didn't say yes, that was a factor.

Representative BROWN of Ohio. Mr. Hartman, you tried to say something a minute ago and I cut you off.

Mr. HARTMAN. It is not on the minimum wage. I don't want something Professor Gordon said to go by without comment. One of the relevant considerations in talking about indexing the personal tax system is the ability of the Federal revenue system to support the kinds of programs we have now and may have in the future. I would like to put a number on this for you. We talked about a 1981 budget margin of \$50 billion. If you were to adjust personal income taxes to eliminate all the gains to the Federal Government from inflation, between 1978 and 1981, that would have a price tag of something a little over \$20 billion.

In other words, that would eat away half of the budget margin that you have and would make any other kind of tax cut virtually impossible.

I think Congress has a real choice in the next round of tax changes, and there certainly will be one that accompanies the President's tax reform package, of whether they want to gear changes toward business tax cuts, investment stimulus, changes in the exemption system, perhaps going into a credit and so on.

I think that any of those choices would be eliminated if you went on to automatic pilot in adjusting the personal tax system for inflation because that would be a major source of revenue growth in the future. You would have to forego other kinds of tax changes if you took that option provided you are serious about having enough Federal revenues to meet outlays.

Representative BROWN of Ohio. Isn't it six of one and half a dozen of another; you either make it on an annual basis or make it in big chunks every once in a while, and index based upon what has happened over 3 or 4 years?

The real question here is, whether one believes in the velocity that was undertaken at the time of the Kennedy tax cut, with rather sharp reductions in marginal tax rates. It was widely predicted that would have a disastrous effect on Federal revenues and therefore reduce the prospect of Federal programs, that you have just enunciated. In point of fact it happened quite the opposite; it had a very stimulating impact on the economy, and the result was that you had increased Federal revenues during that period of time.

Now I am not sure that that was the only reason that there was increased Federal revenues, but at the same time it was the result. And it was widely predicted that this disaster of insufficient Federal income was about to occur if the taxes were cut.

I think one of your predecessors or one of your associates at Brookings was involved at that time, someone named Schultze. I don't know what happened to him. I think he was on one side or the other of the argument.

Mr. HARTMAN. I think a good case could have been made in the 1960's. It was the kind of argument Walter Heller used to make for the Kennedy tax cut: this is a down payment on the future and it will generate its own revenues, and so on. The situation is really quite different today. The Federal budget has a lot more built-in expenditures in it today than it did at that time. Moreover, it is the assumed economic recovery that generates high receipts when these projections are made of the budget. If you eliminate part of the tax base, but have the assumed recovery, receipts will be lowered. In other words, you cannot spend your way into budget balance anymore.

I think the point I was trying to make was that there are really crucial choices to be made in the next round of tax cuts. There will be a tax cut possibly in the next 3 or 4 years. Congress and the people have to make a choice whether they want to channel it toward investment incentives, whether they want to go toward alleviation of poverty, or whether they want to do it toward inflation-proofing the tax system, and it is not clear to me that there is an obvious choice.

We are going to have to make some difficult decisions and it ought not to be one determined by some general philosophy. All of these objectives seem to me to be good.

Representative BROWN of Ohio. We certainly do want to be careful not to cut the Federal Government's revenues just to give the individual citizens the opportunity to make their own personal decisions about spending money. I am sure of that.

Thank you, gentlemen.

Representative HAMILTON. Senator McClure.

Senator McCLURE. There have been a number of suggestions made, as well as yours, about the effect of social security taxes as driving inflation. Should I understand from that, Mr. Gordon, that it would be your thought we should finance social security from other funds rather than this kind of tax fund?

Mr. GORDON. You have heard a lot about social security. Let me state my general position, that in a society which is headed toward an increased proportion of old people relative to people of working age, and as you know we are facing over the next 20 or 30 years, I think we should think more broadly about the problem not as a dilemma of financing this huge burden but a question of how we can reduce that burden.

On the one hand we have increasing predominance of private pension plans. My own parents were talking about the scandal of how much they are getting from social security on top of the tremendous incomes that people get these days from private pension plans, if they have stayed employed by the same employer for their entire lifetime. So that is one area of possible reform.

But the other is to take advantage of the increasing life expectancy and to allow the retirement age to be indexed to life expectancy. If people 30 years ago lived 5 years less than they do now, why not let the retirement inch up each year or each decade, thus eliminating this growing burden of old people relative to the working? We should re-think the problem and redefine the ways the social security works so as to keep the level of financing need relative to the total compensation of employees' earnings today, in today's ballpark, not the very high level that people are projecting.

Senator McCLURE. Do either of you other two gentlemen wish to comment on that?

Mr. HARTMAN. If we change the retirement age and so on, it will have to be phased in; it is not going to solve any short problems. We have to face up to some short-run needs of the present system, and I think it is a very difficult issue, and the administration has proposed what I think is a reasonable compromise.

There is a small infusion of general revenue funds on a temporary basis due to recession-induced losses to the social security trust fund. There is an additional increase in the wage base, so that employers will pay a tax on their entire payroll rather than up to the current wage base. And there is a small increase in rates for self-employed individuals.

Now I would be opposed to doing things in the normal way, which would have been to have a straight across-the-board increase in the payroll tax rate paid by everyone. That would be a very regressive kind of tax to impose at the present time. I think it was considerations of that sort that caused the administration to go into this compromise direction, although it has inflationary consequences.

I am not sure in the short run there is an alternative. I don't think the Congress would accept a total shift to general revenue financing to make up the coming shortfall.

Senator McCLURE. Would that be less inflationary?

Mr. HARTMAN. It is Mr. Gordon's argument that the payroll tax has a more direct effect on prices, a greater effect on prices than the equivalent amount of direct tax, such as income taxes.

Senator McCLURE. Do you agree with that?

Mr. HARTMAN. I really am not an expert on that, and I will pass.

Mr. FAIR. I would say that the effect seems small to me from that source. My recommendation for a social security tax would be to integrate any reform in that system with the overall tax and welfare system. One should look at the entire tax package rather than treat the social security tax as a separate type of tax.

Senator McCLURE. Mr. Gorman, you suggest a review of the retirement policy, the philosophy of retirement. I am sure you are aware of the fact that all of the trends have been in the opposite direction, whether it be earlier retirement or the proposal that the American Federation of Government Employees has made for a combination 80 retirement, whereby any combination of age and service that totals 80 qualifies you for full retirement.

We have just been faced with the dilemma of dealing with the military retirement system and the question of whether or not retired military personnel can also qualify for Federal retirement. I am sure

we will see greater and greater numbers of people who are drawing two and three retirement compensations, drawing one or two while they continue to be fully employed.

You suggest that we turn our backs on all of that recent experience and head in an entirely new direction?

Mr. GORDON. Let's first be clear on the fact that I am in favor of freedom rather than compulsion, and I think that the worst aspect of the present situation is the forcing of people to retire when in all cases they do not want to.

Now if an individual voluntarily chooses to retire at age 60 and forgo the extra earnings, the extra buildup of his pension, then in terms of private employment I think he should be welcome to do so. It is a choice he makes between leisure and earning more income and buying more things.

There are some people who like to go fishing when they are old and spend a decade doing it. There are other people who would like to earn lots of money and take several trips around the world. I don't think that is something that we should make laws about. I think that is a choice we should encourage.

But as far as the Government goes, the big question is when you start paying people social security, and in particular whether you phase it in all at once, whether you give people identical benefits every year regardless of their age, whether you want a graduated system and start out and pay people very little when they want to retire early and a medium amount at 65 and gradually build that up.

Senator McCLURE. Build in an incentive to continue working?

Mr. GORDON. That is right, but still allow them a choice. That is exactly the present system under private pension plans. There the money has to be paid for something and the employer is either getting that money to pay pensions by deducting it from the employee's paycheck or else raising the prices.

But essentially the way this works is that a private employee, in his own pension plan, is going to get a higher pension the more years of service he has. Therefore if he is freely allowed to keep working to an age above 65, he is going to have a higher pension.

Senator McCLURE. I will ask one more question.

It has been suggested that payroll taxes are more directly related to costs than are the other forms of taxation, such as income taxes, the costs to the consumer, the cost of the finished product and service.

Is there a difference in ultimate impact between employer-borne payroll taxes and employee-borne payroll taxes, as far as the inflationary effect is concerned?

Mr. GORDON. The evidence says no. It is somewhat surprising to me actually that the personal income tax is not more inflationary. The most recent evidence I have suggested there is very little impact on wages because of a cut or increase in the personal income tax, and that may be simply because we have had such minor changes over the years and we just haven't observed those benefits.

From what we can observe, the social security tax is always increased in a lump. In roughly 2 or 3 years you see a big increase in the share of social security tax revenue total compensation of employees and that the evidence is that that does go forward in the prices.

This is no trivial matter. The sum of the employers' and the

employees' payroll tax rate is now 11.5 percent. Fifteen years ago it was, say, 6 percent.

Now that is equivalent to a 5-percent increase in wages that the employer has to pay; and so it is added to the price level, roughly speaking, 5 percent over and above what the price level would have been without it.

Senator McCLURE. Does that imply that the employer adds to his cost to the amount of the employee contribution?

Mr. GORDON. There are three places it can go: Either the employee gets a lower wage, the employer has lower profits, or the consumer pays more; and the evidence is that profits have not been dampened by these tax increases. That leaves us with the consumer and the wages.

Senator McCLURE. You are implying that the employer in effect passes through the employee tax, when it is a payroll tax, social security contribution, but does not do so when it is a withholding tax, an income tax?

Mr. GORDON. That seems to be the evidence, and the difference is that a payroll tax is a tax on the use of labor and the income tax is a tax on income, which is something different.

Senator McCLURE. It is different in theory but what is the difference in effect as far as the employer or the employee is concerned?

Mr. GORDON. There is no reason in theory why the personal income tax could not be shifted forward as business costs as well. I don't think there is a theoretical answer. Any question of tax incidence from economic principles depend on slopes of all those curves and it seems to be the case that the personal income tax is borne by the employee, the social security tax, the evidence tell us, is shifted forward, and I would suspect it is very difficult to get a definitive answer on any breakout of the employee and the employer shares, simply because they always go up at the same time.

You can't look at data and give two different effects for the two of them. They always move together.

Mr. FAIR. One thing, to add to that, I have some slight evidence that the personal income tax has an effect on work effort, a negative effect, which is a different effect from, say, that of the employer or employee social security tax. There is some evidence that as the marginal tax rate increases people work slightly less, and so you get one effect from this tax which would be different from the effects of your tax on employees' wages.

Representative HAMILTON. Gentlemen, you have been here a good while this morning. We will try to wrap it up.

I just want to make a comment or two about some impressions I have with regard to your comments on inflation and see if I am off base in some of the impressions I have.

I must say I think I will leave the hearing in a few minutes a little bit depressed with your general attitude on our ability to deal with inflation.

I have the impression that all of you think that we are going to be dealing with—we are going to be living in—an inflationary economy for the immediate future and that that inflation is going to be at a level a good bit higher than we are accustomed to historically, perhaps in the range that we see right now.

I think one of you said—Mr. Gordon said he even expected it to accelerate.

I am also of the impression that you really don't have a lot of confidence in the incomes policy-type approach to dealing with inflation, that you don't have any confidence in direct controls, wage or price, and you don't have a lot of confidence in the social contract approaches of the various kinds that have been suggested in this country and have been put in practice in the United Kingdom and in other areas.

Are all of these impressions I have stated here accurately reflective of your point of view?

Mr. FAIR. Yes, sir.

Mr. HARTMAN. I wouldn't write off incomes policy quite as strongly as your summary would. I don't think we have tried everything that we could here, and I think that certainly if the alternative is to run a sluggish economy to gain a point in the inflation rate and have 2 percent more in unemployment, I would be inclined to give incomes policy another try.

Mr. GORDON. Let's be very clear that I am fully in agreement with Mr. Hartman's opposition to sluggish economies. I think that there is no end to the problem that can be helped along if not cured by more output, more Government revenue, more ability to dream up innovative programs to solve our problems.

I have long been opposed to the technique of trying to beat the inflation out of the system by deliberately keeping the economy sluggish, causing prolonged recession. Because of the facts before us, it simply takes so many billions of dollars of lost output to cause even a marginal effect on the inflation rate.

This would not always be true if wages were negotiated every 3 months and we could get everybody to come together in one big room and beat them over the head and get that wage inflation down. We wouldn't be faced with the dilemma.

We have a decentralized economy, we have 50 different States, each with its own sales tax, pushing on the inflation rate. We have a unionized sector, nonunionized sector, many of them negotiating wages for 3 years, and it is just not an economy in which you can achieve any miraculous deflation or deceleration of inflation. So I think it is far better to devise programs for living with the dilemma that we are presented with.

Mr. FAIR. I would have to agree with that. I do not think that wage and price controls are really a good idea. They have not seemed to be successful when tried, and my view is that we will have to live with perhaps not as much inflation as Bob Gordon is predicting, but at least inflation in the 4 to 5 percent range.

Representative HAMILTON. Let me make one other comment and, again, get your reaction to it.

It seems to me that the European economic policies have had a surprising conservative tone to them. They have really abandoned the idea that using fiscal stimulus is a means of increasing employment and output, and the main instrument of economic policy there, and certainly in Germany and other areas, too, has become control of money supply and the goal of economic policy is gradual reduction of inflation through reduction of that money supply, or the rate of growth, I guess I should say.

Now is that the way we are heading in this country? What do you think?

Mr. FAIR. Actually, we have quite the opposite policy.

If you look at table 2 of my results and look at the percentage change in Government purchases of goods, in real terms, it was 23 percent at an annual rate in the second quarter and it is projected, according to the OMB numbers, to be 24 percent this quarter, 15 percent next quarter, 22 percent in the first quarter of 1978, and 15 percent in the second quarter of 1978. A substantial fiscal stimulus is projected for the United States, and this seems to be quite an important factor to keep in mind when one is considering what the course of the U.S. economy is going to be in the next four to six quarters.

With respect to monetary policy, on the other hand, if you believe the equation that I have that explains Fed behavior, it says that there will be a gradual tightening up of monetary policy. By the end of 1978 the bill rate should be up to about 7 percent from its current level of roughly 5.

So it seems to me that the U.S. policy, for the next 4 to 6 quarters is substantial fiscal stimulus plus a gradually contracting monetary policy.

Senator McCLURE. If we are going to have to live with inflation, should we index the breadth of programs?

Mr. GORDON. What do you mean by programs?

Senator McCLURE. The Federal spending programs, the various beneficiary programs, should we index benefits, either Government or private benefit programs, so that the beneficiaries of the programs do not receive less in terms of real dollars than they are now receiving?

Mr. HARTMAN. Just as a point of fact, almost all of the Federal transfer programs now are already indexed, certainly all of the major ones and even most of the minor ones.

Senator McCLURE. Do you favor that?

Mr. HARTMAN. I think that it was not a mistake to have done that. But, it is beside the point whether we can undo it. I really can't conceive of social security being unindexed or any of the other major programs. I don't think that has added to inflation; it has built in a protection for people who are out of the market system, against the ravages of inflation. I think that if we are going to have inflation, the one area where we really don't have a proper vehicle is for the small saver—that is what Bob Gordon was talking about—those people do not have the equivalent of social security indexing and the indexing that in effect exists for wages.

Senator McCLURE. What you are suggesting then, instead of removing the indexing, where it exists, is to find mechanisms to index for those who are not presently indexed?

Mr. GORDON. That is right. There is one thing I neglected to include in my testimony. When it comes to the question of the indexed bond, that I recommended the Government issue, this has been a proposal which many economists have favored for a long time; this is one area where you get Milton Friedman and James Tobin in the same room and they shake hands and agree and smile at each other.

That is, there is a devastating effect of our present tax system in taxing the inflation components of the earnings from savings. Let's

say that the interest rate goes up to 12 percent and that all of that difference reflects higher inflation so that your real earnings from your savings account have not changed. Under the present system you are taxed on all that extra 6 percent of earnings and yet you haven't got a thing to show for it because it reflects inflation.

So I think here is an area where you can go and help the small saver.

Look at a poor guy who has no assets at all besides a savings account passbook, earning 5 percent a year. First of all, he is taxed on the 5 percent a year, let's say at a 20 percent rate, so now he has got 4 percent.

We come along and hit him with 6 percent inflation, so he has minus 2. He is really getting a negative real aftertax return on his savings. It is not surprising that we have such a low savings rate in this country.

And so if Congress—I know this is fairly innovative, because I haven't heard much because of it—I think we have many illusions for inflation, illusions built into our tax system and consideration of ways in which the inflation component of earnings on savings in bonds and stocks can be freed from tax would eliminate one of the worst effects of inflation now.

Mr. HARTMAN. We have to do it on the other side, too. That is, to the extent that you deduct interest on your income tax you would also have to change the rules so that you couldn't deduct it all. You would have to only deduct that part not due to inflation, so that there are winners and losers in this.

Senator McCLURE. Would you also provide a means by which businessmen, small or large, are able to replace inventory without having paid tax on the income to replace that inventory?

Mr. GORDON. That is a matter of whether you want to reallocate replacement costs calculation, fixed capital, and inventory. That is another process of what is called inflation accounting. I think that is very much to be favored.

Mr. Hartman's point about the debtor paying the interest, borrowing on credit at 18 percent—and really that is 12 percent, at least it is pretty cheap—if you take my same example, the 12 percent after tax is only 10, inflation takes out 6, so you are really only paying 4 percent interest rate.

I think our whole tax system encourages borrowing at the expense of saving for everyone, and if what we want is more capital investment, we should shift back.

Senator McCLURE. One final question: Are we in our economy putting aside enough money for future obligations for retirement systems, social security, private pensions, individual retirement goals, or are we accumulating unfunded liabilities that are institutional and personal and private that will become a matter of concern in the future?

Mr. HARTMAN. I think that there is no global answer to this.

On social security, I would say certainly—well, I think there is general agreement on this now—the error in the 1972 amendments that allows double correction for inflation has to be eliminated. If that were eliminated then there is still the demographic problem. Early in the next century there are going to be an awful lot of retired people relative to workers and we have a choice of either making so-

cial security benefits go up less slowly, moving toward new retirement ages, or deciding what share of payroll tax and other kinds of taxes ought to be used to finance these increases.

All those, it seems to me, would be manageable ways of dealing with the social security problem, if we got rid of this initial over-correction for inflation.

In the case of Government employee retirement programs, I think the evidence is still coming out on that. But there are problems in the civil service retirement program and Congress' way of dealing with its unfunded liability is probably inadequate. I think that there is going to be reform needed in that program sometime in the near future.

Senator McCLEURE. I would like to look at it in a little broader sense, that is, in the sense of what are inflation and tax code and governmental policies doing to the savings which are necessary to provide for capital growth and investment. If we at the present time tax heavily to finance payments so there are not enough savings to provide investment, we exacerbate the demographics to which you make reference. We have encouraged people to spend, to get into debt, instead of saving, and the result is there are more debtors and fewer creditors, there are more people who are more dependent upon other forms of income security rather than their own savings.

Is our policy executed in the direction of making it impossible to meet the expansionary goals of an economy that will have sufficient future economic strength to pay the retirement needs of a growing number of people moving on to retirement?

Mr. FAIR. In the aggregate, the savings rate in the second quarter was 7 percent, the household savings rate. I predict that it will be up to about 8 percent by the end of 1980. This seems to be enough to finance investment. It does not seem to me, looking at the total aggregate numbers, that there is any serious problem with generating enough savings to finance investment in the next few years.

Mr. GORDON. That is a view which takes a very short-term outlook and looks at U.S. benefits.

We know if you look back over the 20 years the savings rate in the United States has been way below our major international competitors, particularly Germany and Japan. If we want to think about what we want to have, more of an investment-oriented economy and less consumption in Government transfer, these are basic choices. A single number which will determine the outcome is the overall level of the full employment Government surplus.

Now when you think about this, it is very important to remember that much of the investment now occurring is investment which doesn't increase production, it goes to implement Government regulation, pollution, and occupational health and safety, and so forth. We may be looking at an economy which is going to have a distinctly lower growth rate of total capacity to produce over the next decade or two than we might otherwise desire.

I lean toward the group which favors, for instance, elimination of the double taxation of corporate dividends, elimination of the corporate income tax entirely, going down to the proposal which would be of most benefit to savings. That is Martin Feldstein's revival of the old economic idea of a progressive consumption tax where the rich man

is taxed heavily to the extent he spends but not to the extent he just has wealth and lets it go into productive investment.

Representative HAMILTON. Thank you very much, gentlemen. Your contributions have been most useful to us, and we appreciate your statements and the responses that you have made to our questions.

The committee stands recessed.

[Whereupon, at 12:15 p.m., the committee recessed, to reconvene at 9:30 a.m., Tuesday, July 26, 1977.]



THE 1977 MIDYEAR REVIEW OF THE ECONOMY

TUESDAY, JULY 26, 1977

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

The committee met, pursuant to recess, at 9:30 a.m., in room 318, Russell Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representative Bolling; and Senators Humphrey and Hatch.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; William A. Cox, Thomas F. Dernburg, and L. Douglas Lee, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, Stephen J. Entin, George D. Krumbhaar, Jr., M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

Mr. Director, I think we will start. There will be other members coming in, but I understand that you, as usual, as are all of us, are under the pressure of time so we will get underway.

The Joint Economic Committee convenes this morning for the final day of hearings to review the short-term outlook, and today we wish to focus primarily on the longer-term planning period extending through 1981. We are pleased to have Mr. Bert Lance, Director of the Office of Management and Budget, to discuss this with us.

To assist in the long-term planning, the administration has set forth some very ambitious goals for 1981—goals I think all of us would be delighted to reach:

Reduction in the unemployment rate to 4¾ percent;

Reduction in the rate of inflation to 4.3 percent;

Balanced budget with expenditures and receipts equal to 21 percent of GNP.

While these goals are highly desirable, I personally have serious doubts that they can all be achieved. The private witnesses who have testified in previous hearings before this committee have expressed strong reservations or complete disbelief.

I asked the staff of the Joint Economic Committee to examine the Carter budget goals carefully to determine if they are consistent and attainable. Briefly, our staff's analysis concluded:

First: In order to reach the inflation target of 4.3 percent using only fiscal and monetary policies, the unemployment rate would have to rise well above its current 7 percent level. The administration's

current anti-inflation program is not powerful enough to change this overall picture significantly.

Second: Even if the inflation target were to be achieved, to reach the full employment and balanced budget targets, nonresidential fixed investment will need to grow 10 percent per year in real terms for 5 consecutive years. This necessitates rapid rates of expansion of the money stock which would have adverse consequences for the inflation target.

Third: The balanced budget and full employment targets are unlikely to be compatible because of structural changes in the economy which have weakened aggregate demand.

I am making this staff analysis available to you and I invite any comments that you have on it.

If all of these targets cannot be achieved simultaneously, then we must make some hard choices and establish priorities among them. Mr. Schultze has indicated to the committee that the unemployment target is more important than the balanced budget target. We would appreciate your views on the relative importance of these various goals.

Establishing a balanced budget goal for 1981 naturally raises questions about its desirability as well as its feasibility. One of our witnesses has stated:

The merits of the Administration's emphasis on balancing the budget . . . has been more than offset by the widespread belief that balancing the budget in 1981 is a promise to be understood literally. As a result, we are embarked on a wild goose egg chase on the consequences of balanced budgeting.

I think there is considerable merit in this statement although it is rather colorful, and I would appreciate your comments on it.

Mr. Lance, we would be glad to proceed with you as you wish.

STATEMENT OF HON. BERT LANCE, DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

Mr. LANCE. Thank you, Mr. Chairman. I have a prepared statement which I think it would be appropriate to request that you place in the record.

Representative BOLLING. That will be done.

Mr. LANCE. I won't bother to read it to you this morning.

There are two or three basic comments that I would make about our midyear projections that I think would be of some importance before moving to what the committee wants to talk about.

I think that the projections that we have submitted—as they relate to the fiscal year 1978 numbers—are accurate. I think that the question of shortfall again needs to be talked about and looked at. This is something that is continuing, but we feel like the numbers and the estimates that we have made up to this point about 1977 outlay totals are accurate. There is, nevertheless, some area of disagreement related to those numbers, as there is a disagreement about other numbers in the process.

As we begin to talk about 1981, I think that the point ought to be made that the numbers that appeared in our midyear review estimates reflect projections, not forecasts, in the normal sense of what forecasting means.

As you well know, it is extremely difficult to forecast with accuracy what the circumstances may be in 1979 with the complex economy that

we have in this country. As you move into 1981, the process becomes correspondingly more difficult. I don't think that the objectives of achieving a balanced budget, making some real progress in the battle against inflation, and doing something of a real nature about the problems of unemployment are incompatible. I think there is compatibility, and I am sure that you will want to talk about that at some greater length. There is naturally room for difference of opinion about the relative priority of those goals, and the relative ability to be able to achieve them. I do not think they are unreasonable. I do not think they are unattainable. It is going to take some effort. It is going to require some hard choices, both on the part of the executive and also on the part of the legislative.

One of the important things, Mr. Chairman, is to realize that, as we begin to deal with the 1979 budget numbers, we will begin to make some of those decisions.

It is also appropriate to note, in response to a point properly raised by many people, that the larger deficit in 1978 than in 1977 will not preclude our ability to move toward balance in 1981.

As you well know, the Carter administration has had very little input into the 1977 and 1978 budget numbers. When we made our February revisions, we projected the 1977 deficit at \$68 billion and the 1978 deficit at \$58 billion. We felt this decline in the deficit was a move in the right direction. Subsequent events, including the withdrawal of the rebate and shortfalls, have significantly altered those numbers. The deficit in 1977 now is projected at \$48 billion, while the deficit in 1978 is projected at \$61½ billion. This has led people immediately to say that we are moving in the wrong direction. My response is that, as we develop the 1979 budget we will see a significant decline in the deficit in that year. We will see restraint exercised in the spending recommendations of the executive branch of the Government; as a result, there will be very little real growth proposed in the 1979 budget numbers.

I think we need to get to the point where people are able to realize that what we are basically talking about is our ability to start moving in the direction of the goals that we have outlined. I think that will become very evident as we move forward in the process.

Having said that, Mr. Chairman, why don't I respond to the things that you are interested in? Thank you.

[The prepared statement of Mr. Lance follows:]

PREPARED STATEMENT OF HON. BERT LANCE

Mr. Chairman and members of the committee, I am pleased to be here this morning as you conclude your hearings on the Mid-Year Review of the economy. I would like to discuss briefly the economic and fiscal outlook and the revised 1977 and 1978 budget estimates and the long-range projections that we issued in our Mid-Session Review.

THE ECONOMIC AND BUDGETARY OUTLOOK

The economic forecast underlying our present budget estimates is little different from that used in our April budget update and, indeed, little different from our February forecast. We expect real growth rates of over 5 percent both this year and next. Inflation will be in the neighborhood of 6 percent, but trending downward.

Consistent with this essentially unchanged economic outlook, the fiscal situation remains little changed from our April update. For 1977, our current estimates show receipts at \$358.3 billion and outlays at \$406.4 billion, with a deficit

of \$48.1 billion. These estimates are within a billion dollars of the estimates that we released in April.

For 1978, we now estimate receipts at \$401.4 billion and outlays at \$462.9 billion, resulting in a deficit of \$61.5 billion. Our current estimate of the deficit is \$3.6 billion larger than the April estimate, with receipts somewhat lower and outlays higher. On the other hand, our estimate of the deficit is \$3.1 billion smaller than the deficit in the first congressional budget resolution for 1978, largely because our estimate of receipts is higher. Our estimates of total outlays and budget authority are also above the levels of the first resolution.

A table showing the 1977-78 budget totals in the administration estimates and in the congressional budget resolutions is attached to my statement.

Our current estimates include two major administration proposals that were not included in our April estimates or in the first resolution. The first is the energy program announced by the President on April 22. A table summarizing the 1978 outlay and receipt effects of these proposals is attached to my statement. I would like to point out that the President's energy proposals are estimated to increase the deficit by about \$1½ billion in 1978, but thereafter would not have a substantial effect on the deficit through 1985. Net receipts from the proposed oil and gas tax would offset added outlays for the new or expanded Federal energy proposals for the 8-year period from 1978 through 1985.

The President has also presented a proposal to put the long-range financing of social security on a sounder basis. While the proposed tax changes would not become effective until 1979 or later, the general fund payments to the social security trust funds are proposed to begin in 1978. These payments are designed to compensate the social security system for payroll tax receipts that are lost as the result of an unemployment rate in excess of 6 percent. They would be made in 1978-80 and would reflect the revenue shortfalls from 1975-78. For 1978, this payment increases budget authority by \$5.2 billion. Since it is a transfer between government accounts, however, it does not add to total budget outlays.

In addition to Presidential policy changes, our Mid-Session estimates reflect the impact of completed congressional action through the end of June. Congressional action, largely on the 1977 supplemental appropriations bill and the economic stimulus proposals, has increased 1978 outlays by \$6 billion and decreased 1978 receipts by \$4.3 billion relative to the Administration requests.

Our current estimates reflect an accounting change that makes our figures comparable to those in the conference reports on the budget resolutions. Earned income credit payments in excess of an individual's tax liability, formerly treated as outlays in the budget, are now classified as income tax refunds. We made this change primarily to avoid the confusion that resulted from different accounting techniques in the President's budget and the budget resolutions.

Finally, our current estimates reflect a number of estimating changes based on revised economic assumptions and actual program experience this year. In recent years, particularly since the enactment of the Congressional Budget Act of 1974, there appears to have been an upward bias in agency estimates of outlays. Actual outlays in fiscal years 1976 and the transition quarter were less than the estimates in the 1977 budget, and, as our downward revisions in April indicate, the 1977 estimates in the 1978 budget also appear to have been too high.

We believe that our current estimates are reasonable; certainly, we have made every effort to make them so. The estimates for 1977 are based upon actual receipts and outlays for 8 months of the fiscal year and on our best judgment of what the final 4 months of the year will be. While we do not rule out the possibility that the 1978 outlay estimates might have some upward bias in them, experience suggests that later add-ons may well offset any such bias.

We are continuing to review our estimates and will eliminate any biases that we find in them. Last month, we requested the larger agencies to report on the methods they use to estimate spending under specified programs. We also asked them to describe how these methods are being or might be improved. These reports are due in OMB toward the end of this month. We plan to share and review this information with the staffs of the Budget Committees, and the Congressional Budget Office.

LONG-RANGE PROJECTIONS

The February and April revisions sent to the Congress by this Administration did not include long-range economic and budgetary projections because of the limited time available for preparation of the revisions. The Mid-Session Review presents for the first time the Administration's long-range economic assumptions, and budget projections. I have a table showing the budget totals projected through 1982.

I would like to emphasize, however, that these projections differ in nature from our estimates for 1977 and 1978. Moreover, long-range budget projections are very sensitive to small changes in the underlying economic assumptions. It is difficult, at best, to make accurate economic forecasts for this year and next year, and it is virtually impossible to make them for longer time periods. Therefore, the long-range economic assumptions, unlike our short-range economic forecasts, are merely projections that assume progress in moving toward a more fully employed economy and greater price stability. They are not forecasts of economic events.

The budget outlays and receipts shown for the year 1979 through 1981 are also not forecasts. In broad terms, they represent an estimate of the degree to which resources would be committed by the continuation of existing programs modified only by those changes already proposed by the Administration.

The difference between the outlays and receipts—the budget margin—simply reflects the fact that under the assumed economic conditions, receipts would grow faster than outlays between now and 1982 if there were no further policy changes. We know that in the past, projected margins have not been realized in terms of budget surpluses, largely because economic and other conditions changed, and policy changes were made to accommodate them. Therefore, the fact that the projections show budget margins of \$4 billion in 1980 and \$42 billion in 1981 does not mean that we will automatically achieve the President's goal of a balanced budget in 1981.

No attempt is made to predict future Administration or congressional decisions. As you know, the Administration will submit two major proposals to the Congress later this year. The first is welfare reform, which the President has pledged to send to the Congress in several weeks. The long-range projections implicitly allow for welfare reform. The outlays that will be folded into the welfare reforms are included in the same program totals as they have been in the past. In addition, there is included in the allowance for contingencies funds that cannot be assigned to a specific function or agency until it has been determined how they will be used. For 1979, \$1.8 billion is included and this rises to \$5.5 billion by 1982.

The second major proposal that the Administration will send to the Congress later this year is tax reform. The long-range projections do not reflect the impact of tax reform, because the Administration's proposal is still being developed.

Tax reform is likely to have little if any effect on fiscal year 1978 receipts because it is doubtful that changes in withholding rates, if any, would take place significantly before the end of the fiscal year, i.e., September 30, 1978. Moreover, while other changes in tax liabilities might affect calendar year 1978 tax liabilities, the actual effect on receipts would not take place until fiscal year 1979.

This concludes my prepared remarks. I will also be happy to answer any questions you may have.

TABLE 1.—1977 AND 1978 BUDGET TOTALS

(In billions of dollars)

	1977 President's budget ¹			3d resolution revised
	February	April	July	
Receipts.....	348.5	358.6	358.3	356.6
Outlays.....	416.6	407.3	406.4	409.2
Deficit.....	68.0	-48.7	-48.1	-52.6
Budget authority.....	463.2	462.1	464.1	470.2
	1978 President's budget ¹			1st resolution
	February	April	July	
Receipts.....	400.7	403.8	401.4	396.3
Outlays.....	458.5	461.7	462.9	460.95
Deficit.....	-57.7	-57.9	-61.5	-64.65
Budget authority.....	506.3	498.0	504.3	503.45

¹ Earned income credit payments in excess of an individual's tax liability, formerly treated as outlays, are now classified as income tax refunds.

TABLE 2.—EFFECT OF THE ENERGY PLAN ON 1978 OUTLAYS AND RECEIPTS

[In billions of dollars]

	Outlays	Receipts	Net impact on the bud- get surplus
Conservation measures:			
Crude oil equalization tax	0.5	1.0	0.5
Auto efficiency tax .....	.5	1.5	1.0
Federal building retrofit .....	.1	—	—0.1
Energy conservation retrofit .....	.2	—	—0.2
Other conservation	(?)	—	—
Subtotal, conservation	1.3	.2	—1.1
Strategic petroleum reserve .....	.3	—	—0.3
Increased Federal fuel costs .....	.1	—	—0.1
Indexed Federal programs and Federal pay	(?)	—	(?)
Oil and natural gas conservation taxes	—	—	—
Energy R. & D.	—	—	—
Other .....	.1	(?)	—
Total, President's energy plan	1.7	.3	—1.4

¹ Reflects only that portion of tax collections that will be returned as outlays. Other collections will be returned through the tax system using credits.

² \$50,000,000 or less.

Note: Detail may not add to totals due to rounding.

TABLE 3.—FISCAL OUTLOOK, 1978-82¹

[In billions of dollars]

	1978 current estimate ²	1979	1980	1981	1982
Projected outlays	462.9	498.6	532.7	564.8	601.0
Projected receipts	401.4	466.8	536.6	606.9	676.5
Budget margin or deficit (—)	—61.5	—31.8	3.9	42.1	75.5
Budget authority	504.3	551.9	589.8	620.2	664.3

¹ Earned income credit payments in excess of an individual's tax liability, formerly treated as outlays, are now classified as income tax refunds.

² Includes impact of congressional action and inaction.

Representative BOLLING. Mr. Lance, I appreciate what you have said and I would have to say in all fairness that, looking back over the first few months, I would have to say that I think that the dice were sort of loaded against the administration coming in with a change in direction and policy simply because of the timing of the budget process and timing of all of the other processes of Government. But one of the things that has disturbed me and one of the reasons that I have yet to regret having taken issue with the figures very early on, more or less privately rather than publicly, although later publicly, is that that kind of approach—I think I understand it better now than I did at the beginning—was designed as much to reassure in terms of subsequent as it was to deal with the specific situation. That kind of approach carries with it certain dangers which I have just experienced in a totally different capacity than as chairman of this committee.

I am the ranking majority Member in the House of the Ad Hoc Energy Committee and I listened both in the meetings of the committee and in the caucuses that the Democrats had to this terrible conflict over numbers between two staffs, the staff of Schlesinger and the staff of the Joint Committee on Internal Revenue Taxation, and it finally dawned on me that what was happening was that the numbers

that we were dealing with in terms of savings from the administration inevitably had to be based on the general thrust of the numbers that the administration projected into 1981, and on the assumption, they couldn't very well be otherwise, or Mr. Schlesinger's people would be completely out of line with the President, who, after all, is all of their bosses.

Well, until I realized this, the battle between the staffs was almost ludicrous, they were coming up with numbers that were totally different, obviously because one group took what I would call still an optimistic view of investment, and consumer spending, and the other group took, you can call it a pessimistic view, or you can call it a realistic view of those two assumptions.

What it did was, I think this is something that is worth keeping in mind, with as much econometric work, with as much simulation work, with as much dependence as we have on figures, in dealing with policy, national gross policy assumption about the behavior of the economy are going to have an amazing impact on the figures that come up in terms of specific programs, and this just happened to me last week in the middle of the consideration of that very difficult bill, and it is the first great illustration I have had of what I consider to be one of the difficulties of that particular approach.

I don't know whether that makes any sense to you?

Mr. LANCE. I think it points out some of the basic problems we experience as we go through the budgetary process. In talking to the various agencies and departments, we find that differences exist about projections and this sort of thing. I think it is something that really has to be dealt with. I don't know how to deal with it. I have a tremendous problem with relying solely on a model, leaving everything to what a model shows, because I don't think models can adequately take into account consumer confidence and this sort of thing.

I think models may be a useful tool, but they ought not to become an end to themselves. I would hope we would always have the ability to use some common sense and judgment with regard to the forecasting method and also the assumptions we have in mind.

I think I understand the problem. The assertion, of course, is that the administration numbers are on the optimistic side. As we showed you and other congressional leaders, we have also looked at an alternative less optimistic path. We have talked about developing a pessimistic set of numbers to see what that does. These things are all really just opinions, when you get right down to the very basic aspect of what we are talking about.

I think there is no trouble in having all of those different projections except that it becomes terribly confusing when people are not talking about the same sets of numbers and not talking about the same basic assumptions.

We have said in our projections that we have always had to have a viable economy that was growing in order for us to attain our budgetary goals. I think that is the case.

You said earlier that there are those who believe that the twin possibility of dealing with inflation and unemployment at the same time really is not realistic. I happen to believe just on a very personal basis that it is, that you don't necessarily have to increase unemployment simply to get the inflation rate down if you are able to rely upon

the private sector to do things that it is capable of doing with regard to the total economy.

These are all things that are subject to differences of opinions and I guess subject to making determinations about who was right and who was wrong after the fact. Given where we are now in our early 1979 work, we feel that we are moving in the proper direction. We realize we have got to have a growing, viable, healthy economy with which to attain our revenue projections; but on the expenditure side we are going to be restrained and we are going to be hardnosed. We are going to try to make sure that we hold the growth down, and I think that is an integral part of the decisionmaking process that we have to go through.

Representative BOLLING. Well, I happen to agree with a great deal of what you said. I think it would be a ghastly mistake if we started to put too much confidence in models.

I am not an economist. I have learned whatever general economics I know serving on this committee for a very long time, and I have come to believe that it is a very useful science or semi-science, but I don't think that it overruns either the political process or the absolute unknown of the psychology of the American people in all their different complexities. But I do think that the role of a committee like this must be to question everything.

Mr. LANCE. I certainly agree with that.

Representative BOLLING. And question as stringently and effectively as it can.

I happen to agree with you that it is perfectly possible, although it has never been done in a major developed nation yet—I happen to believe that it is possible that we can master inflation and unemployment, but I also happen to believe it is going to take some steps more stringent than we have taken or are proposing in the field of inflation.

I don't know what the answer is there. I had a good deal of experience over the years in dealing with legislation that was supposed to control inflation in the Korean war and other places, and I have very little confidence in overall total wage and price controls, but I think we almost surely are going to have to go further than some kind of modified jawboning, even when the jaw is as powerful as it is, the institution of the Presidency.

So that is one of the concerns I have.

Another concern that I have, I think in direct response to not only what you have said but a letter I got from you the other day, this is no decision that I am stating, you were talking about perhaps the possibility of eliminating the current services budget submission in November. That is something that we have been discussing.

We have been discussing between this committee informally and the Budget Committee, and I hope that my staff has supplied your staff at least with the statements made by I believe Mr. Hartman of Brookings yesterday, there are serious deficiencies in that mechanism, and I would be the first one to agree, because I happen to have been the House manager of the Conference on the Budget Act, and I remember, not in detail, but I remember that particular provision was sort of the last compromise, certainly in dealing with a very fundamental problem, and I can't resist the opportunity to talk about that a little

bit because it is so important to the effective relationship between any administration and any Congress.

The Congress has been slower than the executive, much slower, to come to a modern, realistic attempt to deal responsibly over time with the budget process. In other words, to deal for a 2-, 3-, 4-, 5-year period with the problems of macroeconomics. I guess that is the easiest way to put it. One of our dilemmas has been that we have not been able to devise the mechanisms where we have worked effectively, cooperatively, and creatively, with the executive in assuring that we are talking about the same things. When you come up with something you are not talking about apples and when we respond we are not talking about oranges. This is crucially important to the continuing education of the Congress in meeting its responsibilities under the Budget Act, which I happen to think, and I gather that some people in the administration agree, is a very important possible way of achieving common results.

But we have got to figure out some way to get a little advanced notice. I am familiar enough with the ghastly problems that you have as Director of OMB, in mastering justification, the raw material that comes at you, in the latter part of, starting much earlier than the latter part, starting now and earlier than now and going into a crisis in December and early January.

But the suggestion that Mr. Hartman made, and he is, I think, highly qualified and experienced, is that rather than abandoning the current services budget for 1 year, that we have, and letting it fall into the budget presentation, that the administration perhaps try to give us a current services budget approach based on whatever agreed upon approach seemed wise. I suppose from the congressional point of view it would be the last budget resolution affecting that fiscal year. From the administration point of view it would be something else, but not for a 1-year period, but for a 3-year period. And in order to not make that a separate duty, which would be honored in the breach, make it a duty that would be a part of the progression to the actual Presidential budget. Nothing would be a tipoff on the program changes or the cuts or additions or anything like that, but that it would be part of your process.

Now, the advantage—I think it would be a process that would be relatively difficult to arrive at, perhaps from your point of view more than ours, but the enormous advantage of that would be that for the first time in our dealing, even under the Budget Act, we would be working with the same deck of cards. We would be basically coming up with a basket of oranges, a basket of apples, a basket of bananas and a basket of whatever, and we would all know which was which.

I wish very much that in the process, the continuing process of arriving at a final budget, that you would have your staff take a look at that Hartman proposal. I intend to continue my conversations with Giaimo and his staff, Congressman Giaimo, chairman of the House Budget Committee, because we all feel the inadequacy of the present compromise legislatively. We also know that we in Congress, I think I can say fairly, desperately need to be cut in, not on the policy decisions, that is the President's business, but cut in on the figures that are being used as the basis not for the policy decisions but for the next budget, the inevitable budget.

What I am outlining, I may not have made clear, is certainly not unreasonable from our point of view, and I didn't see any particular reason why it would be unreasonable from your point of view. We are not talking about 5 years, because the fourth and fifth year are sort of crystal-balling. We are talking about a possibility of 2 or 3 years, 3 really, and that I think is about the right number that we ought to be dealing with. And we are talking about initiating a situation in which instead of confusing each other we would be understanding that we had almost stipulated figures, not quite, but almost.

Mr. LANCE. I think it is important for us to be able to move toward that ability to talk about the same things on a comparable basis and to make sure that we are talking out of the same basket. I think that is something that the Congress, both through your leadership in the past, and through the leadership in the future, will be trying to achieve. As to the best way to deal with the problem you outlined, I don't have answers yet. I haven't been through all the process and haven't yet faced some of the problems that we are going to run into in November and December and as we approached submission of the budget in January. But it is obvious that these problems do exist, and I am sure that those of us in the executive and in the legislative, want to continue to make this the most effective budgetary process that we can possibly have.

We want to begin to lengthen our sights and be able to say that this is the kind of thing that is going to be handed out 2 or 3 years from now. You have heard me say before that one of the real problems in the past has been that we didn't pay much attention to the outyear effects of program changes, policy changes, legislative amendments, and this sort of thing. I think it is really important for us to be able to do that. How best to do it, I think, is something the Congress is going to have to work at and something we are going to have to work at to see how we can better resolve the problems.

I would be delighted to have our folks take a look at Mr. Hartman's proposal.

Representative BOLLING. I am delighted to hear that and I couldn't agree more. One of the things that has seemed to me irrational in the behavior of the Congress, I think most observers, perhaps, not a good many people in Congress, think this is so, is that we have not successfully grappled with that problem of the impact in future years of the program that you pass under great pressure in any given year.

Obviously the administration effort to rationalize that kind of approach I think has been a very desirable one and not quite unique but different in its approach and the circumstances. but if for any reason the Congress were to fall back from its position of attempting to make a longer range budget process work, I think we would end up in the kind of quarrel that would be totally destructive, not just of that Congress or perhaps the party in power, but probably of the whole process, because we simply have to master the problem and it is going to take a great deal of understanding, cooperation and effort in my opinion, on the part of your people in particular, but the whole administration, to help us educate ourselves in a rational way so that we change our ways of functioning in a way that will lead in the end to a much more sensible approach.

Mr. LANCE. I am sure when you got through with the Conference Committee on the Budget Act you didn't feel like it was the perfect plan, or that it wouldn't need any adjustment or tuning. We think we now have had the benefit of experience of a couple of years; moreover, we are going to gain the experience now with the change in administration. I am sure the problems you mentioned simply have to be looked at and have to be solved from a cooperative standpoint.

As you have heard me say before, the greatest thing that ever happened, in my opinion—and I thought this as an outsider with no Federal Government experience—was the Congressional Budget Act. It gave the greatest possible opportunity to bring about a real fiscal responsibility of anything that has ever taken place. While I am sure there are difficulties in dealing with specific circumstances they have to be worked out.

Representative BOLLING. The specifics were that when we finished we knew perfectly well we didn't have a perfect document. As a matter of fact, you might be amused by the fact that when we first met in conference, Senator Ervin was the leader of the Senate conferees, they had a large number of Senators, and I was leader of the House conferees, and we had a relatively small group from the Rules Committee. We agreed to disagree and we didn't come back and meet for weeks and weeks and weeks. When we came back and met again, we had one further meeting and we agreed unanimously to adopt. So you can imagine the number of arguments and compromises that we made. It was very much of a compromise in order to achieve a purpose and very badly needed perfecting.

I don't want to bore you or anybody else with this too long. The other thing about it is that we have the greatest difficulty in the House, not in the Senate, in venturing to amending, because it then opens up all the old battles and all of the old pains and all the old coalitions go together, so that we are more inhibited on the House side in dealing with the necessary amendments than are some others.

Having pursued my own particular interest long enough, I will now return to some other things.

The administration has given the impression that the budget ought to be balanced in 1981 regardless of whether that will be appropriate fiscal policy at that time. Such a commitment would seem to tie the administration's hands and eliminate opportunities for the kinds of fiscal initiatives that might help to spur more rapid recovery and meet social needs.

If you are, in fact, committed to balancing the budget in 1981, what kind of fiscal options does that leave you?

Mr. LANCE. First of all, I would say in response to your question and comments that it would not be proper to assert that we are going to balance the budget, no matter what the circumstances. Circumstances do change and you have to respond to them. What I am saying is that simply balancing the budget is not an end unto itself, but it is something we feel is extremely important. It is something we feel that we can do, and something we are committed to doing. We are going to begin to take the steps to do so—again presuming those other circumstances that we have talked about.

With regard to the fiscal options that are open, Mr. Chairman, as we

move forward, and starting with the 1979 numbers, you are going to see considerable restraint on the expenditure side. I think this is something we must do. The process is beginning now, and while I am sure some of the Cabinet officers and Members of Congress think that we may have exercised too much restraint.

We have taken the necessary first step.

It has been interesting to me, in talking about the shortfall problem, that when we look at the growth in the Federal expenditures in the past, except in the case of war circumstance, as best I can determine we have never seen Federal expenditures increase from \$406 billion to \$463 billion in 1 year, as we are projecting from 1977 to 1978.

I think that is an awfully big increase. The increase from our mid-year guidance from \$463 billion in 1978 to \$498.6 billion in 1979 is not very much real growth. So I think that is one of the options that you have available.

It appears to me that tax policy may be the biggest fiscal option that you have available in the future. It is the thing that you ought to be using as a fiscal tool to deal with circumstances as they exist. It is very flexible, it is something that I think you can do. It just makes sense to me that as you move in the area of restraint on the expenditure side, you have to keep open those options as it relates to tax policy on the other side.

I think that is the option that is available.

Representative BOLLING. Could you remind us when the administration expects to get its tax bill up here?

Mr. LANCE. As I understand it now, Mr. Chairman, it will probably come to you in mid-September.

Representative BOLLING. In other words, it will be early enough so that there will be an opportunity to study and work on it in committee?

Mr. LANCE. Yes, I believe that is correct. I understood Secretary Blumenthal to say the other day that they will probably get it to you in time to have administration witnesses appear before you go home in October.

Representative BOLLING. That ties in very definitely with something the Joint Economic Committee raised, I guess, in its report on the last President's Economic Report, that it was very important to recognize that the natural function of inflation on the tax system was causing people to fall into higher brackets and the system was collecting more money and that had a regressive effect, and one of the dilemmas that we confront is that it is almost, I don't say overrunning, but it is sort of lying a wave behind us in the water, and it is important that we look at that.

In that connection, the timing on the tax message, which I can understand, I can understand the difficulties of getting it revised in time because after all it is pretty complicated. It seems to me that we are in danger of running somewhat behind when you take a look at the problem that you outlined, we are going to have a policy of fiscal restraint on the expenditure side and a tax system and inflation even at a reduced level will grind away. It is a question of whether we are going to be able to move with it, even with a September proposal, move quickly enough to have the right effect in the next calendar year. I would think that would be a matter of considerable concern.

Mr. LANCE. I can understand that concern because I think it does place considerable pressure upon being able to deal with it. But again, I think that it is obvious that as you try to deal with some of these complex tax reforms, which is a complex area I know nothing at all about, because of the complexities involved, you just can't do it much faster than that. We have tried to talk about these other measures, like the rebate, as being the only method to get money into the spending stream quickly. I hope we have laid that to rest and that we don't talk about rebates any more. We should look at it strictly from the standpoint of tax policy that has the proper stimulative effect upon the economy and things of that type.

There may be some real pressures to being able to get it done for the next calendar year.

Representative BOLLING. That is the problem I would foresee for the administration, it is under pressure to get something done in time and yet it has a very strong commitment to tax reform, as I do, and it would seem to me there is going to be great difficulty in holding together the two objectives, the fiscal relief, if you can call it that, combined with tax reform, because the people who are opponents of tax reform, I would guess, suddenly would become very much interested in the fiscal effect, not having been very interested before. I am not talking about any of the administration, I am talking about the Congress. And you would get a whipsaw situation which might be pretty dangerous, which would mean that you would need to have put together, if I may be brutal about it, put together a coalition that is going to pass the reform and the relief somewhat earlier than sometimes is the case.

I think there is a real danger that you will be tripped up, not by our good intentions, but by the failure to recognize the opposition has no such intention in terms of this matter.

I have a few more that are sort of standard. According to your description, as I understand it, of how budgetary projections—I guess your description in your statement—of how budgetary projections are made for 1979 and beyond, an economic path is simply assumed and the budget magnitudes implied by that path are estimated. The projections, therefore, take into account the effect of the economy on the budget, but they do not take into account the effect of the budget on the economy.

That is I think a relatively fair statement of the situation and how do you justify that kind of approach, except the fact that you didn't have much time and were probably desperate?

Mr. LANCE. Well, that may be an appropriate comment, Mr. Chairman. I think really, though, when you look at it, that again when you start trying to deal with the overall effect on the economy, and use models and all of these other things, you are right back in the soup again about what kind of numbers you are using and the confidence that you attach to those numbers.

As you know, it is just very difficult to get into the business of forecasting the effect of the budget on the economy when there is so much widespread difference of opinion about the effect of governmental spending. If it is a transfer payment it does one thing, if it is a purchase of goods and services it does another, and so on.

One of the interesting things that we have seen is the fact that despite a significant shortfall continuation, we have seen economic numbers continue to improve and look better. Business has been good. While there are those who would say the spending shortfall is a terrible circumstance because of the effect it may be having on the economy, I haven't seen that result reflected in our economic progress. I think those are the assumptions you have to lay out.

As we move forward in the process we say that these are assumptions that we are making. We think that in light of past experience that they have turned out to be fairly accurate. But it is not an easy question.

Representative BOLLING. Well, another aspect of that question is, I think we got into it, some of us, at least, got into what might be described as a semantic discussion with Charlie Schultze. You have appeared before the committee as the matter has developed. While there still remains differences of opinion they aren't opinion that are separated by chasms.

Mr. LANCE. That is right.

Representative BOLLING. And I would raise the question as to whether it wouldn't perhaps be more effective in the future instead of presenting goals as objectives that one was determined to reach, they were presented as goals that could be reached, and that they could be reached in the following fashion with the following assumptions. I am just speaking personally. I would react with less violence to something like that than being confronted with a rigid commitment, a seemingly rigid commitment to a certain result.

I understand the political problems and this kind of thing. But it seems to me in dealing with a body as complicated as the Congress, it is not a question of frankness, it is a question of tactics, it seems to me that some ways it might be better to say these are goals, that we can reach them, and we believe we will reach them with the following facts, but they are not something set in concrete, we have established that after some months of discussion. It might be better to start out with a slightly gentler phrase, I am not sure.

Mr. LANCE. Well that is a point we ought to make. I don't think there is any question about that. I think, as you said, that basically is our posture. These are goals that we think we can attain, and we think we will attain them. We think that it goes without saying that we have to have these other things take place at the same time in order for us to attain them. But I think that is the direction in which we are headed. I think that it is especially important for the people in the executive branch, and also in the Congress, to understand that that sort of commitment in the President is there, that this is going to be the thrust that he is moving with, and the direction that he is moving in. I think that has to be said, and I think it has to be said in an unequivocal manner in order to get attention. As you say, it may be a matter of tactics, it may be a matter of the way you do things.

I think that if the President had not taken that approach early on there would have been many disbelievers. Even taking that approach, there are still some disbelievers, as you said earlier in your statement, and as witnesses from the outside have said. You can well imagine the belief that would be present inside of the Government. That sort of

commitment, thrust, and sense of priority has not been present in times past. I think that is something that we have to lay on the table.

This is one of the reasons, very frankly, I was so pleased with the fact that the President and the Vice President gave us 25 hours of their time in talking about the spring budget review process with the Cabinet officers and the agency heads. Those people came in and sat down to talk about priorities, about thrust, and at the same time were able to react to the President and his views about what he wanted to do.

I think they have the message now that that commitment is there. I think the people in OMB who sat in on those conversations got the message that that commitment is there. So I think it is important from that standpoint. I don't disagree with what you have said about the fact that you can always temper your statements, but we still feel it is a goal we can and will attain.

Representative BOLLING. Well, I have absolutely nothing but admiration for people who make decisions and are determined to achieve them and have the will to pursue them, but I am merely pointing out some of the difficulties that occurred in this particular situation that might be mitigating under absolutely different circumstances in the future.

I have one more question, then I will yield to the Senator.

I hope that the administration is, as I think it is, more and more impressed by the need in dealing with unemployment to deal with the very particular structural problems that we have not just in cities but also in the less urban parts of the country in terms of youth.

Mr. LANCE. I agree with you.

Representative BOLLING. If Senator Humphrey gets here you are bound to hear a good deal more of that. But I just think that as absolutely key to the ability of a great many people in the Congress to support effectively some of his other goals, if we see some beginning of relief and hope for the people who are left out, then we are in much better shape to deal with some of the other problems.

Mr. LANCE. Mr. Chairman, I certainly agree with you about that. I think it is one of the major problems that we have to deal with. We simply cannot allow that condition to exist.

Representative BOLLING. Thank you very much.

Senator Hatch.

Senator HATCH. Well, thank you, Mr. Chairman, it is nice to see you again, Mr. Lance, and we appreciate the great job you are doing and we also appreciate some of the pains you have had to go through recently.

As I understand, you have indicated here today if we are going to achieve a balanced budget we are going to have a certain amount of realistic restraint—

Mr. LANCE. Yes, sir.

Senator HATCH. In this government. Could you give me some of the areas, I am sure you have given some thought to this—if you can today, maybe it is too broad a question. I would be happy to be guided by you. Would you give us some of the areas where we might exercise more fiscal restraint?

Mr. LANCE. Senator Hatch, I think restraint cuts across the whole spectrum of what we are talking about.

Senator HATCH. Are there any programs you would cut out?

Mr. LANCE. In response to that, Senator, we have to say that in the zero-based budget process and the process of reorganization, and ultimately, I hope, in the process of sunset legislation, I would hope that we would be able to identify those programs that do not effectively deliver services or serve some sort of useful purpose. We have not had the ability previously to be able to really try to measure the effectiveness of what we are doing. We know how much money we are spending and what we spend it for. But we really cannot measure how effectively we are spending it and the kind of results that we are getting for the dollars that we spend.

I think we have to get to the point where we are able to measure that sort of effectiveness. That is when you begin to identify programs that you can't cut out or cut back or redirect. That is what we have to try to do and that is what we are trying to do now.

Senator HATCH. I think maybe the major area where you might look into would be HEW. There is such a quagmire of varying institutions and varying different approaches. For instance, I personally favor splitting out the educational department from HEW so that we can at least get that out there in the open where we can see what is going on in the educational process in our society. Maybe there are some other areas where we could since that does comprise a —

Mr. LANCE. As you know, that is being studied now.

Senator HATCH. It might be a most propitious way to get rid of some waste and other things. I appreciate the fact it is across-the-board, we have to look for it all over government.

Mr. LANCE. I think you would both agree that we need to try to establish some incentive for good management in government. I don't think we have that now. What we have seen take place in the past, again from an outside viewpoint, is that the good manager who runs his area well and tries to save money simply doesn't spend it all by October. He doesn't really have the incentive because he sees that money taken somewhere else by somebody who does not manage well. In the overall process, we have to be able to say to people in the Government:

Do a good job of management and a good job of effective delivery of whatever services you are delivering and you are going to be able to take the money that you save and redirect it to do the other things of priority that you feel strongly about.

We are not going to take from one area that is well managed and set that up as an example and turn it over to another area that might not be well managed.

I think that is one of the things we have to be able to deal with. I don't think it has been dealt with in the past.

Senator HATCH. I hope you keep pressing in that area. I think you have brought some realism into this particular area.

If you were to list them, what would be our number one economic problem in America today? It is a tough question.

Mr. LANCE. I think our number one economic problem is inflation. I think the American people are convinced of that. I think it is very, very difficult to say that the problem is inflation without talking about the problems of unemployment. I combine the two because I happen to be one of the few, who thinks that you can deal with the problems of inflation and unemployment at the same time. There is not a tradeoff

between the two. But I would say that if you just ask the American people to state what they consider the number one economic problem, it would be inflation first and unemployment second.

Senator HATCH. There are a number of others who feel that the way to reach some of the stimulation you feel is essential in order to balance the budget and still be able to carry out the work of the Government would be to have a tax cut across the board. Do you feel that would be a helpful step toward stimulating the economy and still raising enough revenues to balance the budget?

Mr. LANCE. Yes; earlier I said to Chairman Bolling that one of the things I think the administration is moving toward, is the idea that expenditures are going to be restrained and tax policy will be the thing that becomes—I don't know a good term to describe it—the instrument or the tool with which to do the things that relate to economic stimulation.

From the standpoint of inflation alone you have to come along and make some tax adjustments. But I have been before enough groups now in Congress that I think all of you have pretty well convinced me there is some good effect in permanent tax cuts.

Senator HATCH. Well, with regard to unemployment, as you know, about 50 percent of our black youngsters are unemployed and 40 percent of the others in our society are basically unemployed yet we are thinking in terms of increasing the minimum wage to \$2.65 an hour. What do you think will be the impact of the proposed increase in the minimum wage? What type of impact do you think it will have on our teenage and minority unemployment, or should we have some sort of youth differential so that we can at least get them to work and get them trained and get some skills developed so they can ultimately reach the point where they make a minimum wage or better?

Mr. LANCE. I am not an expert on what effect increases in the minimum wage might have on unemployment. Those who employ a lot of people in the youth areas, service industries, and fast food business would make the argument that an increase in the minimum wage causes an increase in unemployment. I think that it is very, very difficult to just simply ascribe a number or a percentage that might come about because of some other governmental action or some other circumstances in the economy.

It is sort of like we were talking earlier about variances in forecasts and projections. This sort of thing is very, very difficult to deal with. I really don't know the answer to it.

Senator HATCH. I think maybe what we need to do is acknowledge that we are going to have a minimum wage but also acknowledge that maybe we need some creative approaches in our society to put people to work so at least get the experience of work, the prestige of work, get the self-esteem that comes from working before we move into tying minimum wages for instance to increases in manufacturing wages.

Mr. LANCE. We have to have some creative approaches to deal with the problem of teenage unemployment. In my opinion, it is just a terrible indictment of us when we have half of our unemployment in the 16-24 age group. It is something that we have talked about previously. Obviously as we try to deal with this problem, the Government has the primary responsibility in starting the process moving forward.

I think the private sector has to come along and do its thing about making those jobs permanent. This is one area where there has to be close cooperation between the private and public sector. It is a problem that has had an adverse economic impact upon us as a Nation both from the standpoint of the human factors that are involved and from the economic loss that is involved.

I hope that we are moving in the direction of being able to deal with that problem.

Senator HATCH. We are going into minimum wage hearings within the next week or so, and what I see is that the very unoriginal, uncreative approach to the problem, big labor wants the minimum wage to be raised to \$3 an hour, the President says \$2.50, all the compromise is \$2.65, with an escalation provision that it is going to \$3.15 with no provision for the small businessman, the service companies, or helping not only teenage unemployment, we call it youth unemployment, up to age 26.

Frankly, I would like to see us give some thought to that because I think it is one of the major areas of difficulty in our country.

For instance, there are a number of black economists in our society who are absolutely convinced and have based their thesis upon the proposition that minimum wage is causing much of the disruption that we have in our society among the unemployed youth. I think the problem that we had in New York is not only a problem nationally but it is the cause of some of the problems, they say much of it.

Now, look at New York. I think that is just a symptom of a very widespread illness all over the country that is about to erupt unless we solve the problem, like I say, as you say, in a more creative way, and I am not so sure tying minimum wages to manufacturing salaries is the way to do that or even to increase the minimum wages is the way to do that.

Representative BOLLING. Would my friend yield?

Senator HATCH. Sure.

Representative BOLLING. I have a slightly different problem with the minimum wage. When I leave here I am going to go to a committee that has to make the decision, the Rules Committee of the House, whether the minimum wage bill goes to the floor. I am sure it is going to provide for an open rule, if we ever get to it, because I think there are going to be some overemployed people.

The last I heard we had 30 witnesses in opposition who are obviously going to try to stop the bill by a filibuster tactic. That is supposed to be reserved for my friend's body, not the House.

Thank you for yielding.

Senator HATCH. I didn't realize we had that wonderful instrument of procedural use over there.

Representative BOLLING. We are about to use it. I bet they are up to 45. I heard 30.

Senator HATCH. I certainly wish them a lot of success.

[Representative Bolling, chairman of the committee, withdraws from the hearing room.]

Senator HATCH. Well, let me just go a little bit further. We had a number of leading economists testify in the last 2 weeks that we need to do something drastic about savings if we want to avoid stagnation. What are inflation and the tax code doing to our rate of savings, and

are we saving enough to provide for adequate growth in employment and capital and productivity to insure the solvent situation of social security without ever increasing taxes and a stagnant standard of living for the working people over the next generation.

Mr. LANCE. You have heard from those distinguished economists and I am not in that category—I am not an economist.

Senator HATCH. I look upon you, Mr. Lance, as one of our practical economists. Maybe that is what we need a little more of here. That is why I am asking you for some help.

Mr. LANCE. I appreciate that, Senator. I think that when you have a low rate of savings, which we have been experiencing for quite some time now, that that may be all bad in the future as it relates to capital formation.

I am not sure that is the case as your economy continues to grow and expand. Again, we sometimes try to combine circumstances that, maybe, should not be combined. As the natural ebb and flow takes place in the economy, you see changes in the rate of savings. I don't think there is any question about that. It has been an abnormally low rate, or high spending rate, for quite some time. I am sure that the savings rate will increase as we go forward.

The kind of effect that has on the economy could be argued and discussed, about how our consumer-led economy is affected. As you take away from savings or as you add to savings, you get necessarily a different sort of circumstance. I think that we need to be aware of the savings rate and to try to measure its impact. But I think we have got to move in the direction of tax policy, Senator, of being able to stimulate investment opportunities, and give some incentive with regard to capital investment processes.

I get a little bit more concerned about that than perhaps I do about the rate of savings. From a practical viewpoint I never have been able to understand all of the ramifications of the rate of savings. I think that what we have got to come to is some way to have incentives for capital investment and capital formation in our economy and I am not sure that one foregoes the other. Simply because we have a low rate of savings in the country does not necessarily mean we are adversely affecting the possibility of capital formation or economic capital investment.

There is a lot of room for discussion in that area and I simply do not have a hard and fixed answer to the direction we may be heading.

Senator HATCH. If I didn't misconstrue what you said, you seem to be saying we have to use the Tax Code basically to stimulate savings, and the way I view that, the only way we can do that is through a tax cut across the board.

Mr. LANCE. Not to stimulate savings but to deal with capital investment and capital formation, is what I am saying to you. When people speak about the savings rate and capital investment at the same time, I am not sure that those numbers are the same, and I am not sure of the proportionate influence that they have on each other. I guess you could have an economy dependent on the kind of tax policy that you had and the kind of fiscal policy that you had where the savings rate was low but the capital investment rate was high.

Now whether that is traditional or not I am not enough of an economic historian to say, but I am not sure anybody has really identified

to me the cross relationship between the savings rate on the one hand and capital investment and capital formation on the other.

Senator HATCH. I think we all agree that we can't grow without savings and we can't salvage social security without growth.

Mr. LANCE. I think that is a basic premise, but there is another relationship in here whereby they don't always turn out to be exactly the same.

Senator HATCH. What would be your view of the proposal to increase savings by taxing only that interest or dividend income in excess of the amount due to inflation?

Mr. LANCE. This is just a personal view—and let me emphasize that because the decision has not been made with regard to tax reform—but the position that I have had favors the elimination of the double taxation of dividends. I think this is something that is important psychologically, as well as having very direct impact upon future capital formation. I think it needs to be done. I would hope that our tax reform proposals certainly take that into consideration.

I think it is of prime importance. I think that is one case where you can get savings and capital investment at the same time and where those may be tied together. They may be synonymous, but it all depends on the process.

Senator HATCH. The President's social security program calls for the elimination of the ceiling on the amount of individual wage that the employer pays social security tax on. This will raise the social security tax for employers as we all know. Because it is generally agreed that business passes the social security tax along to the consumer in the form of higher prices.

What effect will this Presidential proposal have on the future rate of inflation?

Mr. LANCE. I saw some estimates by our people and also by Mr. Schultz's people. The proposal does not have a big impact on inflation. Although I don't remember the exact numbers, it was not major.

Senator HATCH. It was minimal?

Mr. LANCE. One- or two-tenths of 1 percent or thereabouts, not major.

Senator HATCH. Well, let me get into something that may be even a little more practical, and that is, what is, in your opinion, the impact of extending the controls on the production of oil and gas in our society, will we create a shortage of domestic energy for years to come? I might say will we end up with more expensive oil imports and a higher cost of electricity?

Mr. LANCE. Well, I would sure hope that would not be the case. Basically, the President has taken the approach that you start with conservation. After that you can move over to areas where you encourage production and alternative sources of energy and the kind of things we have to do to become independent. But I do not think that any administration proposals that we have now would cause the kinds of problems you have outlined. I don't see that being the circumstance although I am sure you have your own views about that.

Senator HATCH. Do you really think we can keep energy prices down by controls?

Mr. LANCE. I think, first and foremost, we have come to a time in this country when we are not going to have cheap energy any longer. That has been a part of the problem. Whatever energy policy we have had in the past, which I happen to think was none at all, except a policy of basically cheap energy, is behind us. We will have to deal with the energy problem in the future on an entirely different basis. The approach that is being taken now is a proper way to begin to deal with the problem.

Again, I don't think this is something that is going to be inflexible and set in concrete. I think we are going to have to deal with this problem for quite some time to come and be very flexible about it as circumstances develop. When you have a situation where control of something as basic as energy is greatly influenced by external forces, then I think you have to be as flexible as possible in dealing with the problem.

Senator HATCH. What will the higher price of oil and gas brought on by the President's proposed tax do to the price level, GNP, and unemployment? How will the higher cost of fuel be divided between lost real output and more inflation?

Mr. LANCE. Well, that is a question that I again don't consider myself competent to answer. Mr. Schultze has projected that the Consumer Price Index would increase from one-fourth of 1 percent to one-half of 1 percent. I think that those other things will depend on what the overall effect is as you go forward.

I think it is very, very difficult to project. I have confidence in the estimates of the total effect, but I think that in some of those areas we are going to have to learn as we go along even though that may be a cruel way to do it. We have done that in other instances. I imagine we are going to do it in this instance also.

Senator HATCH. The President has indicated that our real answer to the energy problem relating to the interim answers consists of our vast reserve of coal. Well, as I understand it, the real problem with that, among others, is that, first, we may have the reserves, second, we don't have the engineers, the mining engineers, the ability to get into reserves because of logjams in energy creation, the means of transportation and many other aspects upon which we have to depend in order to move that coal to market and even utilize it, not even considering all of the other problems such as the increased structure of the many, many other things that people seem to raise.

Do you really expect that we are going to be able to offset our energy problems from an economic standpoint with coal as the interim solution without the regulation and giving incentives to go out and find more oil and gas or other alternative forms of fuel?

Mr. LANCE. Senator, I think that is something that we have got to try. I see no reason why we can't switch to coal. If we can convert to coal, in instances where boilers are fired by gas, that is a process we ought to start. I don't see why that ought to be very, very difficult. Surely there are going to be problems involved in conversion. There are going to be problems involved in shipment of coal, and other things. But we have had other problems that we have had to cope with and I am a great believer in the ingenuity of the American people. When they are faced with a problem, they can pretty well do anything they want to when they make up their mind about it.

When you consider our dependence on external forces for energy, that gives us a great incentive to begin to deal with the problems. As I say, I am not as knowledgeable as I would like to be, or I am getting to be, in the area of all the problems of energy. I wish that I were. But I think there are some practical approaches to deal with the problem, and I think we are moving in that direction.

Senator HATCH. All I can say is that we are all hopefully moving in the right direction. I think that there are enormous problems with the enormous disparity among viewpoints concerning how to solve those problems.

Well, I just have one comment to say then I will turn it over to my distinguished friend and colleague. But you would suggest we don't get good management in Government, by inflicting financial hardships on those who want to serve, and I for one was very pleased with the results of your hearings yesterday, and have deep regard for you and for what you are trying to do, and would ask you to call on me at any time if you can for any help I might be able to give in my humble way in assisting you in things that you are trying to do.

Mr. LANCE. I appreciate that.

Senator HATCH. I am very honored to be here.

Senator HUMPHREY [presiding]. Mr. Lance, let me join with my colleague, Senator Hatch, in saying to you that I was very pleased with the report of the hearing of yesterday.

Mr. LANCE. Thank you, Senator.

Senator HUMPHREY. I considered the treatment which you have received in the public media to be grossly unfair and I think you know that we have in the Congress very high regard for you personally and your sense of personal integrity, so I think we can put this one behind us. I guess this is all part of the political process and we have every reason to note that you will fulfill your responsibilities with complete integrity and honor.

Mr. LANCE. Thank you.

Senator HUMPHREY. I have a few general questions that may be somewhat unrelated to your immediate testimony, but can you give me any idea what you think the interest rate trend will be?

Mr. LANCE. Senator, I have sort of been put on the spot talking about interest rates, so I had better not respond to that. I have been told I shouldn't talk about interest rates.

Senator HUMPHREY. You just go ahead and talk about interest rates. The people that are generally talking about interest rates are the people that are collecting the interest. I would like to have somebody talk about interest rates.

Mr. LANCE. I expect that I had really better not try to make any projections in that area since I have been in the unusual position—and it is an unusual position—of not being able to talk about interest rates. In the practical sense, if I say anything about the principal rate, then I am accused of having my own self-interest. If I say anything about anything else then I get accused of something else. So I think in the area of interest rates, with your permission, I just will not try to respond to your question on what the trend might be.

Senator HUMPHREY. Very good. Let me say something about it, then.

Mr. LANCE. I would like to hear your views.

Senator HUMPHREY. I don't worry about what anybody thinks about what I say about the interest rate. Someday I am going to have somebody tell me how we were able to finance World War II with 2-percent money; how we were able to take this country up to 1960 with 4-percent Government bonds, and how come we found out in the 1970's that we had to have 8 and 9 percent Government bonds, and we had to have principle rates that ran into 11 and 12 percent, and even higher, construction loan rates that ran to 20 percent, that made bankruptcy commonplace in the construction industry.

Some time ago you indicated that you thought that the interest rates were contributory to inflation. I told the President that it has not been my habit over the years to be complimentary to directors of the budget, as you know.

Mr. LANCE. I understand that.

Senator HUMPHREY. And it is nothing personal at all, it is just the institution as such that has bothered me. But I said I want him to convey to you my sincere thanks and appreciation for your courageous statement and sensible statement, I hope he will back you up, because if I am not mistaken, the banks of this country are filled with capital. Isn't that correct?

Mr. LANCE. At the risk of trying to make comments about the banking industry, Senator, I would—

Senator HUMPHREY. Don't hesitate, just tell all these people that have been writing all this junk to go to hell. After all, you and I know what the facts are.

Mr. LANCE. I would rather say it is not an incorrect statement.

Senator HUMPHREY. I know it is not an incorrect statement. I know there are substantial amounts of deposits and substantial amounts of money in our banks, a surplus.

When we get a surplus of corn out my way, wheat, which we have, the price goes down. I just want the banks to practice exactly the same economics that the farmers have to go through. That is all I want. Just the even-steven fairplay. Otherwise, what I want the farmers to be able to do is when they have got a surplus of wheat or corn, to jack up the price, better than even if they had a deficit. It is just nuts. And this is an old, old saw for me and I will keep at it as long as the Lord gives me the breath of life. I am going to keep at it because as a classical economist I believe in the law of supply and demand. I believe when you are short of supply you have got to expect an increase in price. When you have an unusual supply you have to expect to decrease the price.

There are artificial mechanisms that are brought in. For example, we are going to have a \$2 price support, a loan support on wheat. Which it is possible might be even a little higher than in some places the market price. I doubt that. But you see, this is what gets my people in trouble out my way. The farmers that I know—I was just out home meeting with a group of them about a week ago—they are in there paying the interest rates on loans based upon land prices that are high, based upon wheat prices that are going to be \$4 a bushel. All at once the price of wheat goes down but nothing else goes down.

So without putting you on the spot, I want just to emphasize again that the rent on money is just as inflationary or just as cost conscious

or cost effective as is wages, cost of materials, or rent on property. That is what interest is.

With the deficit, I noticed in your report you estimated a deficit of about \$61 billion for the fiscal year—

Mr. LANCE. For 1978.

Senator HUMPHREY. For fiscal year 1978?

Mr. LANCE. Yes, sir, for 1977 it is \$48 billion.

Senator HUMPHREY. Is there any chance that that deficit might be substantially reduced because of the improved condition of the economy?

Mr. LANCE. Yes, sir; I think there is a substantial chance it may be reduced, as well as the possibility of a continuing shortfall in governmental expenditures. I have nothing to base this on except the response I get in talking to people in OMB and in the other areas of Government. I think the shortfall will be with us in 1978 and that you will see a reduction in that deficit as we move forward into 1978. I think there is a real possibility of increased revenues coming about as a result of improving business conditions, which really could make a significant difference.

Senator HUMPHREY. I know, the reason I asked the question, at the State government levels many times calculations and estimates of receipts are under the actual facts because business conditions—

Mr. LANCE. Improve.

Senator HUMPHREY [continuing]. Have improved appreciably and therefore, the estimates did not take into consideration that degree of improvement, and it appears that the economy, while it is not flush, still has a sustaining vitality.

Would you say that is a reasonable objective?

Mr. LANCE. Yes, sir; I think that is a good statement and good description of the economy. I think that if you look at it in retrospect, for example, when we were here before you in February and March, and talking about them, as we saw them developing, there was a good deal of pessimism about the conditions we might find as a result of the severe winter and drought conditions we were facing at that particular time.

Senator HUMPHREY. Yes.

Mr. LANCE. Well, I think that we have overcome that and the impact was not nearly as severe as we thought it might be.

As you know, at that time, people wanted us to go ahead and have some sort of special rebate plan—

Senator HUMPHREY. Yes, I remember that.

Mr. LANCE. Those people who were affected by the weather problems did. We have come through that, and I think that is good evidence of the viability of the economy and the fact that it does have some vitality and is moving along. So I think that part of the process is proof positive we are making some real progress and I think the numbers reflect—

Senator HUMPHREY. To what do you attribute the drop in retail sales in June, or do you have any reason for it?

Mr. LANCE. No, I think it is very, very difficult to try to pay close attention to month-by-month comparisons of economic numbers. As I view it, and the way you view it, as a practical economist, the economy has gotten so large and so complex, and there are so many

interdependent cause and effect relationships, that it is just very, very difficult to pay a great deal of attention to the month-by-month numbers. I think you have to look at it on a much broader trend. If retail sales continue to be weak in July and August, in comparison to what they were in those months a year ago, then I think there is reason to begin to take a look at where we are going. I don't think anybody felt, Senator Humphrey, that we would continue at the same sort of economic growth rate in the second half of the year that we have had in the first half of the year. I think there is some expectation that things will slow down a little bit as we move into the second half of the year.

But I don't think that is cause for alarm from the standpoint that automobile sales and retail sales are showing some decline right now. Since we blame a lot of things on the cold weather in January and February we may be able to blame the slowdown in retail sales in June to the extremely hot and humid weather.

Senator HUMPHREY. I think that is possible.

Mr. LANCE. It hasn't been very pleasant. People don't want to get out. If they are going to make a major expenditure, like buying an automobile, they will be terribly uncomfortable in the heat and humidity. I think that has some effect. They would rather do something else.

Senator HUMPHREY. One of the concerns that I have in the budget process, Mr. Lance, which I am not sure is the result of any order from OMB—it may well be the result of our own budget processes in Congress—is the so-called callable capital that has to be set aside under our International Financial Institutions Act. Take, for example, the World Bank never had to call on us for what we call callable capital. As I recollect, we actually appropriate about 10 percent, I mean actually put into the bank about 10 percent of our commitment, the rest of it is what we call callable capital?

Mr. LANCE. Yes, sir.

Senator HUMPHREY. Since we have had some almost 30 years of experience never having had the World Bank make a demand on our Treasury, callable capital, why is it that we have to set aside callable capital and it becomes a budget item?

Mr. LANCE. I am not sure about that, Senator. I think that you can carry that analogy to other areas as well as just the World Bank and other international financial institutions. I get a little bit, not concerned, but a little bit confused, I guess, about some of the ways that we handle accounting processes from the consistency standpoint. When you start talking about the energy stockpile program, which could be compared somewhat to the callable capital situation, that is a direct charge against our budget as we put that \$10 billion worth of oil into the ground.

Senator HUMPHREY. Do you, for example, if the price of oil goes up next year—

Mr. LANCE. No, sir.

Senator HUMPHREY. You don't include that as an asset, do you?

Mr. LANCE. No, sir. An interesting thing about oil stockpiles is that if the price of oil goes up next year and we have to pay more for those barrels, it costs us more from a budgetary standpoint. There is never any—

Senator HUMPHREY. Offset?

Mr. LANCE [continuing]. Offset at all on what you have already bought in the whole area of financial statements. I think there is something we need to take a look at and see what we are doing. As you know much better than I, in the area of callable capital, there is also a problem of how other nations view that whole process, specifically as it relates to foreign aid and that sort of thing.

Just from the overall process of budgetary treatment, I think there are a lot of those things that we will need to take a look at and see what we are doing. I am interested in how we treat oil reserves as direct budgetary expenditures when in effect they are something that we still have and something that we are not going to use unless events dictate their use. I think it is something we ought to take a look at.

Senator HUMPHREY. I handled the bill for military sales and arms sales and we have what we call the foreign military sales section of that legislation. The budget only takes care of 10 percent. In other words, if we have a \$5 billion military sales program, the amount of the budget is \$500 million. In the instance of military sales, there is no callable there. So you see what I am pointing out is the variances that you have in one area. There is housing, for example, there is World Bank, there is callable capital. Over on the military sales program there is no such thing as callable capital, it is only budget outlay of \$500 million.

Mr. LANCE. I guess you are very interested in such things as commodity credit.

Senator HUMPHREY. You know my concern about the commodity credit loans, you are a banker.

Mr. LANCE. Yes, sir.

Senator HUMPHREY. And I am sure that in running a bank you wouldn't run it like the Budget Office runs the loan program. If you got an asset such as a bushel of wheat and you are loaning \$2 on a bushel of wheat, which has a market value of \$2.35, you don't call it an expenditure, do you? If you are a banker, you make a private loan. Most bankers, most rural credit is done by private banks and out my way I know that the banker looks upon these loans as assets rather than liabilities.

Mr. LANCE. No questions about that.

Senator HUMPHREY. In the Government we look upon them as liabilities rather than assets.

One of these days I hope that we will get around to looking at what we call a capital budget, and then we will look around at what we call a budget that really takes into consideration assets and liabilities in the true sense.

Mr. LANCE. And really have a budget that portrays the expenditures.

Senator HUMPHREY. And operating budget that talks about the expenditures?

Mr. LANCE. Yes, sir.

Senator HUMPHREY. Otherwise I just don't think we have a handle on our fiscal situation.

I know in your testimony, I ran through it just quickly while Senator Hatch was interrogating you, you do speak of the projected inflation rate and you have some indication of the projected rate of real growth in our economy. You have not, however, mentioned anything about the unemployment rate and yet our budget outlays are

related and our fiscal policies must be related to unemployment, particularly when you have public service jobs, youth employment jobs, and so forth.

Mr. LANCE. Yes, sir, we made projections about the unemployment rate, inflation rates, and gross national product growth rates. Those are reflected in our projections. As I was saying to Chairman Bolling earlier, they are assumptions and they have to be viewed as such. That is basically the only way we can deal with the problem. But those projections are all tied together.

I keep telling some of my folks over at OMB that the first thing they ever said, if you remember when we got together down at the pond house in Plains and talked about the stimulus package, was that for each 1 percent decline in unemployment there was a \$15 billion effect on the Federal budget. We will have had that 1 percent decline in unemployment this year, which is not near enough progress.

I am still looking for the \$15 billion to show up over there somewhere at OMB, and I haven't really seen it yet. Those are assumptions that are all built in and you are exactly right that the unemployment rate probably makes a bigger difference than any other item with regard to what your expenditures may become because of the triggering effect and that sort of thing.

Senator HUMPHREY. Have you in figuring your budget estimates for the coming fiscal year taken proper consideration of the impact of the economic package that we passed, for example, the number of youth jobs, the number of job corps slots, the number of CETA slots, the amount of the emergency public works program, and what its impact would be on the economy?

Mr. LANCE. Yes; I am going to give you a very important answer, as important an answer as best we can. I think you have to deal with it on the basis that there are certain factors that are always involved. You know, we have been concerned, as you have been concerned, about the delay in public works projects. I believe I heard the President say yesterday morning at the Cabinet meeting that they are now coming along at the rate, of 1,000 a week.

Senator HUMPHREY. The first one—

Mr. LANCE. Which is very significant progress, and it will begin to be felt. Those are taken into consideration, in the broader sense, in the projections by the Council of Economic Advisers.

Senator HUMPHREY. So all of that is factored in to these assumptions and estimates?

Mr. LANCE. Yes, sir, it is factored in. But as I say, a lot is dependent upon how effectively we administer those programs from the standpoint of the executive branch—how quickly we put those jobs into being, how quickly we get the public works projects underway, and how quickly we do the other things that are part of the package. The administration of these programs, of course, is something we also have to be very much concerned about.

Senator HUMPHREY. The administration's goal of balancing the budget at 21 percent of the GNP; that is, expenditures of 21 percent and revenues of 21, implies that Federal tax as a share of the GNP must rise. At the same time, the expenditure's share of the GNP must fall. In combination these trends add up to a fairly restrictive fiscal policy over an extended period of time.

Is such a fiscal policy consistent with the administration's other goals of lowering unemployment and sustained rapid economic growth?

MR. LANCE. Yes, sir, I think so. I think that in talking about fiscal restraint, on the one hand, and achieving those goals on the other, you have to take into consideration what we are trying to do with regard to reorganization and with regard to zero-based budgeting. These things give us a chance to begin to redirect government activities in the most effective manner, which is something I know you have a great interest in. You have always been interested in making changes in the process to improve circumstances. I think we are in the position where we have to begin to change some things—from the standpoint of direction, from the standpoint of measuring effectiveness, and from the standpoint of being well organized. We have to be able to see a specific problem and feel we have the means with which to deal with it.

I think in going forward, as we exercise fiscal restraint, we have the great tool of being able to redirect, to change, to say that we want to do things in the most effective manner and to measure that effectiveness.

We have the flexibility to work within the total framework to try to achieve this.

Senator HUMPHREY. Do you see that as you approach that goal of balancing the budget of 21 percent of GNP that Federal taxes as a share of GNP must rise? I am speaking of Federal tax receipts.

MR. LANCE. I am not sure of that. It depends on how you measure the Federal tax level. If you are talking about the percentage of the personal income that a citizen pays in Federal taxes, I don't think it necessarily stands to reason that that has to rise. I think that it can be maintained close to where it is now or maybe, dependent on what really happens in the economy, decline to some degree. I don't think that it necessarily has to be always in the upward movement. If you want to measure it by any other yardstick, I guess it really depends on what you are trying to measure. But I don't think it really means automatically that the personal income tax rate has to rise.

Senator HUMPHREY. We include in that Federal tax the social security and others?

MR. LANCE. Yes, sir.

Senator HUMPHREY. Which mostly will have at least some increase?

MR. LANCE. Yes, sir.

Senator Muskie made an interesting comment about the social security situation the other day at the Senate Budget Committee. He expressed it in the best way that I have ever heard it expressed. It clarified the problem in my own mind when he said that we have come to the realism that the social security system is a contract between those who are presently working and those who are now retired. I think that means we have got to reexamine that whole circumstance and see what that contract consists of and what all is involved in the process. I am sure that there is going to be a great debate about what that contract really ought to consist of in the future.

We have the problems of the past that have to be dealt with and the President has, of course, submitted his proposals about that. However, that deals with the past more than it does with the future.

Senator HUMPHREY. That is right.

MR. LANCE. I think we have to come to the point where we try to

examine what really is involved in that contract and then move on forward. It may well be that examination will bring about increased cost. That may be a part of the process.

Senator HUMPHREY. Well, I am sure when we initiated the social security system it was very difficult, if not impossible, to project the nature of the labor force and what was going to be happening in terms of the number of people that were gainfully employed as compared to the number of people that were reaching the period of retirement. Obviously that situation is going to be exacerbated.

Mr. LANCE. No question about that.

Senator HUMPHREY. As we look at demographic charts for the future—I want to take a little more of your time here. The Federal expenditure shortfall, I want to just go over that with you. Our staff has spent time on that. One of the uncertainties in the economic outlook is, as you have indicated, caused by the difficulty of predicting Government spending, Government spending rates. Indeed, a substantial shortfall has been prevalent since the second quarter of 1976, and the shortfall of the last half of 1976 is probably one explanation for the lack of progress in returning to full employment or higher employment than we witnessed last year.

Just a few days ago the Congressional Budget Office Director, Alice Rivlin, stated or testified that the Federal Government is spending between \$1 billion and \$3 billion less than the estimates in the OMB midseason review and from \$4 billion to \$6 billion less than the level planned by Congress last spring.

For that reason, she said, the CBO is somewhat less optimistic about the economic outlook than the administration.

Now, that is for purposes of explanation. Let me ask you a couple of questions.

First, have you, to your satisfaction, tracked down the causes of the shortfall and, if so, what are the causes?

Mr. LANCE. No, sir, we have not tracked down the causes. We have made every effort to track down the reasons for the shortfall. My personal view is that much of it is systemic, that where you have spending ceilings there is a tendency for agencies and departments to overestimate their ability to spend. We have tried to track it as best we can.

We get back estimates from the departments saying that they are on the track and expenditures are moving along at the proper rate. All of a sudden we find that not to be the case. Our estimates do differ and we have had a situation now where the Treasury has one set of estimates based on the cash-flow situation and we have ours based on the expenditure report we get from the agencies. I don't know how the CBO makes their estimates. All of those numbers are somewhat different.

We feel pretty good about the accuracy of our numbers and we think that we are going to be around \$406 billion in expenditures for 1977. We may turn out to be wrong about that.

The \$3.5-billion-or-so difference with regard to the CBO's estimates, I think, is spread throughout the whole Government and it is hard to identify. So we have not been successful. I hope we will get to the point of being successful.

I might add one point about the real thrust of what you were saying—that we need to adjust our economic forecast because of the fact

that this shortfall difference exists. I really don't think that we ought to do that for this reason. We have gone through several months of this fiscal year. We are fast approaching the last quarter with the shortfall problem prevalent throughout. It has not let up in any degree whatever. As best I can tell, it is where we felt it would be at the start of the year. Yet the economic numbers we see with regard to the total economy continue to show improvement. And so I think that there are those who could argue the numbers would be much better if we hadn't had the shortfall.

By the same token, I think I can make the argument the economy hasn't fallen out of the bed because of the shortfall. It is an interesting process, but I never have been able to really quite determine what sort of adjustment we ought to make to the overall economic numbers because we have additional shortfall projections of \$1 billion to \$3 billion.

I think our ultimate results will come in somewhere close to probably what both of us are estimating, \$406 billion in expenditures, but I just think we have gone through the process now of continued months of shortfall and yet the economy has continued to improve.

Senator HUMPHREY. I think the argument of those that are concerned about the shortfall is that were those funds expended, were they moved into the economy, the economy would have shown that much better improvement.

Mr. LANCE. Then you would have to measure the transfer payments versus the purchases of goods and services.

Senator HUMPHREY. What happens at the end of the fiscal year, Mr. Lance? I am really just asking this as a point of personal information. When you have, let's say, a shortfall of \$3 billion, does that mean you carry on over into the next year?

Mr. LANCE. Yes, sir, I think that is one of the problems involved in the shortfall area. I think you always have the risk of the shortfall being caught up with the future. This could cause us some budgetary problems. If we had said without exception we are going to produce a balanced budget by fiscal year 1981, and yet when we got to 1981, saw the shortfall problem corrected all of a sudden, we might have an increase in spending of \$10 billion or \$15 billion—using those numbers in a round sense. Then, of course, that would—

Senator HUMPHREY. Yes—

Mr. LANCE. When the shortfall comes off the deficit this year that is fine. When it adds to the deficit in another year, it creates a problem.

Senator HUMPHREY. You may have answered this next question, but let me repeat it.

Since the shortfall is important as we look ahead to 1978, will the spending shortfall continue at its present level or do you think it will get narrower, or might it even be more widespread?

Mr. LANCE. That is very difficult to answer, Senator. I think the proper response would be that I think it will continue, although it is hard to estimate at this time what the level might be. As we have talked earlier, as best I can determine, we have not seen a year in the budget history of our country whereby we increased expenditures except in a war year by \$57 billion. That is a tremendous increase in estimated spending, and I just don't believe that we can do that. I think it is going to be a part of what we are doing. I think it is just very difficult to increase spending by that much.

Senator HUMPHREY. I had a question handed to me by the staff and I want to put it to you for our record.

Earlier this year Chairman Schultze stated his belief that the administration's anti-inflation program could reduce the inflation rate to the range of 4 percent by 1979. OMB's midsession review of the budget assumes the Consumer Price Index will rise by 5.7 percent in 1979. That is four quarters and that will not fall below 4.5 percent until 1981. Is this a change in the administration's inflation targets and, if not, how do you square the longrun inflation assumptions with Mr. Schultze's earlier statements?

Mr. LANCE. I don't think it is a change, Senator. I think it is realistic. What we had earlier was a goal of where we ought to be by a specific time. As we go along, we adjust to the kind of progress we are making toward achieving that goal. So I don't think there is any change at all about that being a goal. Obviously, as we move forward, we have to adjust to what the realities are with regard to achieving those goals.

I think that we would have all been very pleased this year in the rate of inflation, except for the very severe winter that we had. I think that most of the real pressure that has come about has been the result of that. There is nothing anybody could have done about that circumstance; it was an act of God. We could have been better prepared to deal with some of the circumstances that were causing the result, but I think that we would have done very well in the inflationary area if it had not been for that circumstance alone. I think again we may not have been satisfied, but we would have been pleased about the kind of progress we are making from the standpoint of moving toward lower inflationary rates. I think that is what we need to be doing.

Senator HUMPHREY. The thing that bothers me, Mr. Lance, about the discussions that were held both on inflation, both in the administration and the Congress, is the lack of proper concern over what is happening in the agricultural sector.

One of the reasons the inflation rate is down is because agricultural prices are down, and in some instances very, very low. This doesn't help the economy. It makes the inflation rate look a little better, but in terms of our balanced payments, for example, if the importer of American food can import wheat at \$2 a bushel instead of \$3.50, it doesn't help our balance of payments like we would like it.

Inflation rates of food prices, that is, that the market levels do not come down appreciably when the raw material price comes down. Actually the price of wheat has gone down from \$4 a bushel, down to, let's say, from the kind of wheat that you use for milling, to \$2, \$2.50, between \$2 and \$2.50, yet the price of flour is not down, that is the price of bread is not down.

So that I can't help but express some concern over the generalizations that we use on the inflation rate because inflation is being reduced today not only because of higher productivity, which is really the way to reduce it, but I believe I am correct in saying that the industrial prices as such have been going up and the raw material prices in the agricultural sector have been coming down, and that has been the counterbalancing force that has reduced the rate of inflation. Am I correct?

Mr. LANCE. That is correct. The shortfall problem can really turn around, too. You would have great problems in the future if they all came together at the same time. That is one of the reasons that you have the concern that you have about the area of agriculture. We have to have a viable agricultural community in this country. I don't think there is any question about our need for that. Those things turn around and come together at the same time, causing other problems with regard to inflationary impact.

Senator HUMPHREY. Mr. Lance, the steel price increase announced last week, I believe Mr. Schultze said it was the fourth such price increase since December. It reminds one of the experience of an earlier administration that thought it had won the steel industry cooperation in its fight against inflation. Mr. Schultze stated the wholesale price index for steel has risen by 12 percent since September last, far more than other prices. That has occurred when sales have been conspicuously stagnant and 20 percent of the steel plant capacity is idle. This record seems to show that prices in this industry will rise when demand is weak, will rise when demand is strong, then the industry will demand protection from imports when it is underpriced by foreign competitors.

Now, with that little recitation of dramatic experiences, is the administration going to remain content with the ineffectual jawboning of concentrated industries, if their pricing practices threaten to undo your efforts to subdue inflation?

Mr. LANCE. Let me say, first of all, I think Mr. Schultze made a good statement about that circumstance I think it reflects the view of the administration. It is a very serious problem that has to be dealt with.

Going back to what you said earlier about us being classical economists, and looking at the law of supply and demand, it would appear to me that, in some instances, we ought to begin to see the law of supply and demand take place. The circumstances outlined there in that statement would indicate that the law of supply and demand is not working. But I think that trying to deal with price increases, on a voluntary basis, is the best way to approach it, Senator.

I don't think that wage and price controls are the answer. I hope that we have made that very very clear; that is not the way to deal with the problem. It is something that we have to be mindful of and we have to try to deal with. Frankly, I don't know the answer to that problem.

Senator HUMPHREY. Well, I think that it is fair to say we don't have the answer to it but the industry continues to proceed on its own basis and on its own with its own desires.

I didn't realize until we looked into this there had been a 12-percent rise in the wholesale price index in less than a year in the steel industry. We are talking about cost containment for medical care and we are terribly concerned about the impact of wage increases and other price increases in other segments of the economy, but somebody has to take hold of the steel industry and remind them they have a responsibility as well. I don't know, I noticed that the Wage and Price Stability Council is cutting back in its manpower, it is not being strengthened, yet it is the one place that we have to really focus attention on, but what would appear to be at least extraordinary large price increases.

The steel industry has such a great effect on this economy that I just simply have to raise the note of caution here and warning that unless something can be done on a voluntary basis, we don't want to impose mandatory wage and price controls, but unless something can be done to bring these people to the realization that they are getting out of line, they are out of step with the rest of the economy, we are going to be in serious trouble. It just seems to me that your anti-inflation program is really going to be in dire straits.

I want to state this now because I think a year from now we will have to look back and see what has happened.

Mr. LANCE. I think the view is well stated in that regard.

Senator HUMPHREY. I think we just have one or two more here.

You may recall Mr. Schultze indicated that we were going to achieve the objectives that he outlined in our economy, that we would have too heavy reliance on nonresidential fixed investment, what we call capital investment.

Mr. LANCE. Yes, sir.

Senator HUMPHREY. And that they ought to grow at a rate of about 10 percent a year in real terms in order to achieve the objectives of 1981, and, that this rate of 10 percent would have to be sustained over a period of several years. I think he said 5 years. Now although fixed investment has shown a sustained rate of expansion from 1961 to 1966, the real question is whether economic conditions in the next 5 years are likely to be such that this kind of performance has a reasonable chance to be repeated.

Yesterday, we had testimony from economists here before this committee, and our own staff study confirms their view, that such a growth of investment, that is, the 10 percent, cannot be attained without a radical turnabout in the Federal Reserve monetary policy.

In view of these circumstances, it seems reasonable to ask whether the administration has any plans to attempt to change the Federal Reserve's continuing commitment to conservative monetary policy and, if so, what do you propose to do to secure the cooperation of the Federal—

Mr. LANCE. Senator, I am not sure that that is an area that I can comment on. I do not think that I really ought to try to respond to that; it would probably be inappropriate for me to do so.

Senator HUMPHREY. Well, I just want to state that all of these projections that we have had, which are reassuring in themselves, depend upon very close cooperation between the administration and the Congress, the fiscal policy and the monetary policy.

Mr. LANCE. I don't think there is any question about that.

Senator HUMPHREY. Ever so often we have had the experience here, we have had to review where certain measures were taken by the Congress and the administration, not in only this one but the previous administration, and which we thought we were beginning to move in a certain direction and all at once the Fed puts it in reverse gear. All they have got to do is raise the discount rate, all they have to do is tighten up a little on the credit and bingo, you are in trouble.

Mr. LANCE. There is one similarity that I think you would agree with, in the broadest context, of being able to have a sustainable rate of growth, such as we had in the period 1961 to 1966. We do now have, as then, a Democratic President.

Senator HUMPHREY. That does help and I just want to be sure that that Democratic President has persuasive influence, at least to a degree, upon the distinguished Chairman of the Federal Reserve Board, a man whom I admire much but with whose policies from time to time I have had to find myself in disagreement. Because I just don't believe that you can achieve these goals unless there is a real sensible working understanding between the supply of money on the one hand and credit, and the rates at which that money is made available, plus very carefully applied budgetary policy.

I know how you are working on the budgetary policy. I understand the tremendous effort that is going into reviewing the whole matter of budgetary policy and fiscal policy. The President is coming down with this tax reform bill, the President is reorganizing the executive branch of Government, he is going to place a great deal of emphasis upon proper management. I think all of these things are long overdue and highly commendable.

But what I worry about is that after we get all through with Mr. Lance doing everything he can on budget, getting the cooperation of the budget committees of the Congress, and basically you have had that cooperation.

Mr. LANCE. Yes, sir.

Senator HUMPHREY. And after the President has reorganized, and you start zero-based budgeting and so on, with as many programs as you can, all of this put together can be vitiated unless there is at least a tacit working understanding with the Federal Reserve System, and one of the features of the Humphrey-Hawkins bill, I might add, is to see in title I that this kind of relationship is established without destroying the autonomy of the Federal Reserve System.

I don't want a President to be able to say to the Federal Reserve you are going to print this much money or you are going to do that. I think it is a question of sensible cooperation.

I gather that there are regular meetings between the Secretary of the Treasury and the Director of the Budget?

Mr. LANCE. Yes, sir.

Senator HUMPHREY. The Chairman of the Federal Reserve Board?

Mr. LANCE. Yes, sir.

Senator HUMPHREY. And the Chairman of the Council of Economic Advisers?

Mr. LANCE. Yes, sir, in fact we have one scheduled today.

Senator HUMPHREY. And you are able to lay out your policies?

Mr. LANCE. Yes, sir.

Senator HUMPHREY. And seek accommodations?

Mr. LANCE. It has been good. I think the communication has been good in those instances.

Senator HUMPHREY. Well, I kind of filled in here this morning.

Mr. LANCE. I appreciate the privilege of being able to visit with you.

Senator HUMPHREY. I want very much to have a chance to visit with you, too.

I have a note here that comes from staff that says that you have indicated that it was unnecessary to increase the share of personal taxes in the GNP to reach the administration's balanced budget target, is that correct?

Mr. LANCE. Yes, sir, I said in response to your question I didn't think it necessarily follows that you had to do that.

Senator HUMPHREY. Now in holding the share of personal taxes constant implies, therefore, a personal tax cut of about \$30 billion by 1980. Is it reasonable to expect a tax cut recommendation of about this size from the administration?

Mr. LANCE. I think the overall aspects of tax reform proposals still have to be determined. Senator, I think we have to wait and see. Those discussions are still just that. No final decisions have been reached. In the overall aspect of tax reform, we have talked about three basic things that are related to what the President said he wanted his tax reform to do: First, to be fair and equitable and bring about a sense on the part of the American people that we have a fair tax structure. Second, to make it more simple. That needs to be done. And third, incentives to promote capital investment. Those are the things that are being looked at from an overall standpoint. If you are going to deal with the problem of inflation and what it does to Government revenues by moving people up in different brackets, then you are talking in the area of tax reductions.

I think that will be done very quickly. That part of the process will be decided soon, although it has not been decided yet.

Senator HUMPHREY. One of my concerns, which is not a popular one, I know, is that while we are reducing taxes, we may very well find ourselves weakening the tax base, the tax structure to a point where some of the public needs cannot be met.

I have felt for a long time, Mr. Lance, this country is privately rich and publicly poor. Let me explain what I mean. Private wealth in America is at an all-time high. But as we look around we see some of our infrastructure, our transportation system, surely not what it ought to be, our ports, surely not what they ought to be for modern international commerce, our major cities in dire distress. It is appalling. And I am not sure that we are convincing the American people yet there has to be some sacrifice to overcome these needs.

Quite frankly, it isn't a sacrifice, it's a kind of investment. For example, I live in a little township in Minnesota that does not have a sewer system. We live around a lake. So the type of waste disposal that we have had is septic tanks, and it is gotten to the point where we have to make a change.

Now, in order to make that change we are going to have to invest, but in the long run it is a question of whether you want to have a nice lake with all its recreational facilities and its environmental attributes, or whether you want to just keep on polluting, polluting like you are doing. You can't have these things without being able to pay for them. While I know from a congressional point of view, as a Member that gets elected, that the nicest thing I can say, when I go home, is that we reduced your taxes. But, the very next day, the same fellow I told that to, will say, "Yes, but my road is in a mess, or the mail isn't being delivered, or the water system is out of kilter or the lakes are being polluted."

In order to take care of these things, particularly our cities, I think we have got to have a tax base that produces the revenue, and I guess what I am really saying is, I think the time has come to quit telling the American people that we can constantly reduce the taxes and do

the things that we want to do. We have been going along, and I surely have been one of them, Keynesian economics, noting that we had to make up for the lack of private investment by public investment, which we do with Federal deficits and, therefore, we get a huge debt. Now the biggest problem we have today is servicing the debt. That is one of the big budget items.

Mr. LANCE. Over 10 percent in gross terms, that is, before deducting interest paid by one Government account to another.

Senator HUMPHREY. It is getting bigger all the time. It seems to me if we are going to meet some of the needs that we have, then we are going to have to face up to what needs to be done.

For example, the House has just talked about a 4-cent gasoline tax, and wisely they have put with that that the money will be used to modernize railroads, to improve mass transportation, and so forth. That is the way things have to be done.

Take a look at that situation in New York. I flew over New York City not long ago in a helicopter. A wonderful experience. I looked down and I saw about 200 blocks, a huge area, I was talking to the gentleman with me, and it was as if it were Stuttgart after World War II. It was burned out, bombed out, vandalized. You know it is a terrible eyesore. We talked about the high price of real estate. That must be expensive real estate that lies for all purposes idle.

I couldn't help but think the other day when this tragic circumstance developed of the looting, which was one of the most despicable pictures that has ever come to the American scene, some of the background there.

I was mayor of my city in Minneapolis and I watched a lot of landlords and others not take care of their property. I was also the man that appointed the chief of police, and I had something to do with appointing the director of public health. So I called them in one day and I said let us quit giving out traffic tickets for a while, let us send the boys out on another mission. So I took a look at all the ordinances that related to building codes, garbage collection, to where the public property was, however some people were moving out on the public property, for example.

We had junkyards right on out to the curb, and a lot of other ordinances on sanitation, and so forth, and I put out a little bulletin and indicated that we were going to have a law enforcement drive. I didn't tell them what it was. Most people thought that was on organized crime and on the hoodlums. We thought we had pretty well taken care of them. And lo and behold I started having the police department, the men in blue, walking up to a restaurant and saying you are under arrest, you are in violation of such and such an ordinance. They couldn't believe it. Before some people looked, up in New York there were some looters that were looting the people.

I know I will get in trouble saying this but this is the fact. There are a lot of people up there, landlords, that were not taking care of their property or of ordinances not being enforced. We have got traffic cops running and putting five tickets on peoples' cars trying to find a place to park, and we have an automobile industry that produces more automobiles than we produce parking spaces.

Talk about planning. You can't keep adding 11 million cars every year and not adding any more streets or parking lots, but we do that.

And we just keep on giving those traffic tickets out and we have got all kinds of appliances, we put on cars so they can't move them. But I live down here in Southwest Washington, and I go down New Jersey Avenue to go home. I live on M Street. I want to tell you I bet you there are 100 laws being violated all the way down there by the time I get to M Street, and yet I see traffic cops running around there. I saw one this morning, as a matter of fact, stop a whole line, stopped a cab, because he went through a yellow light. He was busy out there putting that ticket on that poor little old cab driver trying to make a living, most likely starving to death, and by God he didn't do a damn thing about the garbage that is all over the place, which is a violation of the law.

And I think sometimes when we look ahead as to what is going to be needed to be done in this country we are going to do something else besides see whether or not Hubert Humphrey has it a little easier on his taxes. Somebody is going to have to decide whether we are going to abandon these cities, whether we are going to rebuild these cities or whether they can be rehabilitated. We are on the way. Thank God we are on the way.

I use you, my good friend, as my audience this morning because I really am very much as a Senator, as a citizen, in my stage in life concerned over what I consider to be the lack of priorities in this country. We continue to want to be privately rich and publicly poor and we are.

For example, there are literally, I think there are 38,000 bridges, from the last report, that do not meet standards. We are out here trying to enforce environmental standards. We don't even enforce standards on bridges. In my home State, if a milk truck, one of these big 10-ton milk trucks wants to get the market, it is a cooperative out there, for their big 8- and 10-ton trucks to get to market they have to go 160 miles around in order to get in where they ought to be able to go 30 miles.

Why? Because we have got 4-ton bridges for 10-ton trucks. We keep saying we can't afford to rebuild the bridges. Some day the bridge is going to come tumbling down.

I just wrote Bob Bergland a note the other day. I found out during the period of the depression we planted about 40 million acres of shelter belt trees. Under the impact of all-out production we have uprooted 28 million acres of those trees. Twenty-eight million acres of trees that were for soil conservation, wind erosion, part of taking care of the ecology of this country in the name of what, in the name of being able to have another acre to plant up for wheat. Now we have a billion and a half bushels of wheat we don't know what to do with and we are 28 million acres short of trees.

If they don't replant those trees you are going to have a dust bowl that is going to take public funds. The only way that can be done, I just wrote to Bob Bergland, instead of having a lot of set-asides—you might give this some consideration—we may very well want to pay our farm friends out there to replant those trees as a little offering for the morning service.

Mr. Lance, do you have anything more you want to say? You have listened to my harangue.

Mr. LANCE. No, sir, I have enjoyed the privilege of hearing your harangue.

Senator HUMPHREY. I like to philosophize.

Mr. LANCE. I appreciate that.

Senator HUMPHREY. These are rough days. We have to have a little time for philosophy.

Mr. LANCE. I appreciate that.

Senator HUMPHREY. I want to thank you very much and wish you well. You are doing a good job. Thank you, sir.

Mr. LANCE. Thank you.

[Whereupon, at 11:45 a.m., the committee adjourned, subject to the call on the Chair.]

