The 1975 National Economic Program: Another Exercise in Fiscal Activism

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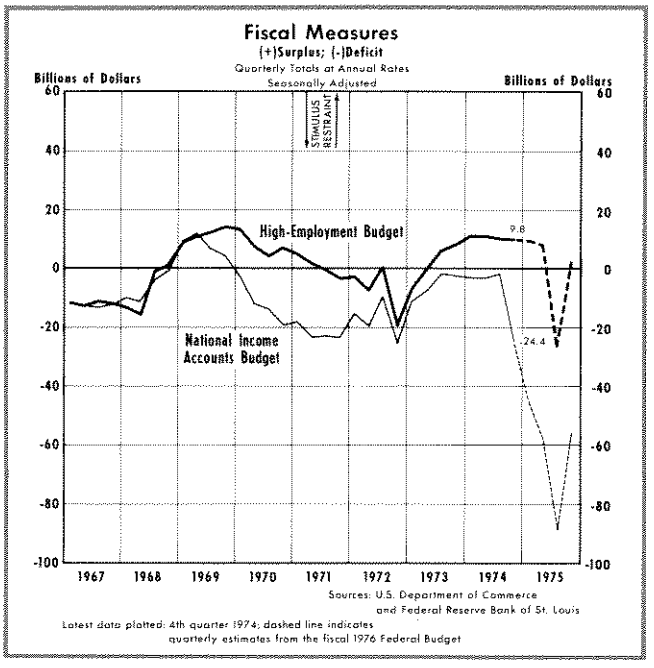
THE Administration recently announced its national economic program for 1975 to Congress and the public. The general nature of the program was disclosed in the President's State of the Union message and the details were provided later in three documents — the *Federal Budget*, the *Economic Report of the President*, and the *Annual Report of the Council of Economic Advisers*. These three documents present (1) Federal budget plans for the 21-month period ending September 30, 1976, (2) economic projections for the years 1975 through 1980, and (3) general suggestions as to the appropriate course for monetary actions.

Economic goals for 1975 are stated in the *Annual Report of the Council of Economic Advisers* (CEA) and represent the CEA's estimate of the most likely outcome, given economic and policy forces already set in motion, along with a future plan for monetary and fiscal action. Economic projections for 1975 include growth in GNP of 7.3 percent which is distributed as a 3.3 percent decline in real product and a 10.8 percent advance in prices. The unemployment rate is projected to average 8.1 percent in 1975. These projections are to be viewed within the perspective of a longer-range economic projection extending to 1980.[1] This set of long-range projections is a major innovation that recognizes the long lags that are inherent in the economic process, and provides a set of economic assumptions that is consistent with attaining the ultimate goals of full employment and price stability. In addition to these well-known goals, a third economic goal is introduced as a part of the economic program — energy independence.

As a part of the overall economic program, a very ambitious plan for Federal budget action is proposed. Included in this Federal budget plan is an increase of



Federal expenditures (national income accounts basis) of 15.5 percent in calendar 1975, which reflects an allowance for increased costs of energy to Federal, state, and local governments, cash payments to individuals who do not pay taxes, and a proposed reduction in spending relative to what it would otherwise be. In addition, many tax changes are proposed. Among these changes are: (1) a one-shot tax rebate to individuals on 1974 incomes; (2) an investment tax credit for corporations; (3) a windfall-profits tax on oil companies; (4) a reduction in tax rates on individual and corporate income; and (5) an increase in the excise tax on oil and natural gas.

Although the emphasis of the Administration's program is on fiscal actions, the CEA *Report* provides some subtle recommendations for monetary policy. In contrast to last year's *Report*, no specific guidelines are offered. The recommendation consists of the general statement that "monetary policy must be conducted so as to encourage a near-term recovery in the economy and a resumption of sustainable economic growth."

[1]Projections for the years 1976 through 1980 are not found in the CEA *Report* but are found in *The Budget of the United States Government, Fiscal Year 1976*, pp. 40-42. The projections for 1975 and 1976 are classified as forecasts of probable economic conditions, but the projections for 1977 through 1980 are called simply "projections consistent with moving gradually toward stable prices and maximum feasible employment."

The purpose of this article is to summarize and evaluate the Administration's 1975 economic program.[2] Even though the *Budget* and the CEA *Report* encompass many economic issues, the focus of this article is on the stabilization aspects of the economic program. As background, economic events in 1974 are summarized and examined along with Administration projections that were made in February 1974. The Federal budget program is then examined in some detail along with the general recommendations for monetary policy. Finally, the economic program is analyzed in terms of its feasibility, given the Administration's policy recommendations, and its internal consistency with reference to GNP, prices, and output.

REVIEW OF THE 1974 ECONOMIC PROGRAM

At the outset of 1974, the U.S. economy was caught between the crosscurrents of high inflation and a slowdown in real product growth. In addition, the energy crisis was a factor complicating the assessment of the economic outlook. After growing very rapidly in real terms in 1972 and in early 1973, output growth slowed in the second quarter of 1973. Despite the slowdown in output, inflation continued at very high rates and shortages of basic materials were common, with wage and price controls still in effect at the outset of 1974.

The objective of Administration policy in early 1974 was to avoid extreme policy actions while aiming toward a resumption of real growth and a decline in the inflation rate. The CEA felt that both monetary and fiscal actions had become less stimulative in the second half of 1973 and recommended a continuation of this moderate policy stance. In general, for the first half of calendar 1974 the CEA projected little change in output along with continued high inflation, followed in the second half by a resumption of real growth and a sharp decline in the rate of price advance. Underlying this projection was the assumption that the bulk of the adjustment to higher energy prices would be completed in the first half of the year.

Economic Projections vs. the Record

The 1974 CEA *Report* projected an increase in GNP for the year of 7.9 percent. Based on preliminary data for the fourth quarter the realized increase was exactly as the CEA projected — 7.9 percent. This is the most accurate projection of GNP since the CEA started giving quantitative forecasts in 1962 (see Table I).[3] The accuracy of the projection was all the more remarkable when account is taken of the uncertainties which prevailed at the beginning of the year relating to the energy crisis.

Table I

CEA PROJECTION ACCURACY OF GNP

	CEA Projected Change	Actual Change*	Error**
1962	9.4%	6.7%	2.7%
1963	4.4	5.4	-1.0
1964	6.5	6.6	-0.1
1965	6.1	7.5	-1.4
1966	6.9	8.6	-1.7
1967	6.4	5.6	0.8
1968	7.8	9.0	-1.2
1969	7.0	7.7	-0.7
1970	5.7	4.9	0.8
1971	9.0	7.5	1.5
1972	9.4	9.7	-0.3
1973	10.0	11.5	-1.5
1974	7.9	7.9	0.0
Average absolute error			1.1

*Based on data given in the CEA *Report* for the year following the forecast year.

**No adjustment is made for deviation of policy realizations from plans, or for major strikes.

The composition of the GNP forecast along with the outcome is shown in Table II. As is typical of most any accurate projection of GNP, the total reflected offsetting errors in the components. Personal consump-

Table II

PROJECTED AND ACTUAL CHANGES IN GNP AND COMPONENTS: 1973 TO 1974
(Billions of Dollars)

	CEA Projection*	Actual**	Error
Personal Consumption	$ 65.0	$ 71.8	$-6.8
Business Fixed Investment	16.0	12.8	3.2
Change in Inventories	2.1	-2.0	4.1
Residential Construction	-8.5	-11.2	2.7
Federal Purchases	11.1	9.8	1.3
State and Local Purchases	20.7	22.6	-1.9
Net Exports	-4.6	-1.9	-2.7
GNP	$101.8	$101.8	$ 0.0

*Estimated by this Bank and based on 1974 CEA *Report*.

**Based on preliminary data in 1975 CEA *Report*.

[2]The Administration's program is analyzed in the form in which it was presented in early February 1975. Indications at this time are that Congressional actions on expenditures and taxes will certainly modify the Administration's program as originally presented. This article makes no attempt to allow for the effects of pending legislation.

[3]For a more detailed analysis of past CEA projections, see Geoffrey H. Moore, "Economic Forecasting — How Good a Track Record?," *The Morgan Guaranty Survey* (January 1975), pp. 5-8.

tion, state and local purchases, and net exports were all underestimated. Overestimated were business fixed investment, inventory accumulation, residential construction, and Federal purchases. Nevertheless, relative to past projection experience, the CEA's 1974 forecast of nominal magnitudes was quite accurate even when examined on a component-by-component basis.

More significant from the standpoint of economic policy is the distribution of the GNP change between prices and output. As indicated in Table III, the CEA projected a 1 percent advance in output, which was predicted to take the form of a decline in the first half of the year followed by a relatively strong expansion in the second half. The pattern of output changes during the year deviated substantially from this forecast. Output fell in each quarter, with the first and fourth quarters showing large annual rates of decline of 7 and 9 percent, respectively. From 1973 to 1974 output declined 2.2 percent on an annual average basis. However, the extent of the decline is obscured by comparing averages for the two years, as output fell 5 percent from fourth quarter 1973 to fourth quarter 1974.

Table III

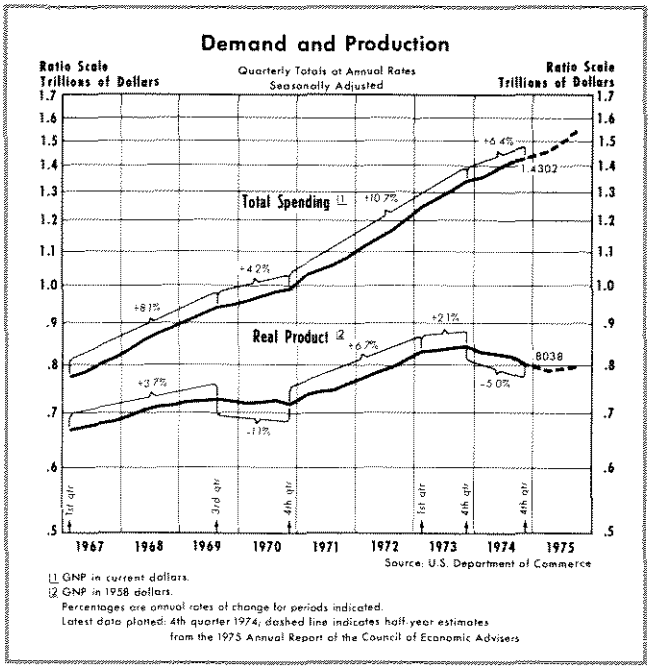
PROJECTED AND ACTUAL CHANGES IN ECONOMIC ACTIVITY: 1973 TO 1974

	CEA Projection	Actual	Error
GNP	7.9%	7.9%	0.0%
Output	1.0	-2.2	3.2
Prices	6.9	10.2	-3.3
Unemployment Rate	5.6	5.6	0.0

There was also substantial error in the CEA's projection of prices. The projection of a 6.9 percent advance compares with the realized increase of 10.2 percent. Again, the average for the year obscures the extent of the error. The CEA expected rapid inflation in the first half of the year followed by a slowing in the second half. The actual pattern of price advance was one of double-digit inflation throughout the year, or 11.8 percent when measured from fourth quarter 1973 to fourth quarter 1974.

Policy Recommendations vs. Realizations

Any ex post evaluation of an economic forecast is incomplete until the underlying policy assumptions are also examined. An accurate GNP projection might well be right, but for the wrong reasons. Furthermore, a full evaluation of a forecast requires an understanding of the underlying model, and, in particular, the



role that policy actions play in that model. In the case of the CEA projection, the underlying model is not made explicit, though it is usually interpreted as more of a judgmental model than an econometric model. The CEA forecasters, however, are fully aware of the results of other models, and their projections probably are not fully independent of such models.

This section examines the Federal budget program in retrospect, along with their recommendations for monetary policy. The conclusion is that the CEA forecast of GNP was accurate because monetary and fiscal actions did not depart substantially from the course envisioned by the CEA early in the year.

Fiscal Policy — The 1974 Federal budget program is compared with the outcome in Table IV. Federal expenditures were overestimated for the year, though the amount was not substantial. At the time the 1974 CEA *Report* appeared there were reservations in some quarters as to the likelihood of calendar 1974 Federal expenditures increasing as rapidly as assumed.[4]

In contrast to expenditures, receipts were underestimated. The unexpectedly rapid advance of Federal receipts was attributable primarily to the pace of inflation. Inflationary advances in incomes push taxpayers into higher tax brackets and lower the real value of standard deductions and exemptions. Consequently, given the nature of the progressive income tax, inflation acts as a tax increase, raising the average

[4]See Keith M. Carlson, "The 1974 National Economic Plan: Riding Out the Storm," this *Review* (March 1974), pp. 2-10.

Table IV

PLANNED AND ACTUAL CHANGES IN THE FEDERAL BUDGET: 1973 TO 1974
(Billions of Dollars)

	Budget Plan	Actual	Error
NIA Receipts	$ 29.7	$32.6	$-2.9
NIA Expenditures	40.7	34.4	6.3
NIA Surplus or Deficit	$-11.0	$-1.8	$-9.2
High-Employment Receipts	$ 38.4	$41.8	$-3.4
High-Employment Expenditures	38.0	32.6	5.4
High-Employment Surplus or Deficit	$ .4	$ 9.2	$-8.8

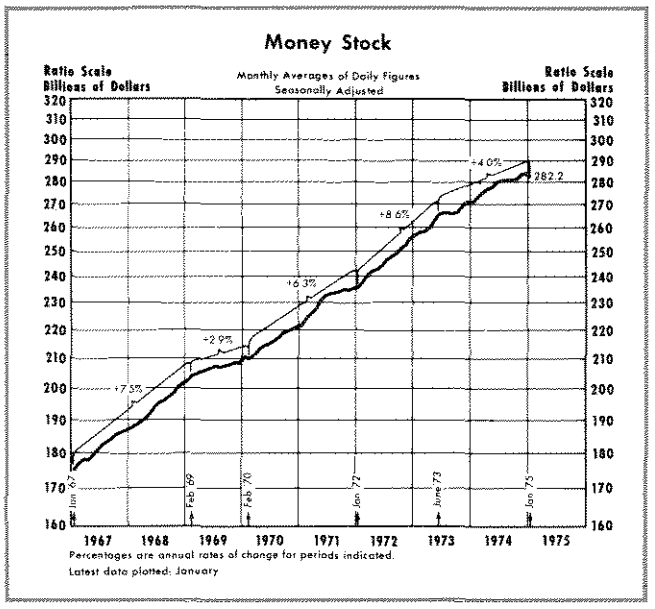
rate of taxation without accompanying legislation. In the case of corporations, inventory profits (which were substantial in 1974) are taxed like all other profits even though they are temporary and tend to be eliminated when inventories are replaced at higher prices.

Another factor working to transfer funds from corporations to the Federal Government is the rate of depreciation on plant and equipment allowable for tax purposes. Depreciation calculated according to historical cost increases accounting profits more rapidly than economic profits when replacement costs exceed depreciation allowances. Corporate taxes are assessed against accounting profits, and thus the effective corporate tax rate on economic profits increases during periods of substantial inflation.

By overestimating the growth in Federal expenditures and underestimating the increase in receipts, the net budget deficit was overestimated by a substantial amount. The original NIA budget estimate for 1974 was an $11 billion deficit, or on a high-employment basis, approximate balance. The NIA deficit which was realized was $1.8 billion, and on a high-employment basis there was a recorded surplus of $9.2 billion. Consequently, it appears that the budget provided more restraint than was planned. To a certain extent such a conclusion is valid, yet the degree of restraint is distorted by the inflation factor. The restraining effect of inflation as reflected in budget receipts holds only to the extent that effective tax rates are increased because of inflation.

Monetary Policy — The CEA's primary emphasis is always on fiscal policy, but general recommendations are made about monetary policy. The 1974 CEA *Report* represented a departure from tradition in that a specific recommendation was made. The role for monetary policy was stated as follows:

> The monetary expansion in the second half of 1973 can be described by an increase in the narrowly defined money stock (M_1) of somewhat under 5 percent and an increase in the broadly defined money stock (M_2) of about 8 percent, at annual rates. Continued growth in M_2 at approximately this rate would be consistent with our expectations concerning the increase in money GNP during 1974.[5]



The M_2 definition of money rose 8.5 percent from 1973 to 1974, or somewhat more than recommended by the CEA. Furthermore, the growth of M_2 in 1974 was not steady throughout the year, growing at an 8.7 percent annual rate in the first half followed by a 5.8 percent rate of advance in the second half. Given the nature of this path and the lags in the effect of policy, the economic impact of realized M_2 growth in 1974 was probably little different than if a steady 8 percent growth had occurred. The effect of the slowdown in M_2 in the second half of 1974 will tend to be reflected in the course of economic activity in early 1975.

Although the CEA tended to de-emphasize M_1, a steady 5 percent growth was considered as being consistent with the CEA projection of GNP. M_1 grew 5.6 percent in 1974. The pattern of rapid growth in the first half followed by slower growth in the second half was even more pronounced for M_1 than M_2. M_1 rose at a 6.1 percent rate in the first six months of 1974, and then the growth rate dropped sharply to a 2.8 percent rate in the second half. Again, this pattern of rapid money growth followed by sharply lower growth probably had little effect on the increase of GNP from 1973 to 1974 relative to a steady 5 percent rate, but such a slowing carries implications for the advance of GNP in early 1975.

[5]1974 CEA *Report*, pp. 31-32.

Table V

PROJECTED CHANGES IN SPENDING, OUTPUT, PRICES AND UNEMPLOYMENT: 1973 TO 1974
(Dollar Amounts in Billions)

	GNP		Output	Prices	Unemployment Rate
CEA Projection (2/1/74)	$101.8	7.9%	1.0%	6.9%	5.6%
Actual	101.8	7.9	-2.2	10.2	5.6
St. Louis Model Projections					
Changes in Money and Federal Spending as Actually Occurred	115.3	8.9	-1.4	10.5	5.5
Changes in Money and Federal Spending Consistent with CEA Assumptions of 2/1/74	111.5	8.6	-1.7	10.4	5.6

Analysis Based on the St. Louis Model

Even though the CEA projection of GNP for 1974 was on target, there was some indication that policy plans deviated from realizations. To provide an estimate of the effect of these deviations some ex post simulations of the St. Louis model are summarized. Since the CEA's GNP projection was on target, the St. Louis model has little to explain, but such simulations are given for the record.

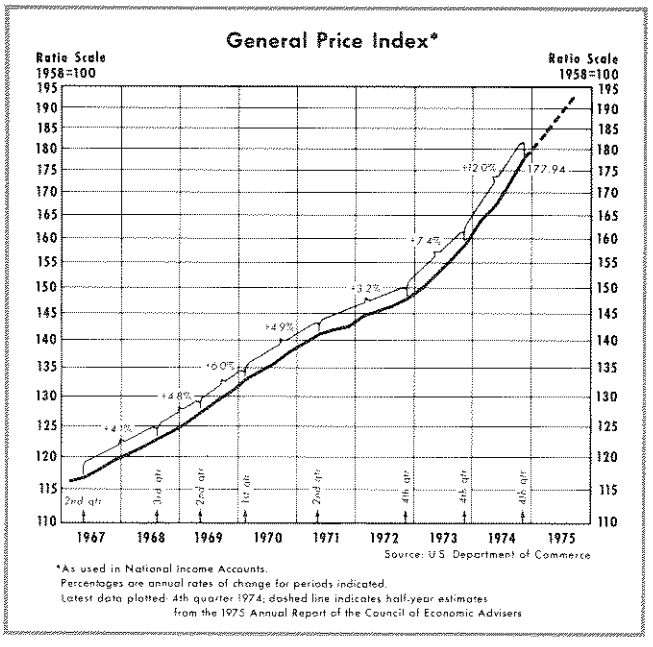
The results of two ex post simulations of the St. Louis model are summarized in Table V. The first projection uses money and high-employment Federal expenditures as actually recorded. The second projection is the result of using money and high-employment expenditures consistent with the CEA policy recommendations at the beginning of 1974.

The ex post projection using the actual movement in the policy variables shows that the St. Louis model projected the increase in GNP at $115 billion, or $13 billion more than actually occurred. Virtually all of the error was concentrated in real product, as the model successfully captured the movement of prices.[6] Even though output was overestimated, the simulated average rate of unemployment was close to the realized value.

The ex post projection using planned values for the policy variables indicates that the net effect of policy realizations was positive, that is, the effect on GNP of the greater-than-planned increase in money more than offset the effect of the less-than-expected growth of Federal spending. In general, however, the differences between the two ex post simulations are small relative to the total error implicit in the model. In contrast to the St. Louis model, the CEA was generally successful in predicting the slowing in the income velocity of money which occurred in 1974.

POLICY RECOMMENDATIONS FOR 1975

The Administration's projections for 1975 of a 10.8 percent rate of inflation and a 3.3 percent decline in real product represents one of the gloomiest forecasts made by any CEA since it was created in 1946. The 1975 forecast apparently reflects to a considerable extent the very dismal performance of the economy in the fourth quarter of 1974. With unemployment rising sharply and rapid inflation continuing, the data for the fourth quarter provided little basis for optimism. The inflation projection, however, is less pessimistic than



the 10.8 percent figure would indicate, since it reflects the Administration's plans to increase excise taxes on oil and gas in an effort to encourage less dependence on imports of petroleum. Even in the absence of an energy program, the Administration estimates that prices would presumably rise by 8 to 9 percent. The CEA does not indicate what output would be in the absence of increased excise taxes.

In general, the Administration's projections for 1975 are very similar to actual experience in the previous

[6]In light of energy developments in 1974, the price equation in the model was modified to include the direct effect of rising oil prices on the general price level. For discussion of the original form of the price equation, along with the other equations of the model, see Leonall C. Andersen and Keith M. Carlson, "A Monetarist Model for Economic Stabilization," this *Review* (April 1970), pp. 7-25.

year, as shown in Table VI. This similarity not only holds for the change in GNP, output and prices, but for most of the components of GNP as well. Projected growth of purchases of goods and services by Federal, state, and local governments is little different from what actually took place in 1974. Personal consumption is projected to advance slightly more rapidly, presumably in response to proposed tax cuts and increased transfer payments.

Table VI

CHANGES IN GNP & COMPONENTS: 1974 & 1975
(Dollar Amounts in Billions)

	1974 Actual		1975 Projected*	
Personal Consumption	$ 71.8	8.9%	$85.1	9.7%
Business Fixed Investment	12.8	9.4	6.0	4.0
Change in Inventories	−2.0	—	−18.3	—
Residential Construction	−11.2	−19.6	−2.3	−5.0
Federal Purchases	9.8	9.2	9.9	8.5
State and Local Purchases	22.6	13.3	23.1	12.0
Net Exports	−1.9	—	−2.3	—
GNP	$101.8	7.9%	$101.3	7.3%

*Estimated by this Bank and based on 1975 CEA *Report*.

Projections of investment are somewhat different from 1974, with the change in inventory representing the biggest deviation. In 1974, the rate of inventory accumulation declined by $2 billion, but in 1975 the CEA projects liquidation of inventory at a rate of $18.3 billion. As indicated in the CEA *Report*, a large part of the inventory overhang consists of manufacturer and dealer stocks of automobiles. Other investment activity is also projected to be relatively weak in 1975. Despite proposed increases in the investment tax credit and decreases in corporate taxes, business fixed investment is forecast to grow by only 4 percent in 1975. Residential construction activity is expected to decline further, though the extent of the drop is much smaller than in the previous year.

Federal Budget Program for Calendar 1975

The budget program for 1975 is one of the most ambitious ever developed during peacetime in U.S. history. Normally, such a degree of fiscal activity occurs only during wartime. However, the budget program for 1975 represents an attempt to aggressively and simultaneously attack the problems of unemployment and energy dependence. Inflation receives consideration in the budget recommendations to the extent that expenditure increases are less than they would otherwise be.

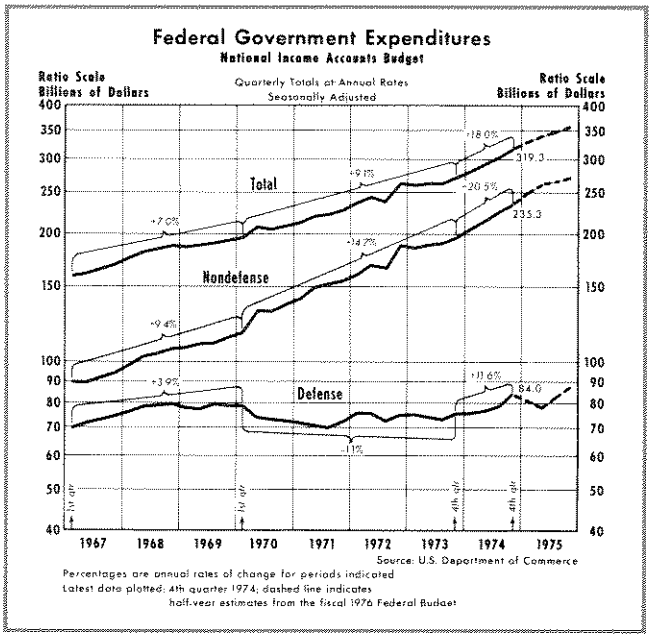
This section presents quantitative details of the Federal budget program on an NIA basis for calendar 1975. For the first time, the Federal budget provides considerable quarterly detail on the nature of the budget program and underlying economic assumptions for the immediate future.[7] In addition, long-term projections through 1980 provide insights into the time path envisioned by the Administration for key economic variables. This presentation of additional information was not required for this budget according to the provisions of the Congressional Budget and Impoundment Control Act of 1974, but will be in the future.

Expenditures — The budget program calls for an increase in Federal expenditures of $46.3 billion in 1975, or an increase of 15.5 percent over 1974. Federal expenditures rose 13 percent in 1974 and at a 7.8 percent average rate from 1968 to 1973. If the recommendations are realized, Federal expenditures would rise to 23 percent of the nation's GNP in 1975, compared to 21.4 percent in 1974 and 18 percent in 1965. These measures provide an approximation of the degree of growing involvement of the Federal Government in the U.S. economy. Not fully captured by such measures is the extent of direct Governmental regulations of economic activity in the form of product reliability, occupational and consumer safety, and environmental control.

Defense spending is expected to increase 5.1 percent in 1975, representing a continuation of the 5.6 percent increase in 1974. By way of contrast, defense spending had declined at a 1 percent average rate from 1968 to 1973, with most of the decline concentrated in 1970 and 1971. The projected increase in defense spending reflects an attempt to meet the higher costs of maintaining forces and stocks of equipment and supplies as well as an effort to modernize weapons systems and equipment.

Nondefense spending is projected to advance by 19.2 percent in 1975, compared to 16 percent in 1974 and a 12.6 percent average rate of increase from 1965 to 1973. The increase of nondefense spending in calendar 1975 reflects primarily a massive increase in transfer payments of $26.7 billion. Of this total, $11.1 billion represents an increase in unemployment benefits. The proportion of Federal expenditures in the form of transfer payments has grown from 26.3 percent in 1965 to an estimated 41.7 percent in 1975.

[7]This quarterly detail on the budget is found in *The Budget of the United States Government, Fiscal Year 1976*, Special Analysis A.



Receipts — Federal receipts on an NIA basis are projected to decline by $8.4 billion in 1975. By comparison, such receipts rose $32.6 billion in 1974, or 12.6 percent. This sharp turnabout in receipts results primarily from the forces of recession, though the Administration's program also contributes to the decline.

Table VII provides estimates of the sources of change in the Federal budget from 1974 to 1975. If the economy were operating continuously at high-employment, it is estimated that at projected inflation rates Federal receipts would rise by $47.3 billion. The projection of further deterioration of real economic activity is estimated to have the effect of reducing revenues by $36 billion, while the effect of the Administration's tax proposals is to reduce revenues by an additional $19.7 billion.

Proposed tax changes consist of (1) a temporary tax reduction in the form of a tax rebate on 1974 income for individuals; (2) permanent reductions in the rate structure for individuals and an increase in the minimum standard deduction; (3) a temporary increase in the investment tax credit for businesses; (4) a permanent cut in corporate income taxes; (5) increased excise taxes on oil and natural gas; and (6) a windfall-profits tax on oil companies. In addition, as a result of past legislation, the tax base for social security contributions was increased from $13,200 to $14,100 effective January 1, 1975.

Surplus/Deficit Position — The combined effect of rapidly rising expenditures and declining receipts is a huge increase in the budget deficit. As indicated in Table VII the deficit is projected to increase by $54.6 billion — from $7.6 billion in 1974 to $62.2 billion in 1975.

Table VII

PLANNED CHANGES IN FEDERAL (NIA) BUDGET: 1974 TO 1975*
(Billions of Dollars)

NIA Receipts		$ -8.4
Change due to growth		47.3
Change due to cycle		-36.0
Change due to tax rate adjustments		-19.7
NIA Expenditures		46.3
Change in defense		4.0
Change in nondefense		42.3
Due to cycle	11.1	
Due to existing nondefense programs	31.2	
NIA Surplus or Deficit		$-54.6
High-Employment Receipts		27.6
High-Employment Expenditures		40.1
High-Employment Surplus or Deficit		$-12.5

*Estimated by this Bank from the Federal Budget for fiscal 1976.

Another way to view the genesis of the deficit is to note that trend growth of receipts and increases in expenditures for defense and existing nondefense programs would produce a decline in the deficit of $12.1 billion (47.3 - 4.0 - 31.2 = 12.1). In other words, without deepening recession and proposed tax cuts, the net budget position would switch from a $7.6 billion deficit in 1974 to a $4.5 billion surplus in 1975. However, the recession reduces receipts by $36 billion from this hypothetical level and increases expenditures (unemployment benefits) by $11.1 billion. So it is estimated that without the proposed tax changes the deficit would be $42.5 billion, but a $19.7 billion net tax reduction pushes the deficit to $62.2 billion in 1975.

With the budget position obviously influenced by recessionary forces, calculations on a high-employment basis are also provided in Table VII. This measure supposedly provides a more accurate indication of the thrust of the budget on economic activity. According to this measure, fiscal actions are planned to provide a stimulus of $12.5 billion to the economy in 1975. It should be noted, however, that this calculation is influenced in considerable measure by inflation. The inflationary bias implicit in the calculation of the high-employment budget indicates that the budget is planned to be even more stimulative than the $12.5 billion shift in the high-employment budget would

indicate. There is no accepted method of correcting the numbers for this inflation bias.[8]

Monetary Policy Recommendations for 1975

The Administration's focus is on fiscal policy, yet there are some well chosen words spoken with regard to monetary policy. In contrast to the 1974 CEA *Report*, the latest report shied away from offering specific quantitative recommendations for monetary policy.

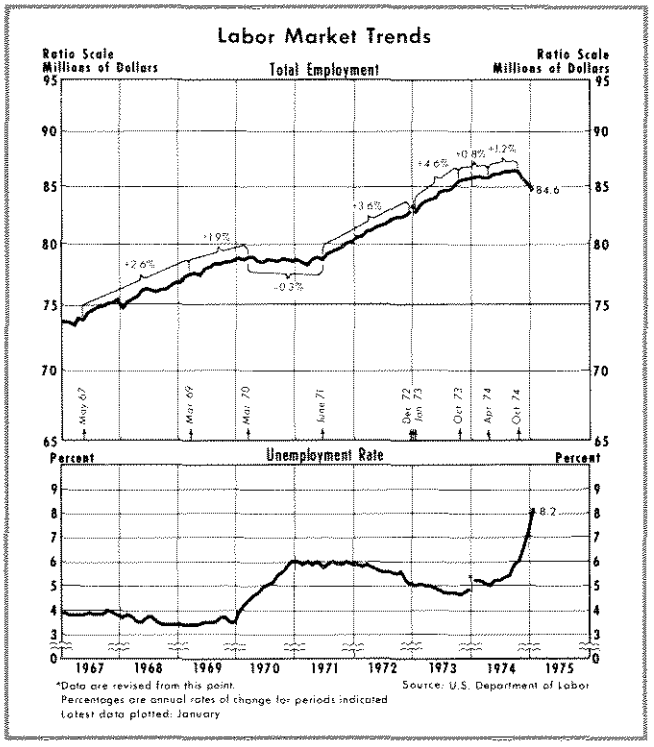
The CEA makes the following statement about monetary policy:

> Monetary policy faces great difficulties in the year ahead and will require careful and continuous evaluation by the Federal Reserve. The uncertainties that underlie the outlook for 1975 add to the importance of a flexible monetary policy. Monetary policy must be conducted so as to encourage a near-term recovery in the economy and a resumption of sustainable economic growth. Toward this end, reasonable growth in money and credit will be required — growth which, one hopes, will encourage a freer flow of credit and lower interest rates in private credit markets.[9]

This recommendation conveys little meaning since imprecise words like "flexible" and "reasonable" are used. Reference to a freer flow of credit, however, does suggest a step-up in the rate of monetary and credit expansion from the rates of late 1974. More subtle recommendations for monetary policy, which appear to be implicit in the overall economic program, are discussed in the next section.

EVALUATION OF 1975 ECONOMIC PROGRAM

According to the CEA, "The most pressing concern of policy is to halt the decline in production and employment so that growth of output can resume and unemployment can be reduced . . . . The policies that we use to support the economy in 1975 must be consistent with a further reduction in inflation in 1976 and thereafter."[10] Despite this primary emphasis on stimulating the economy in the short run, the CEA's long-run projections through 1980 indicate that gains in reducing unemployment are not expected to come quickly, nor is the rate of inflation projected to drop



sharply. If forces have already been set in motion to reduce the rate of inflation sharply in 1975 and 1976, a given growth in GNP will be distributed more heavily toward real product gains.

Playing a strategic role in such an assessment is the rate of monetary expansion. Despite wide acceptance of the direct relationship between the trend growth of money and the rate of inflation over extended periods, there is nothing in the CEA *Report* or the Federal budget documents that provides an inkling of what monetary assumptions underlie the long-range projections. Yet the budget presents a scenario for GNP, prices, and output for the period 1975 to 1980.

For purposes of gaining some insight into the expected effects of monetary and fiscal actions in 1975 and beyond, some simulation results of the St. Louis model are presented and compared with the CEA projections. Econometric models inevitably have serious shortcomings in providing information about the probable course of future economic events; yet, being based on the experience of the past, their implications should not be overlooked.[11] Model results have to be given a liberal interpretation, because events of the

[8]For further discussion of the relationship between inflation and the high-employment budget, see the 1975 CEA *Report*, pp. 62-65. Included in this discussion is an alternative calculation of the high-employment budget which includes allowance for the effect of inflation on inventory profits.

[9]1975 CEA *Report*, p. 26.

[10]1975 CEA *Report*, p. 19.

[11]For a discussion and evaluation of the forecasting performance of econometric models of the U.S. economy, including the St. Louis model, see Carl F. Christ, "Judging the Performance of Econometric Models of the U.S. Economy," *International Economic Review* (February 1975).

last two years have all but destroyed the myth that economic forecasting has become a precise science.

It is to be noted that the St. Louis model is a policy-oriented model which is based solely on past experience. Being a small model, the options are quite limited in dealing with the operation of special factors like energy crises or variations in food supply. Nevertheless, with energy problems looming so large that they cannot be sensibly ignored, the model has been modified to capture some of the effects of rising energy prices. This modification consists of two changes: (1) adding an excise tax variable to the price equation, except that excise tax is interpreted broadly to include the increase in the price of foreign oil in 1975 and 1974; and (2) changing the assumptions about the level and growth of potential output to reflect the adjustment of aggregate supply to increased energy costs and environmental regulations.

Within the context of the St. Louis model, the Administration's projected increase in GNP is examined to determine if it is consistent with their policy proposals. A second exercise consists of an evaluation of the price and output projections given the forecast of GNP. A comparison of Administration projections with those of the St. Louis model is in no way capable of producing definitive conclusions, yet it is important to scrutinize these projections within the context of an alternative model. The comparison is very tentative, however, because the Administration's model is not made explicit.

Feasibility of GNP Projection

The Administration's projection of an increase in GNP of $101.3 billion in 1975, or 7.3 percent, is examined by comparing it with two simulations of the St. Louis model. One simulation uses a 6 percent steady rate of increase of M_1 and the other uses an 8 percent rate. Both alternatives would represent an acceleration from the 2.8 percent increase that prevailed in the second half of 1974. Even though 1975 receives major emphasis, the CEA also makes a projection for 1976. The forecast for 1976, which, incidentally, is presented in the Federal budget and not discussed in the CEA *Report*, is for a $188 billion increase in GNP, or 12.6 percent. This assumption of a sharp increase in GNP growth requires further examination.

Both simulations use the path of high-employment Federal expenditures implied in the Federal budget. The money assumptions use fourth quarter 1974 as a point of departure. It should be noted, however, that at this time there appears to be little likelihood that either a 6 or 8 percent growth of money will be achieved in first quarter 1975.

The results of these combinations of policies are shown in Table VIII. The assumption of 6 percent money growth yields a projection somewhat less than the CEA projection of 7.3 percent growth of GNP in 1975, but the difference is substantial in 1976. Whereas the CEA has a projected increase of GNP of 12.6 percent, the St. Louis model indicates that a steady increase in money at 6 percent would yield only a 7.6 percent increase in GNP.

Table VIII

PROJECTED CHANGES IN GNP
1975 AND 1976
(Dollar Amounts in Billions)

	1975		1976	
CEA Projection (2/4/75)	$101.3	7.3%	$188.0	12.6%
St. Louis Model Projections				
1) With 6 percent growth in M_1 and Federal spending based on 1976 budget	92.1	6.6	112.7	7.6
2) With 8 percent growth in M_1 and Federal spending based on 1976 budget	101.9	7.3	143.0	9.5

The assumption of 8 percent money growth gives a GNP for 1975 that is only marginally above the CEA projection. The faster monetary alternative also comes much closer than the 6 percent case to the CEA projection in 1976, though it still falls short by a substantial margin.

These simulation results raise questions about either the nature of the monetary policy recommendation in the CEA *Report* or the reliability of the St. Louis model. An interpretation of the CEA *Report* is that they are most concerned about accelerating the rate of monetary expansion in the short term. Such actions, *according to the St. Louis model,* indicate that acceleration to 6 to 8 percent will provide the CEA forecast increase in 1975, but realization of their 1976 forecast would require further acceleration of money growth starting in late 1975. This pattern appears inconsistent with the CEA objective of first stimulating demand and then, once the recovery is underway, shifting the focus of policy actions to controlling inflation.

There is an alternative interpretation, however, and that is that the CEA envisions a rapid advance in the income velocity of money as the recovery gets underway. This is a plausible assumption, though the implicit rise in velocity in 1976 for the 6 percent money

case is very high relative to past experience. Given the Administration's GNP projections, a 6 percent growth of money would imply velocity growth of 2 percent in 1975 and 6.2 percent in 1976. An increase in velocity of 6.2 percent would be the largest for any one year since 1951.

Table IX

PROJECTED CHANGES IN GNP, OUTPUT, PRICES, AND EMPLOYMENT: 1975 - 1980

(Percent)

	1975	1976	1977	1978	1979	1980
CEA Projection (2/4/75)						
GNP	7.3	12.6	12.4	12.0	10.8	10.8
Output	–3.3	4.8	5.6	6.5	6.5	6.5
Prices	10.8	7.5	6.5	5.1	4.1	4.0
Unemployment Rate	8.1	7.9	7.5	6.9	6.2	5.5
St. Louis Model Projection						
(1) With CEA Budget Plan, 6% Money Growth, and Velocity Growth of 2.9%						
GNP	7.3	9.5	9.4	9.3	9.0	8.8
Output	–3.2	2.8	5.2	6.3	6.7	6.6
Prices	10.8	6.6	4.1	2.9	2.2	2.1
Unemployment Rate	8.2	8.8	8.6	8.1	7.3	6.5
(2) With Approximate CEA GNP Growth Path						
GNP	7.4	12.5	12.4	11.9	11.0	10.7
Output	–3.1	5.1	7.0	7.1	6.6	5.2
Prices	10.7	7.2	5.1	4.5	4.1	5.2
Unemployment Rate	8.3	8.3	7.6	6.7	5.8	5.3

Implications of Total Spending Projections

Given the CEA projections of GNP for 1975 and 1976, aside from the matter of how they are achieved, leaves open the question of how GNP growth is going to be distributed between prices and output. This question is, of course, the critical one as evidenced by the success that the CEA enjoyed in projecting the advance of GNP in 1974, but the failure to accurately forecast its distribution between prices and output.

The task of projecting prices and output continues to be complicated by the operation of special factors. Even though the oil embargo was lifted last spring, it appears that price and output adjustments to higher energy prices are still taking place. Furthermore, the Administration's budget program contains an energy package that will require further adjustments. Also, even though wage and price controls were lifted in early 1974, there is a question of the long-term damage which this program imparted to the economy by distorting the allocation of resources. And finally, environmental regulations have become so pervasive in their influence that they can no longer be ignored in the determination of the growth in the nation's productive capacity.

To deal with these problems within the context of the St. Louis model, assumptions had to be made about the time path of potential output. Given the energy program proposed by the Administration, it was assumed that the course of potential output has been, and will continue to be, affected by higher energy prices and environmental regulations. The growth of potential output was assumed to be 3 percent.[12] To provide perspective, simulations were conducted through 1980 and compared with those of the Administration.

Table IX contains the results of these simulations of the St. Louis model. The first simulation uses a 6 percent growth in M_1, but in contrast to Table VIII, assumes a trend growth in velocity of 2.9 percent.[13] Federal spending is assumed to follow the course outlined in the budget. As noted earlier, the 1975 GNP projection for this case is essentially the same as the Administration's. In addition, there is virtually no difference in the projections of prices, output, and unemployment.

The picture in 1976 is much different, however, since a 6 percent growth in money does not come near generating the CEA's projected increase. The St. Louis model has the rate of inflation dropping to 6.6 percent in 1976, substantially below the CEA's projection of 7.5 percent. Because of the lower GNP projection in 1976, the St. Louis model shows a weaker

[12]The 3 percent figure is mentioned as a possibility in the 1975 CEA *Report*, pp. 63-64.

[13]The reservations expressed about velocity growth in 1976 also apply to the Administration's longer-term projections. Given their 1980 GNP projection, the following combinations of money and velocity growth would yield such GNP growth from 1974 to 1980:

Money	Velocity
6%	4.7%
7	3.7
8	2.8
9	1.9
10	1.0

Realized growth rates since 1950 are as follows:

	Money	Velocity
1950-55	3.3%	3.7%
1955-60	1.3	3.1
1960-65	3.1	3.2
1965-70	5.2	1.9
1970-74	6.6	2.7

recovery in real product, only 2.8 percent in contrast with the CEA estimate of 4.8 percent. And because real product would rise more slowly, the St. Louis model indicates that the unemployment rate would rise to 8.8 percent. On the basis of these policy assumptions, however, both prices and unemployment would improve each year from 1976 through 1980.[14]

In order to assess the validity of the CEA's projections of prices, output, and unemployment, the CEA's projected GNP path is taken as given in a St. Louis model simulation. This means that the question of attaining GNP is set aside to concentrate on the price and output projections. Since the 6 percent money alternative (with accelerated velocity) for the model was so close to the CEA projection for 1975, the simulation using the CEA GNP path is little different for that year. According to the St. Louis model, an acceleration of GNP has its primary effect on output in the short run. As a result, with prices little affected, say, compared to the case with 6 percent money, output jumps sharply to a 5.1 percent rate of increase in 1976. The high rate of GNP growth keeps inflation relatively high and produces an acceleration beginning in 1980. In contrast, even with high GNP growth, the CEA has inflation coming down steadily to 4 percent by 1980.

These simulations, based on varying assumptions, yield the following conclusions:

(1) The 1975 CEA projections of prices and output appear to be consistent with the path of GNP that they forecast.

(2) Shortly after 1975, there is an indication that the CEA might be too pessimistic on prices, which also leads to the possibility that output growth might be greater in the short run under their GNP assumptions.

(3) By the end of the decade, it appears that the CEA GNP path does not produce the steady decline in inflation and unemployment that they expect. Inflation stays high and, as a result, output growth is correspondingly less than the CEA projects.

SUMMARY

The Administration has projected another year of rapid inflation and declining output. A projected improvement is hidden in the averages, however, as output is forecast to rise in the second half of 1975 and the rate of inflation is expected to decline. The Administration also offers a scenario for the rest of the decade such that by 1980 the inflation rate is reduced to 4 percent and the unemployment rate is reduced to 5.5 percent.

Despite the publication of long-range projections, the Administration program focuses on fiscal actions for the next 21 months. The budget program contains considerable stimulus in the form of tax cuts and continued increases in Federal spending. However, the monetary actions that they consider consistent with their 1975 economic program are not made explicit.

Using the St. Louis model as an aid in evaluating the economic plan, there was little basis for quarreling with the 1975 forecast. Beyond 1975, however, some questions were raised about the likelihood of boosting the growth of GNP to the assumed rates without setting in motion further inflation problems later on. Rising inflation in the future also means that the growth in output is correspondingly reduced.

The Administration is confronted with very serious economic problems and has presented a program to deal with these problems. Despite the urgency of resuming output growth, according to the analysis of this article, the problem of inflation control continues paramount. There is little prospect for sustainable long-run growth until inflation is purged from the economic system. It is this goal that provides the challenge to the monetary authority to maintain a moderate expansion of money and credit in the face of huge budget deficits.

[14]It should be noted that these projections are based on an updated version of the St. Louis model as originally specified in 1970. According to the model, and despite recent experience with inflation, the price level is very slow to respond to a sustained acceleration in the growth of money and total spending. More recent work at the Bank indicates that a maintained growth in money of 6 percent would produce an inflation rate of between 5 and 6 percent by 1980. See Leonall C. Andersen and Denis S. Karnosky, "The Appropriate Time Frame for Controlling Monetary Aggregates: The St. Louis Evidence," *Controlling Monetary Aggregates II: The Implementation* (Proceedings of a Conference Held at Melvin Village, New Hampshire, Sponsored by the Federal Reserve Bank of Boston, September 1972), pp. 147-177.