BY THE COMPTROLLER GENERAL

# Report To The Chairman Committee On Appropriations U.S. House Of Representatives

OF THE UNITED STATES

# An Analysis Of Fiscal And Monetary Policies

The U.S. economy is in its eighth recession since the Second World War. GAO analyzes fiscal and monetary policies and their contribution to the current recession.

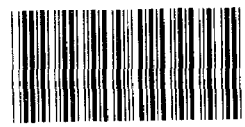
GAO's analysis, complemented by the viewpoints of nationally prominent economists, business leaders, and financial leaders, concludes that any approach to revamping economic policy be built around the following principles:

--Economic policy should be based on a long-run objective of moderating inflation while stimulating economic investment.

--Adjustments in economic policy should be gradual and moderate.

--Fiscal and monetary policies should be based on consistent long-run employment, price level, and economic growth goals that are achievable.

Overall, a marginal easing of monetary policy and a substantial reduction in future budget deficits seem appropriate policy actions.


GAO/PAD-82-45
AUGUST 31, 1982

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

B-208549

The Honorable Jamie L. Whitten
Chairman, Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

At your request, we analyzed the Nation's fiscal and monetary policies with a view toward possible changes. Although this report does not present recommendations for change, it does provide an overview of the issues and tradeoffs currently being debated within the economic policy community. We discuss the nature of the debate and provide a balanced judgment of its controversial features.

As you requested, we consulted a wide range of experts from academia and the business and financial communities to obtain their views. Business and financial leaders, while expressing concern that monetary ease might refuel inflation, were generally in favor of Federal Reserve actions to reduce interest rates. Among senior economists there was substantial agreement that while progress on reducing the rate of inflation (disinflation) is being achieved, a marginal expansion in the current growth of the money supply and a reduction in the budget deficits for fiscal year 1984 and beyond is desirable. The dominant view supports an approach to economic policy built around the following principles:

1. Policy should be based on a long-run objective of moderating inflation.

2. Unemployment should not be reduced by either expansive monetary or fiscal policy to levels where inflationary pressures are renewed. The exact magnitude of a non-inflationary unemployment rate is the subject of some debate among economists, but it is now generally thought to be above the 4 percent to 5 percent rate traditionally used as a benchmark.

3. Adjustments in policy should be gradual and moderate, so as to reduce the great uncertainty and instability now existing in financial markets.

4. Long-run growth should be a paramount goal in policies to stimulate investment in the economy.

5. Monetary and fiscal policy should be based on a consistent set of long-run employment, price level, and economic growth goals for the economy that are both desirable and achievable.

We direct your attention to chapter 1 which contains a broad overview of our findings and a fuller discussion of the above principles.

This report was sent for comment to the Council of Economic Advisers, Department of the Treasury, and the Board of Governors of the Federal Reserve. Their comments are incorporated in the report's text and in appendix II.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the report's date. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Charles A. Bowsher

Comptroller General
of the United States

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## ABBREVIATIONS

| | |
|---|---|
| ACRS | Accelerated Cost Recovery System |
| CBO | Congressional Budget Office |
| CPI | Consumer Price Index |
| DRI | Data Resources, Inc. |
| GAO | General Accounting Office |
| GNP | Gross National Product |
| OMB | Office of Management and Budget |

# CHAPTER 1

## INTRODUCTION

The Chairman, Committee on Appropriations, U.S. House of Representatives, asked the GAO to study our Nation's fiscal and monetary policies and to make suggestions for change. Special attention was to be placed on the effect of the restrictive monetary policy of the Federal Reserve System on present and future economic growth. We were also asked to consult with experts in industry and educational institutions for their viewpoints in this area.

## OVERVIEW

The current recession resulted from a policy decision to reduce the rate of inflation through restrictive monetary policy. Reducing the rate of growth of the money supply led, initially, to rising interest rates and a contraction in aggregate demand. As would be expected, the contraction was felt most heavily in the sectors of the economy which are particularly sensitive to interest rates, such as housing, consumer durable goods (including automobiles), and business investment.

The decision to pursue a policy of disinflation was based on a broadly held view that high rates of inflation were a national problem. A viewpoint was adopted that, given the state of the art, reducing aggregate demand with the high probability of this leading to a recession was the only way we had of reliably reducing the rate of inflation. It can accomplish that objective, as it has begun to do in the past year. But reducing the rate of inflation by reducing aggregate demand imposes costs as well, in the form of lost output and unemployment. Those costs appear particularly high in this case because the current recession follows a weak and incomplete recovery from the last one.

On four previous occasions in the past decade and a half, a recession--usually induced by restrictive monetary policy--has led to a temporary decline in the rate of inflation. In each previous case, however, policies were reversed and the gains against inflation were lost in the ensuing recovery. The initial rise in prices was then carried forward into the 3-year wage contracts and other cost-of-living adjusted programs in the economy. While monetary policy may not have initiated inflation, it did accommodate it in short-term efforts to stabilize interest rates and the economy.

This time, however, the Federal Reserve Board has chosen to guide its monetary policy actions by focusing greater attention on the behavior of various measures of the money supply, rather than interest rates, and has the stated long-term goal of slowly reducing the rate of growth of the money supply. Economists

generally agree that this overall approach to monetary policy, if pursued consistently in future years, will avoid the risk of a substantial rebound in inflation. But this is coupled with a generally held view among economists that this approach will also mean continued weakness in the investment sectors of the economy, particularly if it is combined with continuing large Federal budget deficits after the recovery begins.

Overall outlook

The dominant view among economists is that the present set of policies will lead to a relatively weak recovery, starting in the last half of calendar 1982. The weakness in the recovery, in this view, will result from a monetary policy which is still oriented toward the primary goal of disinflation. That, combined with the very large Federal deficits now anticipated for fiscal years 1983 and 1984, will mean continued weakness in interest-sensitive sectors such as housing and business investment. This dominant view also recognizes that there is some significant risk that the economy will continue to contract, rather than experience the weak recovery that is generally predicted as the most likely outlook for calendar 1983.

All economic forecasts are subject to a substantial margin of error. In part, this reflects lack of knowledge about the precise nature and durability of many economic relationships. But it also reflects the unpredictability of external events, such as weather and energy supplies, over which the Government can exercise little or no control in the short run. Given this margin of error, however, we have found no basis for disagreeing with the dominant view that, given disinflation as the guiding objective of monetary policy, there will be a relatively weak and unbalanced recovery in 1983.

Interest rates

Perhaps the most troublesome and uncertain aspect of the near-term outlook is the level of interest rates. While a consensus could be found on many aspects of the economic outlook, experts acknowledged the lack of a satisfactory explanation of why interest rates remain so high. Both short- and long-term nominal rates have fallen since 1980, but real rates (which are adjusted for inflation) have appeared to rise. Various explanations have included a decrease in the growth of the supply of money, the short-term liquidity needs of companies with cash flow problems, the volatility in the growth of the money supply and, consequently, a risk premium demanded by investors, an unpredicted increase in the demand for money, a lagged response of inflationary expectations from the 1970s, and prospects of huge Federal deficits and borrowing requirements into the mid-1980s.

There is also lack of consensus on what interest rates will do over the next year or two. In past recoveries, low interest

rates have played an important role in stimulating renewed investment and expanding output. If the Federal Reserve allows a more rapid growth of the money supply, interest rates would be expected to fall. But in this case, there is the danger of a resurgence of inflationary expectations and a continued rise in nominal rates. Similarly, unless the budget deficits are reduced, the skittishness of investors will not be allayed.

Monetary policy

There is relatively little support among economists for a dramatic change in the general direction of monetary policy. We found no support for a further tightening of the money supply, the dominant view being that this would involve an unacceptable risk of forestalling the recovery entirely. The dominant view also would oppose a major easing of monetary policy, on the grounds that this would create an undesirable risk of damaging the credibility of the Federal Reserve and raising once again expectations for continued inflation. The general view seems to be that since a substantial price has already been paid for the progress to date against inflation, to risk rekindling it would be unwise.

Nevertheless, there seems to be substantial support among economists for a marginal easing of monetary policy, to reduce the risk of a continuing contraction of the economy, while retaining disinflation as a primary goal. The dominant view is that a modest relaxation would carry little risk of accelerating inflation and would become increasingly appropriate if the predicted start of the recovery is delayed beyond the beginning of 1983. We share this view, based on our own analysis. Judging from recent public reports, the attitude of the Federal Reserve may be similar.

While substantial support exists among economists for continuing to base monetary policy on the long-run objective of gradually slowing the rate of inflation, there is less consensus on how to carry out this policy. In 1979, when the Federal Reserve Board shifted to a central focus on the monetary aggregates, the expectation was that this would yield greater stability in the money supply. In fact, however, the growth in the money supply has been substantially more volatile since the change in policy. Economists have not yet found a satisfactory explanation for this volatility.

Many economists are dissatisfied with various aspects of the implementation of monetary policy. They point, for example, to the questionable reliability of any one of the monetary aggregates as a true measure of the money supply. Others point to the apparent "looseness" in the relationship between changes in the money supply and changes in either prices or the level of real economic activity. Despite these reservations, however, none of the alternatives has yet gathered broad support among

economists. We were unable to develop a convincing analytical basis for judging one approach to be superior to the others.

The absence of a broad consensus leads us to the view that actions to implement monetary policy should not be guided by any single indicator. Rather, the Federal Reserve Board should be observing a variety of economic indicators, including not only measures of the money supply and interest rates, but also those that measure more directly the economic results being sought, such as the movement of prices, wages, employment, etc. Because of statutory limitations on our access to records, and the short time available for this review, we made no effort to examine the details of current Federal Reserve decision processes. Nevertheless, the external evidence suggests that the Federal Reserve is actually a great deal less rigid in its operations than is implied by public discussion of its focus on monetary targets. This view is supported, for example, by the fact that the Federal Reserve targets are stated in ranges and that significant deviations from the implicitly desired trend line have been tolerated.

If this assessment is correct, the Federal Reserve has been significantly less rigid in its adherence to the "monetary rule" than has been publicly acknowledged. The overall approach to its implementation of monetary policy may well be quite consistent with that suggested by us, and may already be yielding the modest relaxation considered desirable by many economists.

Fiscal policy

With regard to fiscal policy, the dominant view is that the budget deficits now projected for future fiscal years are a serious problem. The concern is that, given a continuing disinflationary monetary policy, large Federal deficits will shift the composition of output away from investment, thus undermining the basis for long-term economic growth.

The dominant view is that reducing these deficits will require a combination of greater restraint on outlays and substantial increases in revenues. There is less consensus on the share of the task that should be assigned these two sides of the budget, or on the composition of either. The most common view is that restraint on outlays must focus particularly on entitlements and defense spending. Apart from its effect on the budget deficit, many people are concerned that the rate of acceleration in defense spending may generate troublesome inflation within that sector.

The recent tax and spending actions taken by the Congress are generally applauded by economists as an important first step. But a commonly held view is that substantially greater revenue increases will be needed soon. A frequent, but certainly not universal suggestion, is to drop the tax cuts that are currently scheduled to take effect in 1983.

We share the view that action is needed to reduce substantially the deficits projected for future years. Large deficits are to be expected during a period of contraction. During a period of recovery, however, such deficits should decline rapidly. This is important both to avoid generating excess demand and to permit a level of capital investment necessary for long-term growth.

We take no position at this time on the detailed composition of actions needed to close the future budget deficits. As a practical matter, however, we believe it will be necessary for the Congress to constrain the growth of both entitlements and defense spending, while also generating additional revenues. There is a growing backlog of public infrastructure needs, e.g., construction and maintenance of highways, dams, and airports. Much of this backlog is in areas traditionally supported by the Federal Government. If deferred indefinitely, these unmet needs may impede future economic growth. If a significant portion of these infrastructure needs are to be funded through the Federal budget, even greater pressure will be put on future deficits. Therefore, if these deficits are to be constrained to levels consistent with long-term economic growth, even greater restraint will be required in other areas, or further increases in revenues beyond those which would otherwise be necessary.

Despite concern over the size of projected budget deficits, few economists support a constitutional amendment to require a balanced budget. This reflects both a general skepticism that such an amendment would achieve its stated purpose, and the concern that, if effective, the amendment would constrain inappropriately the Federal Government's ability to carry out an effective economic policy.

Dissenting views

The points summarized thus far concentrate on what we believe to be the dominant views among economists, but these views are not universally held. Some economists hold sharply dissenting views, often on fundamental issues concerning the objectives of economic policy. This disagreement over policy objectives has created a perception of greater analytical disagreement among economists than actually exists.

The issue of anti-inflation policy exemplifies some of these disagreements. The dominant view is that gradual disinflation is an appropriate objective, and that monetary policy is an appropriate way to achieve that objective. But others dispute either the objective or the means of achieving it. Some economists would prefer more rigid adherence to the "monetary rule," believing that it would yield more moderation of inflation and, then, resumption of sustained long-term growth. Still others suggest that inflation can be constrained in a more direct fashion, through incomes policies.

Such policies can span the range from informal presidential jawboning to mandatory wage and price controls to tax-based incomes policy incentives. Those that hold these views argue that the wage price spiral cannot be squeezed out of the economy by relying exclusively on macroeconomic policy tools without the presence of unacceptably high levels of idle capacity and unemployment. Disagreement continues about the probable effectiveness of any of these proposals. However, there is some agreement that necessary conditions for success include a substantial and visible commitment of the President's personal prestige and a high degree of cooperation among all sectors of the economy and government. At this time, most economists hold the prospects for this cooperation to be slight.

None of these arguments should be dismissed casually, particularly since each of them is espoused by groups of reputable economists. But in considering the arguments, one should recognize that contrasting value judgments are frequently interwoven with theory, analysis, or historical experience. Some place greater value on current output than on long-term growth or vice versa. For others, the tradeoff is the greater economic efficiency of relatively free markets versus the need to satisfy social policy objectives other than those related to economic efficiency.

The weight that should be attached to these competing values is not an issue that can be resolved by analysis. Values, of course, also underlie what we have characterized as the "dominant view" among economists. But those values tend to be a great deal more moderate and involve a great deal more compromise. The dominant view, for example, is equally concerned about current output and future growth. It respects the efficiency of markets, but also recognizes the legitimacy of other policy objectives.

In general, the dominant view supports an approach to economic policy built around the following principles:

1. Policy should be based on a long-run objective of moderating inflation.

2. Unemployment should not be reduced by either expansive monetary or fiscal policy to levels where inflationary pressures are renewed. The exact magnitude of a non-inflationary unemployment rate is the subject of some debate among economists, but it is now generally thought to be substantially above the 4 percent to 5 percent rate traditionally used as a benchmark.

3. Adjustments in policy should be gradual and moderate, so as to minimize uncertainty and instability in financial markets and investments.

4. Long-run growth should be a paramount goal in policies to stimulate investment in the economy.

5. Monetary and fiscal policy should be based on a consistent and achievable set of long-run employment, price level, and economic growth goals for the economy.

In the present circumstances, these principles suggest a moderate easing of monetary policy and a concerted effort to reduce substantially the budget deficits now projected for fiscal year 1984 and beyond.

## SCOPE AND METHODOLOGY

In response to Representative Jamie L. Whitten's request of April 26, 1982, we consulted a wide range of senior economists and convened a panel of experts to discuss current economic conditions and the costs and benefits of policy changes. Business and financial leaders were consulted for their perspectives on current policy, in particular on the effect of high interest rates.

Simulations were run on macroeconomic models of Data Resources, Inc., Chase Econometrics, and Townsend-Greenspan. These simulations tested several options for monetary and fiscal policy. Finally, we consulted with the Council of Economic Advisers, the Congressional Budget Office (CBO), and the Federal Reserve System. We obtained revenue and expenditure projections from both the Office of Management and Budget and CBO.

Because of statutory constraints and the limited time available for this study, we did not attempt to examine the day-to-day operations of the Federal Reserve. Neither did we attempt, in the time available, to develop the details of tax and expenditure changes that might be taken to reduce the projected deficits.

The report is organized as follows. Chapter 2 describes current economic conditions, in particular the recession in interest-sensitive sectors as well as disinflation and high interest rates. Chapter 3 describes monetary policies, and chapter 4, fiscal policies. Chapter 5 assesses prospects for the economy through 1984. Chapter 6 describes the views of experts on policy options for monetary ease and fiscal restraint. Appendix I presents the results of our econometric simulations. Agency comments are reprinted in appendix II along with our responses. Appendix III contains Mr. Whitten's request letter. His concerns about the housing and timber industries are the subject of another GAO report issued concurrently with this report: "Analysis Of Options For Aiding The Homebuilding And Forest Products Industry," (GAO/CED-82-121).

## AGENCY COMMENTS

We requested comments on this report from the Council of Economic Advisers, Department of the Treasury, and the Board of Governors of the Federal Reserve. Their comments are incorporated

where appropriate within the report. Matters of disagreement are discussed in appendix II. The Federal Reserve chose not to comment specifically on the report. Its response is reprinted in appendix II also.

## CHAPTER 2

## THE CURRENT ECONOMIC SITUATION

The U.S. economy is in its eighth recession since the Second World War. The current recession began in July 1981--the result of faltering demand caused by a restrictive monetary policy that produced high interest rates and tight credit conditions. This recession is markedly different from others of the past 25 years in that it began barely a year after the end of the 1980 recession, when the economy had only just regained lost ground. At the start of the 1980 recession, the level of real gross national product (GNP) was 18 percent higher than it had been at the start of the previous recession in 1974-75. At the beginning of that recession, in turn, the level of real GNP was 17 percent higher than at the start of the previous recession in 1970-71. A similar pattern appears in all the previous post-World War II business cycles: recessions typically begin only after the economy has greatly exceeded its previous peak. In contrast, at the onset of the current recession, the level of real GNP was only 1 percent above its 1980 peak.

### CURRENT ECONOMIC SITUATION PARTIALLY DUE TO STRUCTURAL CHANGES

Our recent economic history exhibits extraordinary weak growth. Over the last 3 years, from the first quarter of 1979 to the first quarter of 1982, the economy has grown at an average annual rate of just 1.0 percent--by far the lowest 12-quarter growth rate since the quarterly data were first collected in 1946.

Since the end of World War II, the world economy has been undergoing dramatic and fundamental changes. New industrial powers are emerging, competition in many industries is assuming a worldwide character, and the relative prices of various energy supplies have changed markedly. These developments imply that some of the problems facing U.S. industries are not directly related to the current cyclical downswing. Hence, a recovery may not show dramatic improvements in some of the sectors of our economy, especially in the automobile, steel, and construction industries.

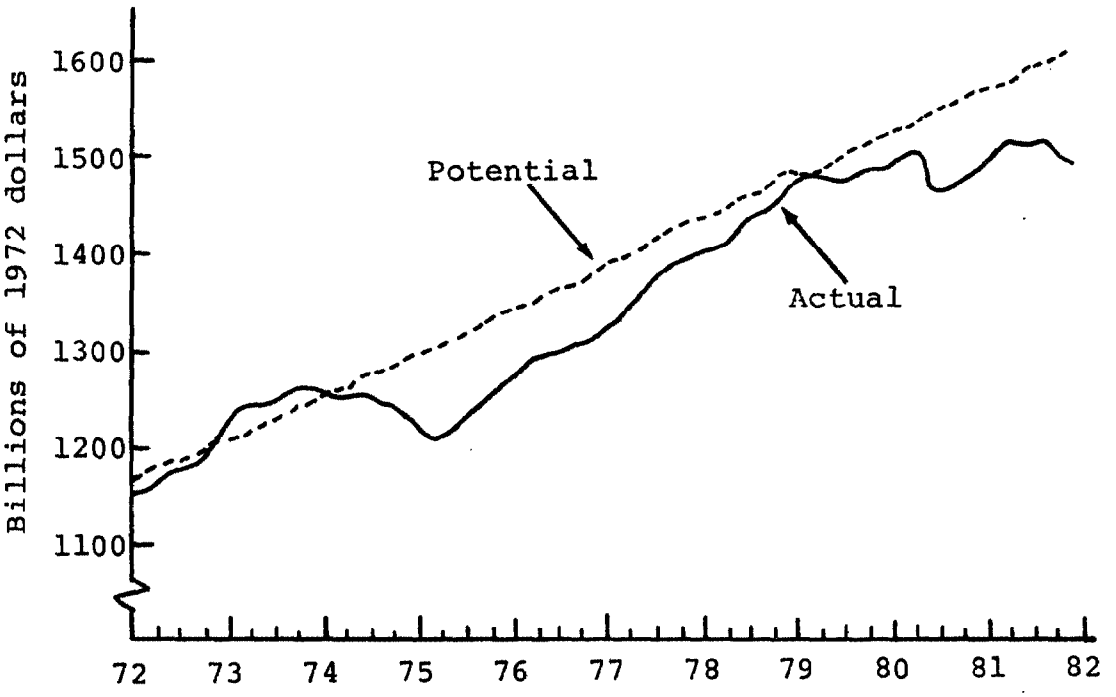
### CHARACTERISTICS OF THE 1981-82 RECESSION

While the current recession has not been, in isolation, very severe, in combination with the 1980 recession it has left the economy with an unusual amount of slack. The unemployment rate has reached 9.8 percent; use of the Nation's industrial plant capacity stood at 69.5 percent in July 1982.

An alternative measure of slack, shown in figure 1, is the gap beween what the economy could produce, as measured by the Council of Economic Advisers, and actual GNP. This gap now exceeds $100 billion. 1/ This unprecedented weakness is evident in many sectors of the economy.

Figure 1

Potential and Actual GNP
by Quarters, 1972-81
(through 4th quarter, 1981)




Source: Data Resources, Inc.

- Housing. Housing construction has been one of the key areas of weakness both in the current period and in the 1980 recession. High mortgage interest rates and uncertainty over mortgage finance have slowed the demand for new housing. The construction industry is in its worst slump since the mid-1960s. Employment has fallen from an average of 4.5 million jobs in 1979 to 4.0 million in the first quarter of 1982. New housing starts have fallen to the lowest levels since the data were

1/This amount measures the GNP being lost because of unemployment and idle industrial capacity.

first collected in 1959, and new home sales have also been declining. The latest data available in June 1982 indicate that housing starts have only reached an annual rate of 0.9 million units, 0.3 million less than the level reached during the deep recession year of 1975. 1/

- Mortgage finance. Mortgage bankruptcies and foreclosures are at new peaks and continue to grow. Savings and loan associations and other mortgage lenders are suffering enormous losses as yields on their mortgage portfolios fail to keep pace with the rising cost of funds. In the last half of 1981, average yields trailed the average cost of funds by 1.5 percentage points. 2/

- Automobile industry. From a 1978 peak of nearly 9.3 million units, domestic car sales fell to 6.2 million in 1981. On a seasonally adjusted annual rate basis, domestic car sales for the first quarter of 1982 were 6.0 million units.

  The auto industry's weakness has spread to its suppliers. Given the industry's geographic concentration, its plight has been felt disproportionately in the Midwest, especially in Michigan and Ohio. Michigan's unemployment rate is the highest in the Nation; in July 1982 it reached 14.7 percent, nearly 3 percentage points above its July 1981 level.

- Unemployment. Overall unemployment rates have averaged 9.5 percent for the second quarter of 1982. Such a high overall rate necessarily means a considerably higher rate for some labor force groups. Teenage unemployment rates, which averaged 16.1 percent in 1979, rose to 24.1 percent in July 1982. Black unemployment rates rose from the 1979 average of 11.3 percent to 18.5 percent in July 1982.

- Consumer spending. Despite high interest rates and weak labor markets, consumer spending, which accounts for about two-thirds of aggregate demand, has remained surprisingly resilient. Indeed, in the first quarter of 1982, consumer spending advanced at a 2.4 percent annual rate while real GNP fell over 5 percent. The financial conditions of households, as measured by both

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1/See U.S. General Accounting Office, "Analysis Of Options For Aiding The Homebuilding And Forest Products Industries," GAO/CED-82-121.

2/Ibid.

the ratio of consumer installment credit to personal income and delinquency rates on consumer installment loans (30 days and over), seem to be surprisingly healthy despite the high interest rates and weak income growth.

- Business fixed investment. Until very recently, business investment has held up despite historically high costs of finance and capital. The recent capital spending survey from the Commerce Department indicates that businesses expect investment spending in 1982 to decline 2.4 percent from its 1981 levels. These data seem to show that the decline will be concentrated in the first half of 1982, followed by moderate growth. (See figure 2.)

- Corporate cash flow. The financial conditions of businesses have deteriorated over this 3-year period of economic weakness. Use of short-term debt as a means of financing has greatly expanded, partly due to the result of unwillingness to borrow long at historically high rates, and partly due to the weakness in corporate cash flow (see table 1). Short-term borrowing increases the risk of bankruptcy and tends to discourage investment.

- State and local government. The State and local government sectors have been, and will continue to be, a source of weakness for aggregate demand. Over the past year, real purchases by this sector have fallen. Recent revenue-raising efforts by State and local governments have increased personal and corporate marginal tax rates moderating the decline in purchases. Capital spending has also been severely limited by the very high cost of municipal finance.

- Foreign sector. Normally, a recession will decrease imports relative to exports. However, during this recession, this pattern has exhibited somewhat atypical behavior. This is possibly due to high interest rates that have attracted foreign funds and kept the dollar strong. As a result, imports have increased relative to exports. 1/

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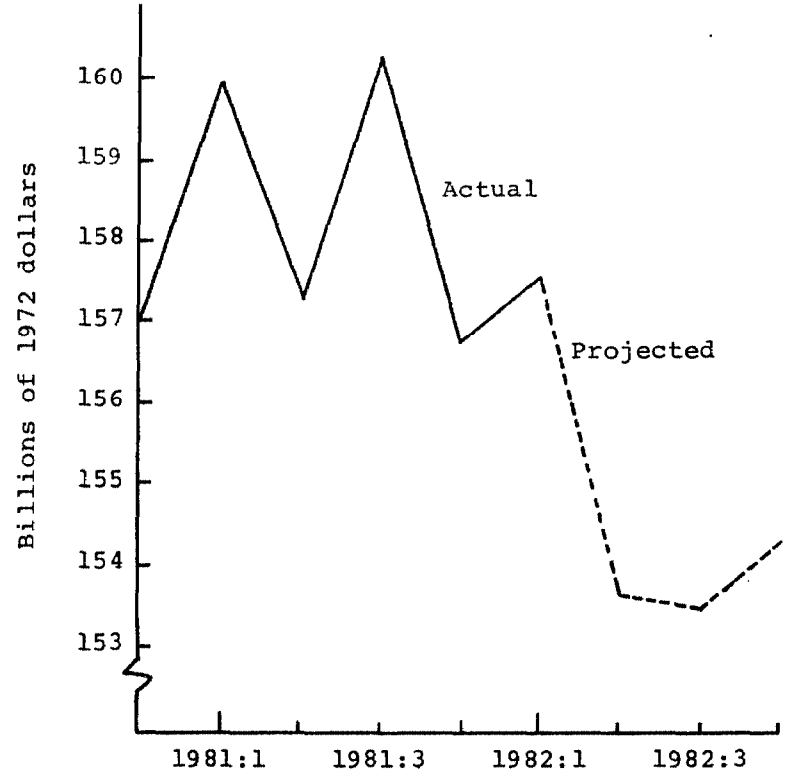
1/Care should be taken in comparing the export-import pattern of this recession with those of the past. The pattern depends on the origin of the recession--whether domestic or foreign. In addition, the exchange rate system has changed. Until the early 1970s, the United States maintained a fixed rate system that gave way to a managed floating system, and then to one in which market forces were allowed to determine the rate with little official intervention. The change in the system may be responsible for the changed pattern.

Figure 2

Expenditures for New Plant and Equipment
by U.S. Nonfarm Business
(Quarterly data seasonally adjusted at annual rates)




Note: Projected figures are based on planned capital expenditures reported by business in late April and May, 1982. Estimates of constant dollar plans, adjusted for expected inflation, are calculated by the Bureau of Economic Analysis.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## RECENT GAINS IN INFLATION ARE LARGE BUT MAY BE TRANSITORY

While the United States has experienced weak economic activity, significant progress against inflation has occurred. The rate of increase of the consumer price index (which is a measure of inflation), has declined from 13.5 percent in 1980 to 10.4 percent in 1981. Table 2 shows that the rate of increase in the consumer price index (CPI) has declined further in the first quarter of 1982 to a 3.2 percent annual rate.

Fluctuations in the CPI do not necessarily measure long-run trends in the aggregate of prices because of the volatility of

## Table 1

### Nonfinancial Corporate Cash Flow and Debt Service for Selected Periods a/

| | | 1974 | 1975 | 1979 | 1980 | 1981 b/ | 1981 b/ I | 1981 b/ II | 1981 b/ III | 1981 b/ IV | 1982 c/ I | 1982 c/ II |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $ billions | Nonfinancial Corporate Cash Flow d/ | 79.6 | 114.0 | 177.1 | 187.8 | 225.2 | 215.8 | 222.1 | 231.0 | 231.8 | 231.2 | 230.9 |
| $ billions | Net Interest Paid on Debt (Debt Service Costs) | 29.7 | 30.8 | 43.9 | 52.4 | 62.5 | 55.0 | 61.2 | 65.7 | 68.1 | 70.5 | 72.6 |
| Percentages | Debt Service as a Percentage of Cash Flow (%) | 37.3 | 27.0 | 24.8 | 27.9 | 27.8 | 25.5 | 27.6 | 28.4 | 29.4 | 30.5 | 31.4 |
| Percentages | Short-term Debt as a Percentage of Total Debt (%) | 37.5 | 36.0 | 39.1 | 39.8 | 41.0 | 39.7 | 40.5 | 41.6 | 42.2 | 42.7 | 43.3 |

a/Data are for years in the current and previous two business cycles.

b/Data for 1981 are presented both in quarterly and annual form.

c/Data for the first two quarters are presented for 1982.

d/Reflects undistributed profits plus inventory valuation adjustments plus capital consumption allowances.

Source: U.S. Department of Commerce, Survey of Current Business.

Table 2

Selected Measures of Inflation
1979-82
(annual percentage rate of change)

| | 1979 | 1980 | 1981 a/ | 1981 a/ I | 1981 a/ II | 1981 a/ III | 1981 a/ IV | 1982 a/ I | 1982 a/ II |
|---|---|---|---|---|---|---|---|---|---|
| Consumer Price Index | | | | | | | | | |
| All items b/ | 11.3 | 13.5 | 10.4 | 11.0 | 7.8 | 11.8 | 7.8 | 3.2 | 4.6 |
| Excluding food, energy, and home purchases and finance c/ | 7.3 | 9.0 | 9.5 | 8.6 | 9.1 | 10.9 | 9.4 | 6.3 | - |
| Implicit Gross National Product Price Deflator d/ | 8.5 | 9.3 | 9.4 | 10.9 | 6.8 | 9.0 | 8.8 | 4.3 | 5.3 |
| Implicit Price Deflator for Personal Consumption Expenditures e/ | 8.9 | 10.3 | 8.6 | 8.3 | 7.3 | 8.2 | 7.0 | 5.0 | 3.6 |

a/Data for 1981 are presented both on a quarterly and annual basis. Data for 1982 are available for the first two quarters.

b/For a description of the CPI for all items see footnote 1, page 16.

c/The "stripped" CPI figure is computed by excluding food, energy, and home purchases and finance from the CPI figure for all urban dwellers.

d/For a description of the Implicit GNP Price Deflator see footnote 1, page 16.

e/The Implicit Price Deflator for Personal Consumption Expenditures is computed in the same manner as the Implicit GNP Price Deflator. Only the personal consumption component of GNP is used to compute this figure.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics.

several of its components, notably food and energy prices, and because of its distorted treatment of housing costs. Some prefer to deal with this problem by eliminating these volatile items from the index and examining what they call the "underlying" rate of inflation. By using this measure, the 1980 rate of inflation was 9.0 percent. It increased to 9.5 percent for 1981, then declined to a 6.3 percent annual rate for the first quarter of 1982.

To avoid the shortcomings of the CPI, economists frequently use a more broadly based price index such as the implicit GNP deflator. 1/ This measure shows a decline comparable to that of the CPI (see table 2). From a 9.3 percent and 9.4 percent increase in 1980 and 1981, the implict GNP deflator rose at only a 5.3 percent annual rate based on data for the second quarter of 1982.

These recent reductions in inflation, however, do not necessarily indicate a trend. Whether further reductions can be sustained is uncertain. There is some reason to believe that the gains to date have been the easiest and that further improvements will be slower to come and harder to achieve. First, some of the recent gains have been due to weak food and energy prices. The short-run behavior of these two categories, which is difficult to predict, is heavily influenced by weather and developments in world oil markets. A healthy economic rebound that spreads worldwide could put enough pressure on oil prices to quickly reverse the recent slide. Indeed, some upward pressure is already evident in recent data.

Second, some of the weakness in prices may be attributable to the inventory-trimming efforts by manufacturers and home builders. As the recession has deepened, the interest cost of holding inventories has remained high. Firms caught with excess inventories are likely to cut prices and production to reduce stocks. The current sell-off of inventories has been a striking

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1/This index differs from the CPI in a number of ways. The CPI measures changing living costs for households based on price changes of about 400 consumer items. The GNP deflator is a broader measure, taking into account a wider range of goods including investment goods, inventories, and government purchases. In addition, the GNP deflator accounts for shifts in the components of GNP between consumption, investment, government, and the foreign sector. The CPI, on the other hand, represents a fixed sample of goods and services for a given period. The sample was last revised in 1972.

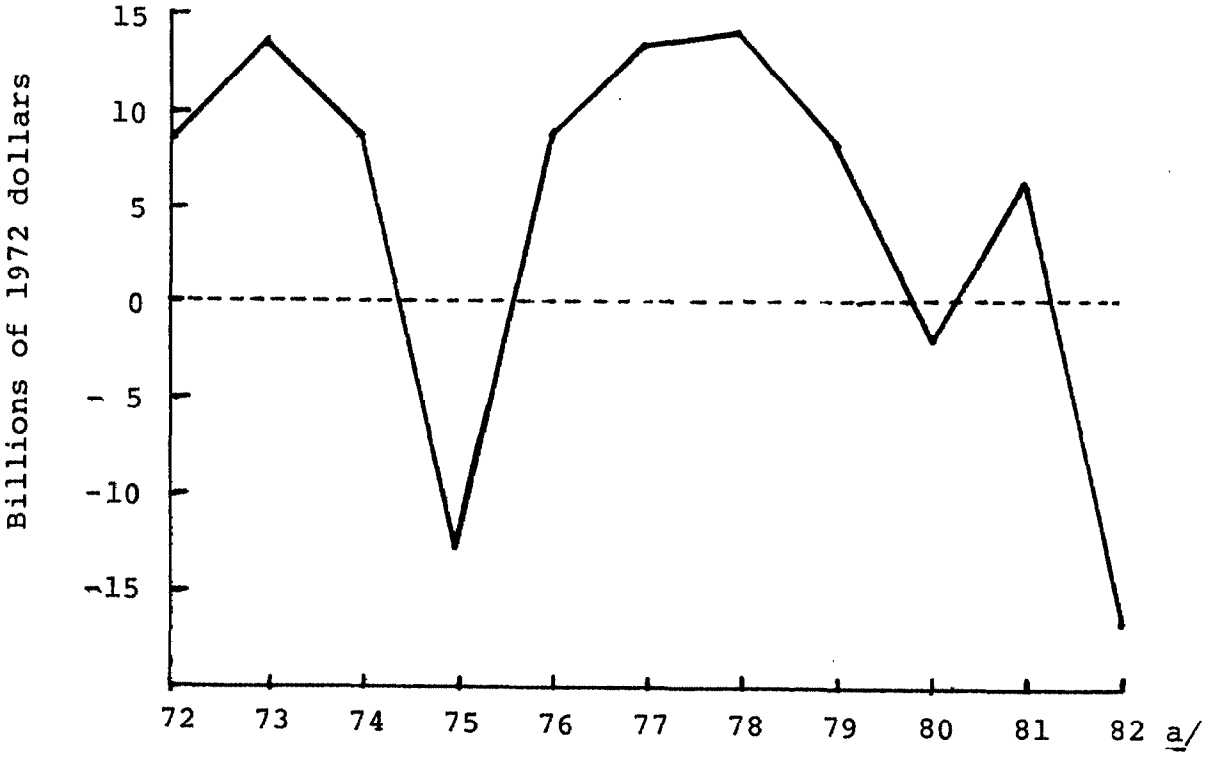
The GNP deflator, like the CPI, includes measures of food and energy prices. It does not measure housing costs in the same fashion.

feature of recent data. Indeed, as shown in figure 3, the decline in inventories registered in the first quarter of 1982 was the largest on record.

Third, because labor costs compose approximately two-thirds of the total production costs in the private sector, a sharper deceleration in per unit labor costs must occur if the recent gains in inflation are to continue. The rate of increase in nominal wage rates has decelerated somewhat, but far less than product prices in general. The widely publicized union concessions, while important, have occurred in only a few key industries. While these concessions have begun to produce some decline in the rate of increase of wages, the aggregate compensation data are still growing.

Figure 3

Change from Previous Year in Nonfarm Business Inventories




a/First quarter data for 1982 calendar year seasonally adjusted at annual rate.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

As indicated in table 3, over the four quarters ending in June 1982, total hourly compensation in the private business

## Table 3

## Selected Measures of Compensation and Labor Costs, 1979-82
(annual percentage rate of change)

| | 1979 | 1980 | 1981 a/ | 1981 a/ I | 1981 a/ II | 1981 a/ III | 1981 a/ IV | 1982 a/ I | 1982 a/ II |
|---|---|---|---|---|---|---|---|---|---|
| Hourly Compensation b/ (private nonfarm business, all persons) | 9.3 | 10.2 | 9.7 | 11.8 | 7.1 | 9.0 | 7.3 | 10.1 | 6.2 |
| Unit Labor Costs c/ (private nonfarm business) | 10.7 | 11.2 | 8.1 | 6.6 | 8.6 | 9.3 | 11.2 | 7.4 | 3.8 |
| Hourly Earnings Index d/ | 8.0 | 9.0 | 9.1 | 9.3 | 8.5 | 8.5 | 7.3 | 6.5 | 6.1 |
| Employment Cost Index e/ (for private wages and salaries) | 8.0 | 9.2 | 9.1 | 9.3 | 9.3 | 9.1 | 8.8 | 8.1 | 7.1 |

a/Data for 1981 are shown both in quarterly form and at annual levels. Data for 1982 are available only for the first two quarters.

b/Hourly compensation is computed for all employees in the nonfarm business sector of the economy (including estimates for the self-employed). It covers wages and salaries, other labor income (such as pension benefits), and employer's contribution for social insurance. It is not adjusted for any changes in the mix of employment. Quarterly data is seasonally adjusted at annual rates.

c/Unit labor costs measure the labor compensation cost required to produce one unit of output and is derived by dividing compensation by output. Quarterly data is seasonally adjusted at annual rates.

d/The Hourly Earnings Index is calculated from the average hourly earning series. It adjusts these data to exclude the effects of fluctuations in overtime premium pay and shifts in the employment mix between low and high wage industries. Average hourly earnings are derived by dividing payrolls by total hours. No adjustment is made for premium pay for overtime and late-shift work. The earning series does not cover irregular bonuses, retroactive items, and payroll taxes paid by employers. Data only cover production workers, construction workers, and nonsupervisory employees.

e/The employment cost index covers both supervisory and nonsupervisory workers and measures changes in pay rates of a standardized mix of labor services. Quarterly data show 12-month changes for the last month of the quarter. Annual data are averages of the four quarter percentage changes.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

sector rose at an 8.15 percent annual rate. 1/ While this rate is lower than the near 10 percent rates averaged for all of 1980 and 1981, it is still quite high. In combination with languishing and recently falling productivity, these wage gains have resulted in increases in unit labor costs that remain at 7.93 percent on an annual basis from the third quarter of 1981 through the second quarter of 1982.

Continued increases in labor costs in the face of softening final product prices have been an important factor in the decline in corporate profitability. Profits in the first quarter of 1982 show a decline of over $53 billion since the first quarter of 1981 level of $203 billion. In contrast, the drop in profits during the recession of 1974-75 was only $15.6 billion.

The corporate sector cannot continue to pay for reduced inflation through lower profits. If the inflation improvements are to be sustained, they must be accompanied by a restoration of corporate profitability. Some business analysts have argued that the decline in corporate profits is a cyclical phenomenon that will be offset by gains as the economy recovers. Such profit gains must result from some combination of firming product prices, reduced labor costs, and an increase in sales volume. If they merely result from increasing product prices as the economy recovers, our recent inflation gains will be short-lived. If they result from slower labor cost increases due to normal procyclical productivity gains or to slowed increases in wages, the recent gains against inflation may continue.

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1/A portion of the fourth quarter, 1981, to first quarter, 1982, increase in hourly compensation is attributable to a change in Social Security taxes. The Bureau of Labor Statistics estimates that after adjusting for the increase in Social Security taxes, the fourth quarter to first quarter rise in hourly compensation declines from 8.2 percent to 7.6 percent. Similarly, the rise in unit labor costs declines from 9.0 percent to 8.4 percent. (These figures may not agree with figures in table 3 because of revisions in NIPA and related figure computations completed by the Department of Commerce in May 1982. These newly computed figures are represented in table 3. The revised data does not affect the amount attributable to Social Security tax changes.) In addition, other measures of labor costs indicate a continuing increase in compensation. The employment cost index for the first quarter, 1982, shows an increase of 8.1 percent over first quarter, 1981, while the quarter-to-quarter change (fourth quarter, 1981, to first quarter, 1982) is 1.7 percent (not shown in table 3). Of this, only 0.1 percentage point is attributable to the Social Security tax increase. In other words, a 1.6 percent increase would have occurred even if there had been no change in Social Security payments. The employment cost index is adjusted for possible changes in average weekly hours.

## INTEREST RATES AND THE CURRENT BUSINESS CYCLE

A noticeable phenomenon over the past two decades has been that the rising long-term trend in all nominal interest rates roughly parallels the rising long-term trend in the rate of inflation. However, these rates are not necessarily relevant to decisions to save and to invest or add to the Nation's capital stock. Take for example, a typical home buyer who is willing to take out a mortgage at 10 percent in anticipation of a rise in housing prices of 7 percent per year. Such an individual would regard himself as paying a "real" rate of 3 percent. Should the nominal mortgage rate rise to 13 percent while the expected rise in housing prices advanced to 10 percent, the home buyer would still face a real interest rate of 3 percent and presumably his decision to purchase the house would be unaffected. Therefore, the real rate of interest is relevant to the decisions of households and businesses to save and invest. 1/

When the rate of inflation is high, nominal interest rates are also likely to be very high, but this need not imply high real interest rates. High nominal rates can coexist with low real rates. Indeed, when viewed after the fact, real interest rates have been close to zero, or even negative at times, during the 1970s, despite relatively high nominal rates.

Even though nominal interest rates have shown a rising long-term trend, they also display a distinct cyclical pattern. They tend to fall in the downswing of the business cycle and rise in the upswing. Do the cyclical patterns of real interest rates follow the same pattern as nominal rates? Generally they do but there is no mechanical connection between nominal and real rates. Unfortunately, while we can observe nominal rates we cannot observe real rates. Trying to measure real interest rates is no easy task because it involves estimating the public's expectation of inflation which cannot be directly observed. One way to calculate a real rate, admittedly imperfect, is to say that present expectations of inflation depend on the current and past actual rates of inflation. Using this approach, which is probably not too bad for short-term rates, a real short-term interest rate series is shown for the last three complete business cycles in figure 4. These estimates of real rates conform to the general expectations of economic theory, i.e., the fall in the downswing and rise in the upswing. 2/

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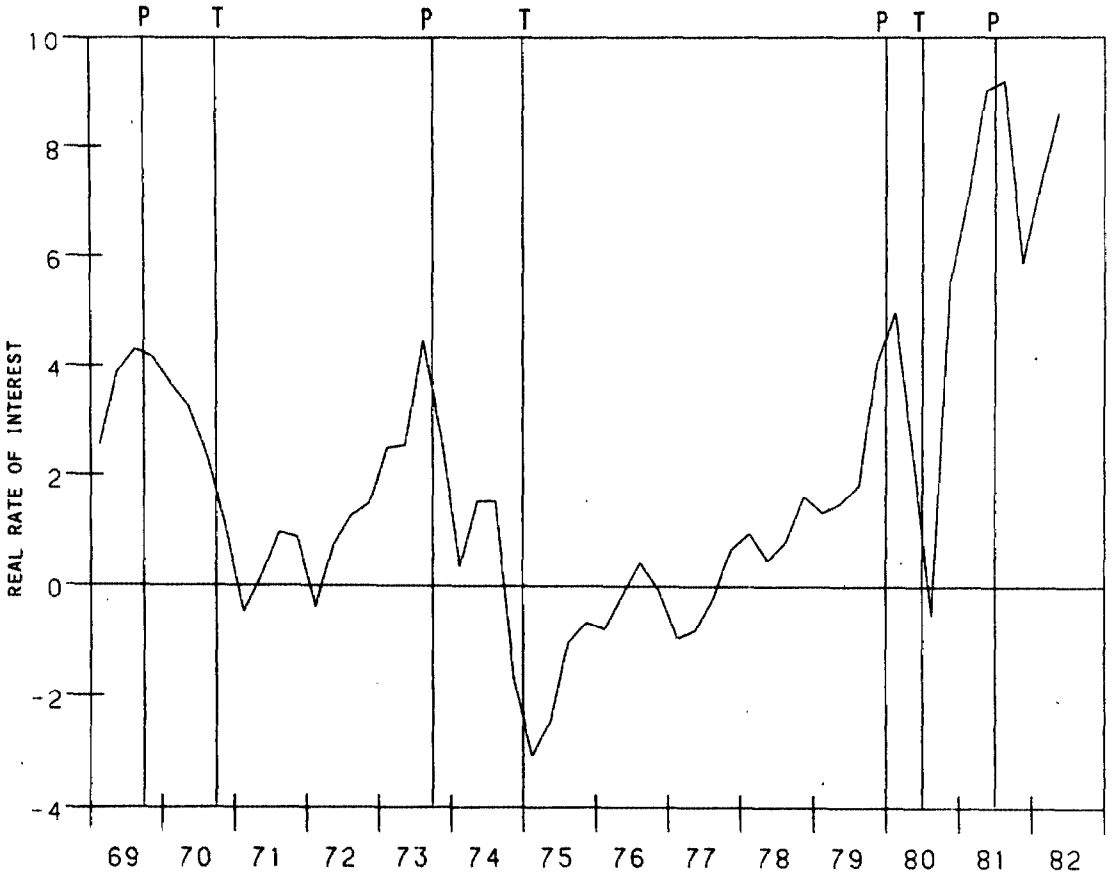
1/As a practical matter, tax considerations would also play a role in the purchase decision, and therefore, tax rates can influence real rates of interest.

2/The data shown in figure 4 must be regarded as only an approximation to the true real rate since they measure the real rate of interest after the fact. What is relevant for decisions to save and invest is the anticipated rate of interest.

## Figure 4

## Real Short-Term Interest Rates a/ and the Business Cycle b/ 1969-82




Last data plotted: second quarter, 1982.

a/The real short-term interest rate is calculated by DRI as the Federal funds rate minus a four-quarter moving average of the implicit price deflator for personal consumption expenditures.

b/The peak of the business cycle is designated by P. The trough is designated by T.

Sources: National Bureau of Economic Research; Data Resources, Inc.

During the current cycle, the behavior of the short-term real rate appears to be somewhat unusual. More particularly, the real rate has remained at historically high levels despite the emergence of substantial economic slack. Most recently, there appears to be some downward movement in the short-term real rate, but it is too early to tell how significant this will be.

## CHAPTER 3

## MONETARY POLICY

Monetary policy, as formulated and implemented by the Federal Reserve, plays a key role in determining the pace of economic activity. By influencing the availability of money and credit, Federal Reserve policies affect interest rates, employment, inflation, and economic growth.

The Federal Reserve uses three tools to affect the supply and cost of money and credit: open market operations, reserve requirements, and the discount rate. In open market operations, the most important tool, the Federal Reserve purchases and sells primarily Federal Government securities. Other things equal, purchases add to bank reserves and lower interest rates, thus increasing private sector spending and lending activity. The net result is an increased economy-wide demand for goods and services. By changing the reserve requirements (the cash assets member banks are required to hold against their deposit liabilities), the Federal Reserve increases or decreases the amount of money those banks can lend. The third, and least important tool, is used by the Federal Reserve to change the interest (or discount) rate it charges financial institutions who borrow from it. Traditionally, the discount rate has been seen primarily as a signal of the direction of monetary policy.

Presumably, at any one time, these three tools help to control the total flow of money spending (or nominal GNP) so that the traditional goals of high employment, price level stability, and economic growth may be achieved. The current economic situation demonstrates that there may be great difficulty in achieving these goals simultaneously.

### FORMULATING MONETARY POLICY

For much of its existence, the Federal Reserve measured its policies by the behavior of short-term market interest rates. High or rising market interest rates signaled a restrictive monetary policy which, if pursued, would lead to a decline in money spending, employment, real output, and the rate of inflation. Low or falling market interest rates suggested a policy of monetary ease with the opposite results.

In October 1979, the Federal Reserve formally announced that in the formulation of monetary policy greater emphasis would be placed on controlling the growth in the monetary aggregates. To accomplish this, it announced a change in day-to-day procedures which reduced the role of short-term movements in the Federal

funds rate as an operating guide. 1/ Instead it proposed to operate on bank reserves to achieve a more accurate control of the monetary aggregates.

The 1979 change in operating procedures was not implemented without opposition. There were several criticisms: that these procedures can limit the Federal Reserve's flexibility; that little evidence exists to suggest that using bank reserves rather than interest rates would yield superior control of the monetary aggregates; that one cannot adequately define money; and that control of the money supply, however defined, will not necessarily yield a certain level of money spending, the object of monetary policy. 2/

Coincident with this change in operating procedures, the Federal Reserve began to place more emphasis on achieving price level stability. In early 1982, it declared:

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1/There is some contention over whether the 1979 announcement signaled a radical new departure in Federal Reserve operating procedure. The evidence suggests that the monetary aggregates were being used with increasing frequency during the 1970s by the Federal Reserve in formulating its policies. Nevertheless, the Congress felt compelled to ask the Federal Reserve to publicly state its growth targets for the monetary aggregates. It gave formal expression to these concerns in 1975 when it passed House Concurrent Resolution 133, later incorporated in the Federal Reserve Reform Act of 1977, which required the Federal Reserve to prepare and report to the Congress periodically on the planned growth rates of the principal monetary aggregates. Substantial evidence indicates that between 1975 and 1979 the Federal Reserve did not entirely cease to use market interest rates as a guide to policy.

2/The criticisms made reference to the following: (1) during the 1970s many new instruments arose for making transactions (e.g., automatic transfer from savings services, NOW accounts, and credit union share drafts); (2) high interest rates induced several innovations, enabling business to conduct the same volume of transactions with less conventional money (e.g., cash concentration account, and improved cash flow management); and (3) a number of devices were created by financial markets to enable more spending with the same amount of conventional money (e.g., repurchase agreements, Eurodollar deposits, money market mutual funds, etc.). These innovations have made it increasingly difficult to define or to estimate with precision the relationship between any money measure and money spending. The Federal Reserve has responded by redefining the monetary aggregates four times in the last 4 years.

"Confidence in the restoration of reasonable overall price stability is needed if economic growth is to be resumed on a sustained basis. The accelerating inflation of earlier years had been eroding the foundations of the Nation's economy: capital formation had slowed; productivity was sagging; the functioning of basic market mechanisms was being impaired; and inequitable and capricious transfers of wealth were harming many of the weakest among us . . . economic theory and experience alike indicate that progress toward price stability cannot be obtained without adequate restraint on the growth of money and credit."

The greater emphasis on pursuing price level stability under current policy has led to tight money conditions. Even if the Federal Reserve had continued to formulate its day-to-day monetary policy objectives in terms of interest rates, it would have had to let the rates rise if it were to attempt to curb inflation.

## CURRENT PROGRESS OF MONETARY POLICY

The Federal Reserve's targets for M1 and M2 over the last 4 years are shown in table 4. M1 is a measure of money which includes currency in circulation and checkable deposits supplied by commercial banks, savings and loan associations, mutual savings banks, and credit unions. M2 includes M1 plus saving and small time deposits (under $100,000) of all depository institutions, overnight repurchase agreements, and the liabilities of money market mutual funds. 1/

As table 4 demonstrates, the Federal Reserve has been reducing the growth rate of M1. The growth rate from 1979-80 to 1981 was reduced rather drastically. By using shift adjusted data, one can see that the reduction was almost 70 percent; using nonshift adjusted data results in a more modest decline of 30 percent. 2/ The growth rate of M1 thus far in the 1981-82 target year is very near the upper target range of 5.5 percent. This result is a bit of an accounting quirk because most of that growth occurred during November and December of 1981. During

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1/The rationale for the relationship of the M1 to the M2 range is not given. However, it can be rationalized in the following way. The turnover or spending rate of M1 (relative to GNP) has been rising at an average of about 3 percent per year since 1960. M2, on the other hand, shows no such trend. In fact, its turnover rate has been fairly constant. Hence, the same monetary effect should be achieved if M2 grows about 3 percent faster than M1.

2/The distinction between shift adjusted and non-shift adjusted data is explained in note c/ of table 4.

Table 4

Proposed and Actual Growth of Monetary Aggregates, 1979-82

| Aggregate | Proposed Range a/ (percentage) | Actual Growth Rate a/ (percentage) |
|---|---|---|
| 1979 M1 b/ | 3.0-6.0 | 7.4 |
| M2 | 5.0-8.0 | 8.4 |
| 1980 M1B b/ | 4.0-6.5 | 7.3 |
| M2 | 6.0-9.0 | 9.2 |
| 1981 M1B | 3.5-6.0 c/ | 2.3 c/ |
| M2 | 6.0-9.0 | 9.5 |
| 1982 M1 d/ | 2.5-5.5 | -- d/ |
| M2 | 6.0-9.0 | -- d/ |

a/Fourth quarter to fourth quarter.

b/In 1979, M1 measured only currency in circulation outside of commercial banks, and the Federal Government and adjusted demand deposits of commercial banks. In 1980, the checking deposits supplied by savings and loan associations, mutual savings banks, and credit unions were included. This new aggregate was designated M1B; in 1982, it was redesignated M1.

c/When the Monetary Control Act of 1980 authorized nationwide interest-paying NOW accounts, the Federal Reserve, concerned that shifts of savings deposits to NOW accounts would give the false impression of a large growth in M1B, adjusted M1B to remove these "shifted" deposits. The nonshift adjusted range was 6.0 percent to 8.5 percent with an actual growth of 5.0 percent.

d/The current rate of growth of M1 is less than 5.5 percent; for M2 it is slightly above 9.0 percent.

Source: Board of Governors of the Federal Reserve System.

the first 7 months of 1982, M1 has shown very little growth. 1/ Should this continue, money and credit conditions can be expected to experience further tightening. In any event, monetary policy, as measured by the growth of M1, is still tighter than it was in 1979-80.

Total money spending, the object of Federal Reserve concern, depends not only on the monetary aggregates, but also on how frequently money is turned over or spent during the year. This turnover rate is frequently called the velocity of money (where V = GNP/M). From 1969 to the end of 1980, the M1 turnover rate rose on average slightly more than 3 percent per year. This rise in turnover is shown in figure 5. The turnover rate of M2 does not display such a trend and has remained virtually constant over the past two decades. However, as with many historical relationships, the velocity of money has shown variation over time. One measure of this variability is shown in figure 5 as the percentage change of M1 velocity. Rapid growth in M1 velocity has usually been associated with a sharp rise in nominal interest rates; as rates rise individuals and business have an incentive to hold money for less time. However, on some occasions, a ready explanation for the change is not immediately obvious.

Recently, velocity has declined. Changes in velocity over time obviously complicate the task of the monetary authorities in influencing the pace of economic activity by controlling the supply of money.

INTEREST RATES

The other indicator of the posture of monetary policy (other than monetary aggregates) is the interest rate level--especially short-term rates. Earlier we distinguished the real or inflation adjusted interest rate from the nominal rate. As we noted, one of the salient features of the current recession is the failure of real and nominal interest rates to follow historical patterns

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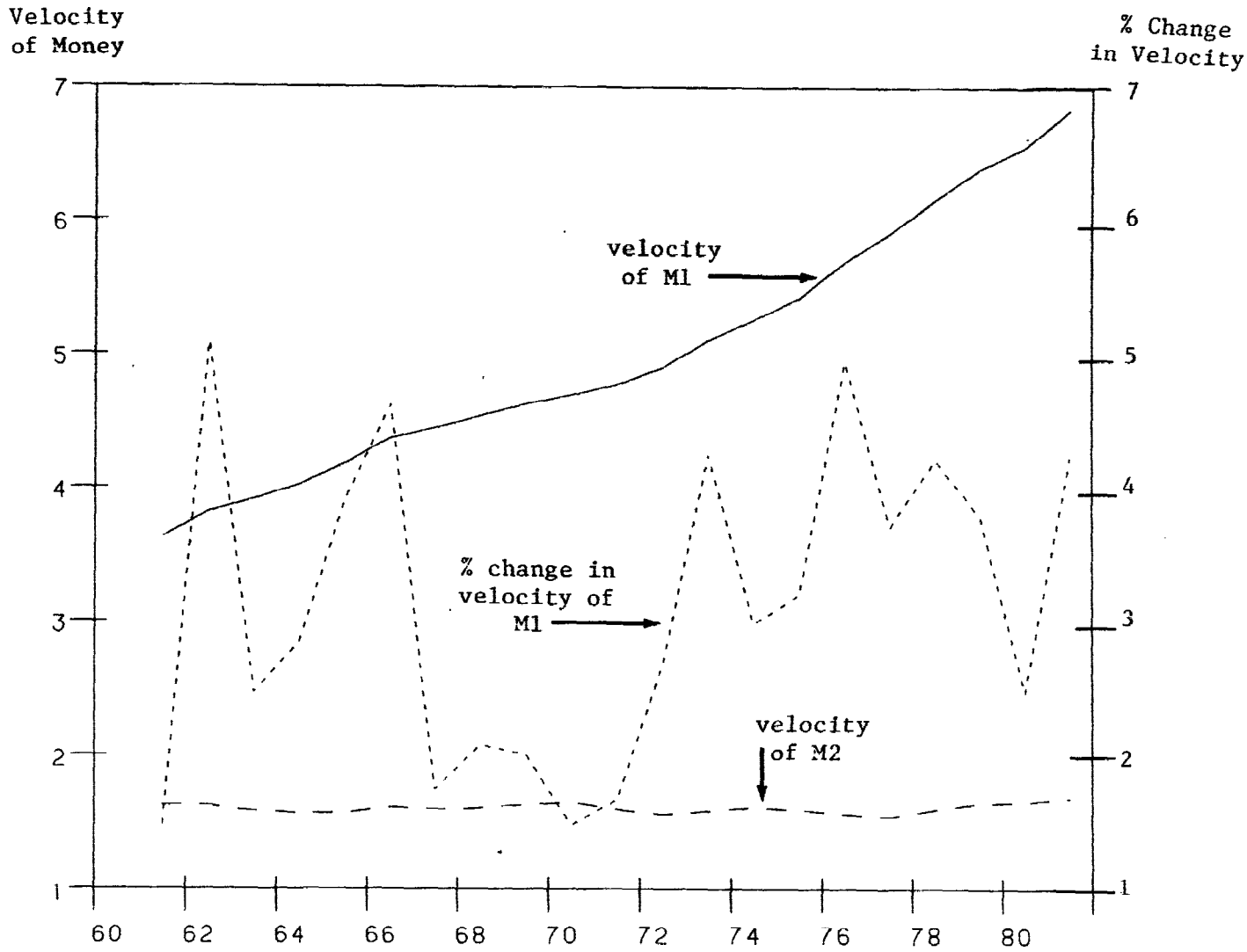
1/Many economists who believe that the thrust of monetary policy is most appropriately measured by the growth in monetary aggregates prefer to look at an aggregate for which the Federal Reserve does not set a growth range--the monetary base. It consists of the total reserves of the banking system and the amount of currency held outside the banking system. The entire money and credit system is built upon this base.

Using fourth quarter to fourth quarter data, the growth rate of the base was 8.1 percent in 1979, 8.2 percent in 1980, and 4.3 percent in 1981. Using data for the first 6 months of 1982, the rate of growth has accelerated on an annual basis to 10.0 percent.

## Figure 5

## Velocity of Money, 1960-81



of decline during recessions. Instead, they have remained at historically high levels.

Some economists attribute the high interest rates, both nominal and real, to tight credit conditions induced by the tight monetary policy. To reduce the rate of inflation, the Federal Reserve has slowed the growth of monetary aggregates by restricting the growth of bank reserves. This constraining of the growth of bank reserves has decreased the growth of credit availability relative to its growing demand, sustaining high real short-term interest rates. Thus, even though current lenders and borrowers may expect the short-run inflation rate to decline and would be willing to lend and borrow at a lower rate, the monetary policy needed to produce the continued decrease in inflation is contributing to high short-term real rates.

The explanation for continued high long-term rates is subject to greater disagreement. Given the difficulty of measuring long-term real rates, the disputes are really centered on the continuation of high nominal long-term rates. In fact, one possible explanation is that recent declines in inflation are not reflected in comparable declines in long-run inflationary expectations. 1/ A possible reason for this relates to the size of the outyear budget deficits. These large deficits give rise to a fear that pressure may be brought to bear on the Federal Reserve to ease their financing by easing money market conditions. In addition, since the deficits are large and a growing fraction of expected GNP, they may lead to the expectation that future short-term rates will remain high and can serve to prop up current long-term rates.

An additional cause frequently offered concentrates on the volatility in the growth of the monetary aggregates. Even though the trend of monetary aggregate growth is downward, great variation exists in the growth rate about this trend, contributing to uncertainty in future interest rates and, indeed, in the overall course of monetary policy. To compensate for this, lenders demand a "risk premium." This risk premium is incorporated in the real interest rate. Thus, in a period when we might expect interest rates to decline because of a fall in inflationary expectations, the see-saw pattern of growth in the money supply has resulted in an increase in the risk premium in the real interest rate structure that prevents both nominal and real long-term rates from declining.

Whether one uses the growth of the monetary aggregates or real interest rates, the evidence suggests that monetary policy is tight.

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1/If this view is correct, long-term real rates are lower than commonly supposed.

## CHAPTER 4

## FISCAL POLICY

Like monetary policy, fiscal policy plays a role in determining the pace of economic activity. Changes both in Federal expenditures and tax rates influence the growth of the economy-wide demand for goods and services. In addition, because of the tax rate structure and the nature of some expenditures, changes in the economy also influence the size and composition of the Federal budget.

The current and projected budget deficits are the result both of the current and anticipated future course of economic growth and the policy choices made by the Congress and Administration over the past 18 months.

### CURRENT FISCAL POLICY

Two principal elements underlie the policy choices made over the past year and a half. First is a desire to reduce the size of the Federal Government relative to the private sector. Second is a desire to alter the tax structure to increase the incentives of individuals and businesses to work, save, and invest. To achieve these goals, the Government has attempted to reduce the rate of growth of outlays on the expenditure side, as well as to reduce the rate of growth of tax rates and change the composition of taxes on the revenue side. For several reasons, the Government has been more successful cutting tax rates than cutting expenditures.

The Administration's policy choices were based on a belief that the large size of the Government sector relative to the total economy was depriving the private sector of resources needed for private capital formation and productivity increases. The thesis was that shifting these resources to the private sector would enhance real growth.

The Administration also argued that the taxes necessary to support the growth in Federal expenditures were having a substantially negative effect on private investment, savings, and work effort. Reducing personal and business taxes were, therefore, seen as a means to raise investment, saving, and the desire of individuals to work. This emphasis on incentives was a primary feature of the Administration's program. In the past, the rationale for reductions in personal taxes stressed the potential for stimulating the economy-wide demand for goods and services directly by increasing disposable income. In contrast, the Administration played down this type of deficit-induced demand stimulation and stressed instead the expected supply-side effects

of its tax-rate reductions on raising gross national product, the tax base, and revenue flowing to the Federal treasury. 1/

Critics argued that no prior experience existed to justify the magnitude of the supply-side expectations of the Administration, i.e., that incentive effects would be large enough to substantially reduce the deficits associated with the tax cuts. They argued instead that these cuts would likely lead to a substantial budget deficit and an expansionary fiscal posture. To support their arguments, they noted that while the cuts in personal income taxes appeared large, they would do little more than offset past inflation-induced increases in taxes (i.e., so-called bracket creep), implying very small supply-side effects. Furthermore, increases in payroll (Social Security) taxes would also tend to offset the stimulus of the individual tax cuts. As figure 6 shows, the net tax reduction will be small and short-lived, at best. 2/

Critics were also skeptical of the effectiveness of the new accelerated cost recovery system (ACRS) for tax depreciation. Indeed, the Council of Economic Advisers criticized the ACRS

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1/The personal tax rate reductions are to be accomplished primarily through three modifications of the tax law. First personal tax rates are to be cut by 25 percent over 3 years. Second, the top marginal rate has been cut from 70 percent to 50 percent for unearned income (thus equating the top marginal rates for earned and unearned income). Third, beginning January 1, 1985, the personal income tax is to be indexed for inflation, thus eliminating bracket creep as a source of increasing revenue for the Government and higher rates for individuals.

Lowering the top marginal rate for income from capital from 70 percent to 50 percent also is intended to stimulate increased savings, as is the increased eligibility for participation in tax-deferred individual retirement accounts (IRAs), and improved tax breaks for other retirement savings.

The cornerstone of the corporate tax reductions is the new accelerated cost recovery system (ACRS) for tax depreciation. The ACRS groups assets into four classes with tax lives that vary from 3 years for autos and some other types of equipment to 15 years for most structures. Another provision of the Economic Recovery Tax Act of 1981 allows firms that are unable to fully use the investment tax credit and ACRS deductions to sell them to other firms through "safe harbor leasing" arrangements.

2/Of course, without the tax rate reductions, taxes would have risen substantially due to bracket creep.

(in combination with the investment tax credit) insofar as investment decisions were distorted by differential tax treatment of various classes of investment goods. This system is supposed to lower the tax burden on income from assets by speeding up the period over which an asset can be depreciated for tax purposes. First, the critics say that ACRS accords differential tax treatment among assets. Second, ACRS is not neutral with respect to inflation (i.e., tax burdens rise with inflation). These factors alone can cause large misallocations of investment patterns and lead to a lower growth rate in productivity and real output. Furthermore, the positive incentives of ACRS on capital formation appear to be overwhelmed by current high real interest rates.

Regardless of the anticipated effects of the tax reduction program, as it has been enacted so far it has contributed to a series of large and seemingly intractable current and future deficits, even in the Administration's own projections.

## CURRENT PROGRESS IN FISCAL POLICY

The Administration's original fiscal program, delivered on February 18, 1981, was developed in anticipation of a tighter monetary policy, one in which "...the rate of money and credit growth will be brought down to levels consistent with noninflationary expansion of the economy." 1/ Monetary restraint was apparently expected to reduce inflation while the supply-side tax cuts together with spending reductions would spur real output growth. This combination of monetary and fiscal policy did not work as anticipated. Partly as a result of the current recession and partly as a result of fiscal policy choices, the tax base has been reduced, tax rates cut, and outlays (mainly for transfers, defense, and interest payments) have risen. Federal outlays as a percentage of gross national product are, therefore, expected to approach 24 percent in fiscal year 1982, rising from the previous high of 23 percent in fiscal year 1981.

The existence and/or size of the deficit is often used to indicate the thrust of fiscal policy--whether it is stimulative or not. Unfortunately, the figure showing the actual difference between Government receipts and outlays--the deficit--does not really measure the nature of fiscal policy at any one time. Both expenditures and tax receipts vary with the condition of the economy. Thus, a high level of unemployment will be accompanied by an increase in outlays and a reduction in revenues as personal income and corporate profits fall. A budget that would be in balance near full employment would be thrown substantially into deficit by the recession. The high-employment surplus or deficit

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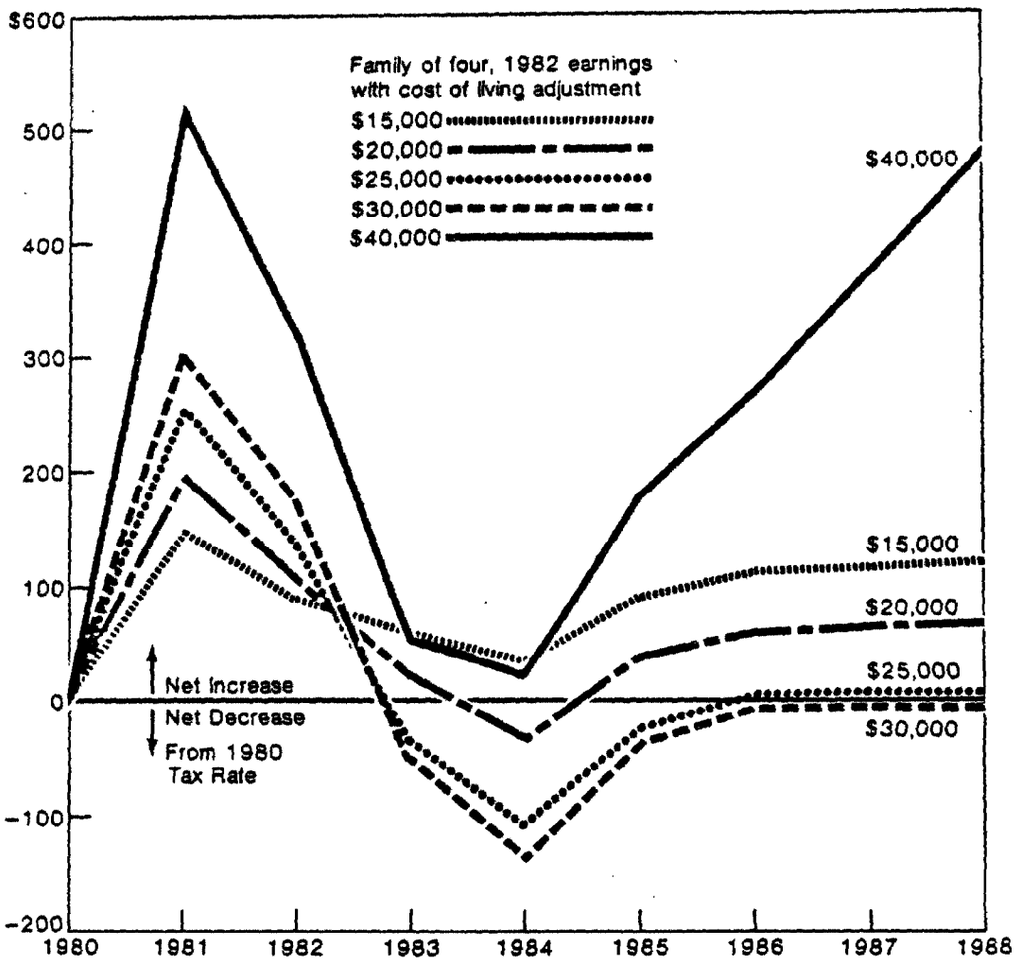
1/ A Program For Economic Recovery (February 18, 1981), p. 22.

Figure 6

Net Tax Change:
Bracket Creep Plus Payroll Tax Increases
Less Tax Cut Under the Economic Recovery Tax Act a/




a/The inflation estimates used to generate this figure are in the Administration's 1983 budget. The estimates for 1982 through 1987 are: 6.6 percent, 5.1 percent, 4.7 percent, 4.6 percent, 4.6 percent, and 4.4 percent.

Note: Significant reductions in inflation below the projections in footnote a/ would have the effect of reducing taxes by more than is shown. The Treasury Department indicates that the dollar change would not be large for each one percentage point reduction in inflation below the estimates.

Source: U.S. Department of the Treasury.

provides a better measure of the actual thrust of discretionary fiscal policy that is unaffected by the employment and income changes that occur over the business cycle. In calculating this measure of fiscal policy, one needs to make adjustments for recession-induced changes in both revenues and expenditures. The remaining deficit or surplus provides a consistent and comparable measure of fiscal thrust, irrespective of the current phase of the business cycle. Table 5 shows the variation which has existed among four different commonly used measures of the Federal Government deficit since 1970.

The actual fiscal year 1981 deficit (total on- and off-budget) of $78.9 billion, although quite large by historical standards, is only $0.8 billion when converted to a high-employment basis. This low annual figure, however, masks the changes in the high employment deficit that occurred in the latter part of the year. Looked at by quarters, the high-employment deficit went from $1.3 billion (on an annual rate) in the first quarter of 1981, to surpluses of $10.6 and $4.3 billion in the second and third quarters. In the fourth quarter, however, the budget swung sharply to a deficit of $24.0 billion (at an annual rate). Preliminary figures for the first quarter of 1982 show the high-employment deficit declining to $0.6 billion. Since the fourth quarter of last year, there has clearly been a more stimulative fiscal policy even when adjusting for the current recession. 1/

Table 6 presents alternative budget estimates developed by the Administration and the Congressional Budget Office (CBO), based on their respective projections of economic conditions. These estimates also reflect different policy assumptions. The CBO baseline estimates are consistent with no change in policy on spending and taxing. The Administration, on the other hand, has proposed policy changes that will tend to reduce the deficit. Virtually all of the differences in these budget estimates can be accounted for by the differences in economic assumptions and policy proposals.

In table 6, outlays have been broken into four categories for simplicity: National Defense, Health and Income Security, Interest, and Other.

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1/The high employment budget deficit may not be properly measured. The proper way to measure the interest on the national debt is disputed. In an inflationary period, a portion of the interest payment actually reflects a return of capital to the lender. Thus, a portion of the sum classified as interest expense in the Federal budget really reflects a retirement of the national debt. If this portion were to be removed from the expenditures, the Federal budget would likely be in substantial surplus on a high employment basis and, therefore, fiscal policy would not be stimulative.

## Table 5

## Four Measures of the Surplus or Deficit of the Federal Government, Fiscal Years 1970-81
($ billions)

| Fiscal Years a/ | (1) Total Federal Budget and Off-Budget Surplus or Deficit (-) | (2) Unified Budget Surplus or Deficit (-) | (3) National Income and Product Accounts Federal Budget Surplus or Deficits (-) | (4) High Employment Budget Surplus or Deficit (-) |
|---|---|---|---|---|
| 1970 | - 2.8 | - 2.8 | - 6.3 | -1.5 |
| 1971 | -23.0 | -23.0 | -21.6 | -10.6 |
| 1972 | -23.4 | -23.4 | -16.3 | - 8.8 |
| 1973 | -14.9 | -14.8 | -10.6 | -13.6 |
| 1974 | - 6.1 | - 4.7 | - 6.9 | - 2.2 |
| 1975 | -53.2 | -45.2 | -58.4 | -22.6 |
| 1976 | -73.7 | -66.4 | -55.6 | -18.7 |
| 1977 | -53.6 | -44.9 | -47.0 | -19.4 |
| 1978 | -59.2 | -48.8 | -37.5 | -20.3 |
| 1979 | -40.2 | -27.7 | -13.6 | - 2.4 |
| 1980 | -73.8 | -59.6 | -52.5 | -18.0 |
| 1981 | -78.9 | -57.9 | -50.9 | - 0.8 |

a/Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal 1977. Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976, is a separate fiscal period known as the transition quarter.

Sources: Column 1 - Economic Report of the President: 1982, Table 4-4, p. 98.
Column 2 - Economic Report of the President: 1982, Table B-73, p. 318.
Column 3 - Data Resources, Inc., August 19, 1982.
Column 4 - Department of Commerce, Survey of Current Business, April 1982, p. 27.

Table 6

Alternative Budget Projections
($ billions)

| | Actual | Estimates | | | |
|---|---|---|---|---|---|
| | FY81 | FY82 | FY83 | FY84 | FY85 |
| **Administration Estimates (July 1982)** | | | | | |
| National Defense | 160 | 188 | 222 | 253 | 293 |
| Health & Income Security | 291 | 323 | 338 | 358 | 390 |
| Interest | 83 | 100 | 111 | 118 | 114 |
| Other | 123 | 121 | 91 | 83 | 79 |
| Total Outlays | 657 | 731 | 762 | 813 | 875 |
| Total Receipts | 599 | 622 | 647 | 720 | 801 |
| Deficit (-) | -58 | -109 | -115 | -93 | -74 |
| **CBO Baseline Estimates (February 1982) a/** | | | | | |
| National Defense | 160 | 190 | 214 | 238 | 263 |
| Health & Income Security | 291 | 330 | 361 | 389 | 427 |
| Interest | 83 | 102 | 127 | 154 | 172 |
| Other | 123 | 118 | 107 | 108 | 109 |
| Total Outlays | 657 | 740 | 809 | 889 | 971 |
| Total Receipts | 599 | 631 | 652 | 701 | 763 |
| Deficit (-) | -58 | -109 | -157 | -188 | -208 |
| Outlays as share of GNP (%) | | | | | |
| Administration | 23.0 | 24.1 | 22.8 | 21.9 | 21.4 |
| CBO | 23.0 | 24.2 | 23.6 | 23.5 | 23.3 |
| Receipts as share of GNP (%) | | | | | |
| Administration | 21.0 | 20.5 | 19.3 | 19.4 | 19.6 |
| CBO | 21.0 | 20.6 | 19.0 | 18.5 | 18.3 |

a/While CBO has issued more recent budget estimates, this is the latest one to include both expenditure by category breakdowns and total receipts estimates.

Note: Figures may not add due to rounding.

Source: Administration - Mid-Session Review of the 1983 Budget, July 30, 1982; CBO - Baseline Budget Projections for Fiscal Years 1983-1987, February 1982.

Several points stand out from inspection of the CBO baseline numbers:

The total outlays on average grow 10.3 percent per year. They will decline slightly as a fraction of GNP from 24.2 percent in fiscal 1982 to 23.3 percent in fiscal 1985.

The combined growth in national defense, health and income security, and interest outlays will average 12.8 percent per year. All other components of the budget will fall an average of 3 percent per year.

Receipts as a percentage of GNP will drop from 20.6 percent in fiscal 1982 to 18.3 percent in fiscal 1985.

Deficits grow to $208 billion or roughly 5 percent of GNP by fiscal 1985. 1/

The source of this widening budget gap is the very pronounced reduction in the growth of tax receipts that are scheduled under the Economic Recovery Tax Act of 1981 (ERTA). Whereas at one time it was thought possible to achieve the expenditure reductions required to offset the revenue reductions resulting from ERTA, it is now evident that the combination of large planned defense outlays, the upward bias in income security and health programs, and interest costs will make it difficult, if not impossible, to narrow the budget gap without substantial increases in taxes, reductions in spending, or both. These factors are reflected in the substantial difference between the Administration and CBO outlay estimates.

The obvious implication of table 6, given CBO's underlying economic assumptions and no change in policy, is that Federal deficits, already at a record level, will become larger over the next 4 years. This is especially troublesome, given that the economic projections on which these estimates are based show relatively strong growth. Ordinarily, recovery from recession allows a rapid reduction in the size of the budget deficit. But as can be seen from both budget estimates, the policies currently in place or envisioned seem inconsistent with reaching budget balance any time in the foreseeable future.

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1/Dr. Alice Rivlin, Director of the Congressional Budget Office, in testimony before the Senate Budget Committee on July 27, 1982, said that proposed legislation that further limits expenditures and increases revenues would probably lead to approximately level deficits in the range of $140 billion to $160 billion per year over the next few years if it becomes law. These estimates were, however, not derived from new baseline estimates, but rather were a response by Dr. Rivlin to a question about her "best guess" about future deficits if the proposed legislation were passed.

Of course, the figures in table 6 are estimates of the actual budget deficits expected by the Administration and CBO. As indicated earlier, the high employment budget deficit is a better measure of the direction and strength of fiscal policy. Table 7 shows the high employment budget deficits projected by the Bureau of Economic Analysis and the CBO. Although quite different from the figures in table 6, both project growing deficits, even corrected for recessionary budget influence. Thus, fiscal policy is seen as becoming increasingly stimulative even as we emerge from the current recession.

Table 7

High Employment Budget Deficits
($ billions, National Income and Product Accounts basis)

| | FY1981 a/ | FY1982 | FY1983 |
|---|---|---|---|
| U.S. Department of Commerce, Bureau of Economic Analysis (March 1982) | -0.8 | -6.1 | -10.7 |
| CBO (February 1982) | -0.3 | -5.7 | -43.2 |

a/Actual

## CHAPTER 5

## ALTERNATIVE FORECASTS THROUGH 1984

There is substantial diversity among forecasts of the economic outlook for the next 2-1/2 years. Some of these forecasts are relatively precise, setting forth expected rates of growth, unemployment, inflation, etc. Others are much less formal, and are expressed in terms of a general optimism or pessimism about the future course of the economy. The purpose of this chapter is to summarize that diversity, based on what we believe to be representative views from Government, the leading forecasting services, businesses, and financial institutions.

The Administration's economic estimates for the coming 18 months have undergone several revisions, each successively less optimistic and more reflective of the actual deterioration of the economy. The most recent, issued on July 30, 1982, brings the Administration in line with the much more pessimistic assessments of the leading forecasting firms.

The Administration now believes that the annual average rate of growth in real GNP during 1982 will be -0.7 percent. A recovery will take place during 1982 and real GNP will increase by 4.4 percent in 1983, and 4.1 percent in 1984. The annual average rate of inflation as measured by the CPI is expected to be only 6.7 percent in 1983 and 6.9 percent in 1984. Unemployment is expected to decline to an annual average rate of 8.4 percent in 1983 and 7.6 percent in 1984. If expected inflation is subtracted from the projected nominal Treasury bill rate, it will yield a real rate of 4.0 percent in 1983 and 1.9 percent in 1984.

### ECONOMETRIC FORECASTS

We must preface our comparison of modeling results with two caveats. First, each model has its limitations and none can be accepted as a perfect predictor of future economic conditions. Second, the assumptions used by the forecasters may differ from the Administration's. The forecasters have used their best guesses about the future mix of monetary and fiscal policies. In this sense, their projections cannot be strictly used to predict the likely outcome of the continuation of the current loose fiscal--tight monetary mix. 1/

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1/The following growth rates for M1 are assumed:

CBO - Near the the top end of the Federal Reserve's announced target range of 2.5 percent to 5.5 percent growth.

DRI - Moderate tightening in early 1983 and a reduction of M1 growth to 5.4 percent in 1983 and 4.6 percent in 1984.

Forecasts based on econometric models have been subject to a number of criticisms because the models themselves, no matter how complex they are, can only be a simplified abstraction of reality. In addition, the equations which form the essence of the model depend on past history, and they can never fully capture the fundamental forces that make an economy function. Especially vulnerable is their ability to capture the manner in which expectations are formed and changed. This shortcoming may be especially critical now when policy-induced changes in expectations are counted on to play a crucial role in the recovery. To the extent that current conditions are inadequately captured by past experience, the models may be incapable of yielding an accurate forecast.

Nonetheless, the models are the only reasonable way we have to systematically review the consistency of the economic interrelationships contained in policy pronouncements. One value of the models lies in their being able to identify the quantifiable relationships that must deviate from their projected paths in order for the forecasts to be wrong.

In making our comparison, the Administration's estimates are contrasted with the Congressional Budget Office projection and four leading forecasting firms: Data Resources, Inc. (DRI),

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(Footnote 1 continued)

Wharton - M1 growth is assumed to average 5.2 percent in 1982, 5.6 percent in 1983, and 5.5 percent in 1984.

Chase - M1 will grow 6.3 percent in 1983 and 5.9 percent in 1984.

Townsend-Greenspan - M1 will grow 6.4, 5.7, and 5.8 percent in 1982, 1983, and 1984.

In conjunction with other assumptions including those of tax rates and spending, the deficits resulting from those models are

| | Billions of dollars FY83 | FY84 | |
|---|---|---|---|
| CBO | $157 | $188 | (Unified Budget basis) |
| DRI | 135 | 122 | (Unified Budget basis) |
| Wharton | 140 | 150 | (Unified Budget basis) |
| Chase | 151 | 124 | (National Income and Product Accounts basis) |
| Townsend-Greenspan | 129 | 151 | (National Income and Product Accounts basis) |

Table 8
Forecasts of Selected Economic Variables
(Seasonally adjusted annual rate)

| | 1982:2 | 1982:3 | 1982:4 | 1983:1 | 1983:2 | 1983:3 | 1983:4 | 1984:1 | 1984:2 | 1984:3 | 1984:4 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Growth in Nominal GNP | | | | | | | | | | | | | | |
| Administration | - | - | - | - | - | - | - | - | - | - | - | 5.6 | 11.2 | 10.9 |
| CBO a/ | 5.3 | 10.1 | 11.9 | 11.2 | 9.2 | 10.0 | 11.5 | - | - | - | - | 6.5 | 12.1 | 10.9 |
| DRI | 7.1 | 9.2 | 9.6 | 8.3 | 8.8 | 11.1 | 11.4 | 9.7 | 11.7 | 12.1 | 12.4 | 5.1 | 9.2 | 11.0 |
| Wharton | 7.1 | 9.3 | 11.9 | 9.6 | 9.9 | 10.7 | 11.0 | 10.2 | 10.6 | - | - | 5.2 | 10.1 | 10.5 |
| Chase | 5.2 | 9.8 | 10.5 | 9.9 | 9.8 | 10.0 | 10.3 | 11.3 | 10.3 | 9.9 | - | 5.4 | 9.7 | 10.5 |
| Townsend-Greenspan | 5.4 | 10.1 | 11.7 | 10.0 | 9.7 | 11.2 | 10.9 | 10.6 | 10.2 | 10.0 | 8.7 | 5.4 | 10.2 | 10.4 |
| Growth in Real GNP | | | | | | | | | | | | | | |
| Administration | - | - | - | - | - | - | - | - | - | - | - | -0.7 | 4.4 | 4.1 |
| CBO | 0.7 | 4.5 | 5.9 | 4.7 | 4.3 | 4.2 | 4.5 | 4.0 | 4.0 | 4.0 | 4.0 | 1.7 | 4.4 | 4.0 |
| DRI | 1.7 | 2.1 | 3.4 | 2.3 | 2.8 | 4.8 | 4.2 | 3.4 | 4.9 | 5.1 | 4.8 | -1.4 | 3.0 | 4.3 |
| Wharton | 1.7 | 3.1 | 4.6 | 3.2 | 3.5 | 4.5 | 4.0 | 4.0 | 4.0 | - | - | -1.2 | 3.6 | 4.0 |
| Chase | 0.6 | 4.0 | 4.5 | 3.7 | 3.5 | 3.6 | 3.9 | 4.3 | 3.4 | 3.4 | - | -0.8 | 3.7 | 3.8 |
| Townsend-Greenspan | -1.7 | 4.1 | 2.8 | 3.1 | 3.2 | 3.9 | 2.8 | 3.1 | 3.0 | 3.1 | 1.1 | -1.4 | 3.0 | 3.0 |
| Unemployment | | | | | | | | | | | | | | |
| Administration | - | - | - | - | - | - | - | - | - | - | - | 9.2 | 8.4 | 7.6 |
| CBO | 9.3 | 9.3 | 9.1 | 8.7 | 8.5 | 8.2 | 8.0 | 7.8 | 7.6 | 7.5 | 7.4 | 9.1 | 8.4 | 7.6 |
| DRI | 9.5 | 9.6 | 9.3 | 9.1 | 9.0 | 8.7 | 8.4 | 8.3 | 8.1 | 7.8 | 7.6 | 9.3 | 8.8 | 7.9 |
| Wharton | 9.5 | 9.6 | 9.3 | 9.1 | 9.1 | 8.9 | 8.8 | 8.8 | 8.7 | - | - | 9.3 | 9.0 | 8.5 |
| Chase | 9.5 | 9.6 | 9.3 | 9.1 | 8.9 | 8.7 | 8.5 | 8.2 | 8.0 | 7.7 | - | 9.3 | 8.8 | 7.9 |
| Townsend-Greenspan | 9.5 | 9.4 | 9.3 | 9.1 | 9.0 | 8.8 | 8.8 | 8.6 | 8.5 | 8.4 | 8.5 | 9.2 | 8.9 | 8.5 |
| Rate of inflation | | | | | | | | | | | | | | |
| CPI: | | | | | | | | | | | | | | |
| Administration | - | - | - | - | - | - | - | - | - | - | - | 5.9 | 6.7 | 6.9 |
| CBO | 6.5 | 6.5 | 6.1 | 6.8 | 7.8 | 7.2 | 7.0 | 7.0 | 6.7 | 6.6 | 6.5 | 6.4 | 7.2 | 6.7 |
| DRI | 4.6 | 9.0 | 6.0 | 6.9 | 6.0 | 6.1 | 6.2 | 6.9 | 6.9 | 6.7 | 6.6 | 6.5 | 6.5 | 6.6 |
| Wharton | 4.1 | 7.5 | 6.4 | 6.0 | 5.7 | 5.2 | 5.4 | 6.0 | 6.5 | - | - | 6.3 | 6.0 | 5.9 |
| Chase | 4.0 | 6.5 | 6.6 | 6.3 | 6.1 | 6.7 | 5.8 | 8.0 | 6.4 | 6.3 | - | 6.1 | 6.2 | 6.7 |
| Townsend-Greenspan | 2.8 | 6.1 | 7.2 | 5.4 | 5.3 | 6.0 | 6.3 | 6.8 | 6.2 | 6.5 | 7.3 | 5.9 | 5.8 | 6.7 |
| GNP Deflator: | | | | | | | | | | | | | | |
| Administration | - | - | - | - | - | - | - | - | - | - | - | 6.4 | 6.5 | 6.5 |
| CBO | 6.9 | 7.3 | 8.4 | 7.2 | 6.8 | 6.4 | 7.3 | 6.4 | 6.2 | 6.0 | 6.8 | 7.0 | 6.9 | 6.4 |
| DRI | 5.3 | 7.0 | 6.0 | 5.9 | 5.8 | 6.0 | 6.9 | 6.1 | 6.5 | 6.6 | 7.3 | 6.5 | 6.1 | 6.4 |
| Wharton | 5.3 | 6.0 | 6.9 | 6.2 | 6.1 | 5.9 | 6.7 | 6.0 | 6.3 | - | - | 6.4 | 6.2 | 6.2 |
| Chase | 4.6 | 5.6 | 5.8 | 6.0 | 6.0 | 6.1 | 6.2 | 6.8 | 6.7 | 6.3 | - | 6.2 | 5.9 | 6.5 |
| Townsend-Greenspan | 7.2 | 5.8 | 8.7 | 6.7 | 6.4 | 7.0 | 7.9 | 7.3 | 6.9 | 6.7 | 7.5 | 6.9 | 7.0 | 7.2 |

Table 8 (cont.)

| | 1982:2 | 1982:3 | 1982:4 | 1983:1 | 1983:2 | 1983:3 | 1983:4 | 1984:1 | 1984:2 | 1984:3 | 1984:4 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3-Month Treasury Bill Rate | | | | | | | | | | | | | | |
| Administration b/ | - | - | - | - | - | - | - | - | - | - | - | 12.0 | 10.7 | 8.8 |
| CBO | 11.6 | 11.7 | 11.6 | 10.3 | 10.5 | 11.0 | 11.0 | 10.0 | 9.1 | 8.4 | 7.8 | 12.0 | 10.7 | 8.8 |
| DRI | 12.4 | 10.7 | 11.0 | 12.7 | 12.0 | 11.7 | 12.2 | 12.5 | 11.7 | 10.8 | 10.4 | 11.7 | 12.1 | 11.3 |
| Wharton | 12.4 | 11.5 | 11.6 | 11.7 | 11.5 | 11.3 | 11.0 | 10.5 | 10.3 | - | - | 12.1 | 11.4 | 10.2 |
| Chase | 12.3 | 12.3 | 12.2 | 12.0 | 11.7 | 11.6 | 11.2 | 11.2 | 11.9 | 10.8 | - | 12.4 | 11.6 | 10.9 |
| Townsend-Greenspan | 12.2 | 12.4 | 11.2 | 10.3 | 10.2 | 10.3 | 10.4 | 10.4 | 11.0 | 11.8 | 13.5 | 12.1 | 10.3 | 11.7 |

a/The CBO annual estimates for nominal GNP are not directly derivable from the four quarterly estimates in a calendar year, but instead approximate a mid-year to mid-year percentage change. The annual estimates for the other CBO economic variables do represent averages of the four quarters in a calendar year.

b/The Administration's interest rate estimates are not forecasts but assumptions.

Note: "-" indicates data not available.

Sources: Administration: Mid-Session Review of the 1983 Budget, July 30, 1982.

CBO: "Conference Economic Assumptions (revised)" June 18, 1982.

DRI: Review of the U.S. Economy, August, 1982.

Wharton: Quarterly Model Outlook, August, 1982.

Chase: U.S. Macroeconomic Forecasts and Analysis, June 24, 1982.

Townsend-Greenspan: May 1982 Forecast (unchanged for July, 1982).

The major innovation in Tobin's scenario is in the implementation of monetary policy. Tobin's recommendation is that the Federal Reserve use a "nominal GNP targetting" approach. The Federal Reserve would not try to maintain growth targets for M1, M2, or any other aggregate, nor would it target interest rates. Rather, Tobin suggests that the Federal Reserve conduct monetary policy in such a manner as to allow for growth of nominal GNP by 11 percent to 13 percent over the next four quarters (which we take to mean starting in 82:3 through 83:2), and 9 percent to 12 percent over the succeeding four quarters (83:3 through 84:2). With declining inflation, Tobin suggests that this will allow a 4 percent growth in real GNP over the period and a two percentage point drop in unemployment.

Tobin's fiscal assumptions are straightforward: the July 1983 personal income tax cut is rescinded as is the indexation of tax brackets due in 1985. Since our simulations go only through 1984, however, this latter assumption was not tested. The remaining and more immediate changes in fiscal policy include: (1) $10 billion in annual cuts in the defense budget, (2) $10 billion in taxation of windfall profits arising from natural gas decontrol, and (3) $10 billion in savings from adjustments in the tax code to close loopholes.

Tobin suggests that by 1984 the program should reduce budget deficits to 2 percent of GNP and should reduce real interest rates on government securities (short-term, we presume) to 2 percent.

## IMPLEMENTING THE SCENARIOS

Although the large macro models of each firm all endeavor to capture the same economic reality, they differ in important respects such as in the number, structure, and content of their equations. These choices frequently reflect different assumptions and theoretical underpinnings. It is not surprising, then, that models will sometimes produce differing results even for the same change in policy. Our purpose in these simulations is not to evaluate the structure of these models. Rather, it is to study the results of the models given the same policy exercise, in order to determine the range of likely effects from a given policy change.

We asked the firms to simulate the policy change suggested by Tobin and gave them maximum discretion in conducting the exercise. Not surprisingly, they all proceeded in a slightly different manner. This arose because each had made various assumptions about prospective fiscal and monetary policy and these form the basis of their "control" forecasts. Some of Tobin's suggestions had already been incorporated in the current forecasts of the firms.

One way to proceed with the Tobin simulations was to alter the current "control" forecast of each firm. Another way is to define a baseline scenario which eliminates the judgmental assumptions of the "control" forecast. Then a separate simulation would be performed, using the Tobin policy assumptions. The differences of the two simulations, when compared, describe the results of the Tobin policy change. Neither approach is incorrect nor clearly preferable.

The simulations run by Townsend-Greenspan follow the former approach of altering the existing forecast, partly because their model is smaller and this could be implemented easily. The other two chose the latter approach. Chase chose to delete all of the current assumptions in its standard forecast thus defining a "no policy" baseline scenario. DRI chose a similar approach by using a baseline scenario which reflected the Reagan Administration budget proposals through April.

We had the firms run three different "experiments." The first was to implement only the fiscal policy assumptions of the Tobin scenario. This implies a slight contraction through mid-1983 and more contraction in late 1983 and 1984 (with the rescinding of the tax cut). Economic theory would predict lower real growth, budget deficits, inflation, and interest rates. As there will be feedback effects on the monetary aggregates from a weaker economy, monetary policy is not really held constant. But we expect these feedback effects to be minor.

The second experiment was to implement only Tobin's monetary policy assumptions without changes in the "baseline" fiscal policy. This scenario is clearly more expansionary, and we expect higher nominal GNP growth, higher inflation, and a drop in unemployment. We would also expect lower short-term, and, possibly, long-term interest rates and a somewhat lower deficit.

The third experiment combines tighter fiscal policy with a more stimulative monetary policy. The expected effects are more ambiguous. However, Tobin predicts that this change would lead to lower nominal (and real) interest rates, budget deficits and unemployment, and an increase in economic growth. With a slack economy Tobin predicts only a small increase in the rate of inflation.

## SIMULATION RESULTS

The results of the three alternative policy exercises are presented in tables 9, 10, and 11. The tables show the results for each model for the years 1982 through 1984, for six selected economic variables: (1) real GNP, (2) the rate of inflation as measured by the implicit price deflator for GNP, (3) a short term interest rate (rate for 3-month U.S. Treasury bills), (4) a long-

term interest rate (rate for Moody's AAA-rated corporate bonds), (5) the rate of unemployment, and (6) the Federal Government budget deficit (as measured for the National Income Accounts (NIA) on a calendar year basis). These variables were selected to illustrate the general results of the simulations.

The figures in the tables measure the departure of the values of the policy experiment variables from their values in the baseline simulations. Differences in the estimates can result from variations in model structures, baselines, and from differences in the way the policy changes are implemented. Thus it may not be appropriate to place too much emphasis on the differences in results among the different models. Rather, attention should be placed on the overall results in each model separate from the others.

The results are described below. Any differences calculated for real GNP and the Federal deficit are for the levels of these variables (in billions of dollars). Differences in the other variables are the percentage point differences in rate.

FISCAL POLICY SIMULATION

The overall results shown in table 9 are consistent with our expectations of what would occur with a more contractionary fiscal policy. Real GNP decreases compared to baseline and the unemployment rate is higher.

Interest rates show a modest decline through 1984, especially the short-term rate. Both the Chase and Townsend-Greenspan models show a decline of 67 basis points in 3-month Treasury bills in 1983. While Chase shows a decline of 155 basis points in 1984, the Townsend-Greenspan model reports a more moderate decline of 74 basis points. The DRI results differ from the others in that short-term rates rise in 1982 and 1983. They decline in 1984. All three models display very small effects on long-term rates.

As expected, tighter fiscal policy leads to a reduction in the deficit. Chase shows a decline of almost $50 billion below baseline in both 1983 and 1984. DRI has deficits lower by $32 billion and $39 billion and Townsend-Greenspan has deficit declines of $22 billion and $26 billion.

The results for the inflation rate are at first somewhat puzzling. A tighter fiscal policy implies less aggregate demand which should decrease the rate of inflation. While this occurs in the Townsend-Greenspan model (with a decline of 0.2 percentage point in 1983 and 1984) it does not in the Chase and DRI results. The explanation for this peculiar result concerns the method used to incorporate the taxation of natural gas windfall profits. While the Townsend-Greenspan model had already implemented such

Table 9

Effect of Policy Change--Tobin Scenario
Fiscal Policy Changes
(differences from baseline)

| | Chase | | | DRI | | | Townsend-Greenspan | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 |
| Real GNP (bil. $) | -1.1 | -13.5 | -32.3 | -3.8 | -29.1 | -56.5 | -0.4 | -10.5 | -24.5 |
| Inflation rate (GNP defl.) | -0.1 | 1.0 | 0.3 | 0.2 | 0.9 | 0.5 | -0.1 | -0.2 | 0.0 |
| Short-term interest rate | -0.02 | -0.67 | -1.55 | 0.19 | 0.58 | -0.36 | -0.23 | -0.67 | 0.74 |
| Long-term interest rate | 0.0 | 0.06 | -0.04 | 0.00 | -0.07 | -0.38 | -0.13 | -0.35 | 0.35 |
| Unemployment rate | 0.1 | 0.2 | 0.9 | 0.1 | 0.5 | 1.2 | 0.1 | 0.3 | 0.6 |
| Deficit (NIA-bil.$ Calendar Yr.) | -1.4 | -49.7 | -48.2 | -7.8 | -31.7 | -39.2 | -6.0 | -22.3 | -25.8 |

an assumption in its control solution, both Chase and DRI had to make the reasonable assumption that the increased taxation would be coupled with deregulation of natural gas prices in 1983. While this is appropriate, the values of several energy price variables had to be adjusted to account for the effect of deregulation. This, in large part, explains why the increase in prices occurs with tighter fiscal policy.

Unfortunately, this makes the scenarios more difficult to interpret than had a simpler fiscal policy assumption been used. In this case, the higher inflation rate also acts to lower real GNP growth and raise unemployment.

We, therefore, conducted an additional experiment using the DRI model which did not employ the windfall profits tax assumption. The results of this simulation are found under the heading "fiscal policy change," in table 12, col. 1, and generally show no change in inflation compared to baseline and smaller increases in unemployment. The changes in real GNP are similar to those shown in the Townsend-Greenspan results. In this scenario, the greater decline in short-term interest rates is due in part both to the lower inflation estimates and the larger reduction in the Federal deficit in 1984.

In summary, the fiscal policy simulation results generally support the predictions of economic theory.

MONETARY POLICY SIMULATION

The expansionary effect of the Tobin scenario is, for the most part, dependent upon faster monetary growth. It is expected that this will lower interest rates, stimulate real growth, and have little effect on inflation due to a slack economy. In general, as shown in table 10, this is what happens.

The DRI and Chase models each implement a change in monetary policy by altering the growth of nonborrowed reserves which then affects the growth of the monetary aggregates. The Townsend-Greenspan model implements such a change by modifying the monetary base.

Tobin's monetary assumptions are less straightforward than the fiscal assumptions and for this reason we chose to rely upon the firms' judgments in implementing them. To implement Tobin's nominal GNP targetting approach, the Federal Reserve must conduct monetary policy by aiming to achieve a given growth range for nominal GNP. Such a monetary policy introduces substantial variation into the growth of monetary aggregates and requires a substantial amount of judgment on the part of the modelers, as it would the Federal Reserve. We were generally satisfied with the implementation of the targetting approach as all three firms

Table 10

Effect of Policy Change--Tobin Scenario
Monetary Policy Change
(differences from baseline)

| | Chase | | | DRI | | | Townsend-Greenspan | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 |
| Real GNP (bil. $) | 2.1 | 34.0 | 42.7 | 6.2 | 30.5 | 31.1 | 0.1 | 1.5 | -4.9 |
| Inflation rate (GNP defl.) | -0.1 | 0.4 | 0.5 | 0.0 | 0.4 | 0.3 | 0.0 | 0.2 | 1.2 |
| Short-term interest rate | -1.85 | -3.73 | -3.18 | -0.97 | -1.82 | -2.23 | -0.03 | -0.39 | -0.05 |
| Long-term interest rate | -0.73 | -1.62 | -1.33 | -0.03 | 0.03 | 0.27 | -0.03 | -0.29 | -0.08 |
| Unemployment rate | 0.1 | -1.7 | -2.1 | 0.0 | -0.6 | -0.8 | 0.0 | 0.0 | 0.1 |
| Deficit (NIA-bil.$ Calendar Yr.) | -4.0 | -42.3 | -54.8 | -5.4 | -34.2 | -44.2 | -0.2 | -4.7 | -11.9 |

stayed within the ranges set for nominal GNP. Chase appeared to be at the high end of each range compared to DRI and Townsend-Greenspan which aimed at the middle or lower end of the nominal GNP target. The directions of the effects are as expected. They do, however, vary in magnitude due to the variation in the target and the growth rates of money needed to achieve it. The Chase and DRI results are of similar magnitude and both differ substantially from the Townsend-Greenspan results.

Both the Chase and DRI results exhibit increases in real GNP in 1983 and 1984 in the range of $30 billion to $40 billion above baseline. The inflation rate increases modestly by 0.4 and 0.3 percentage points in 1983 and 1984 in the DRI model and by 0.4 and 0.5 in the Chase model. Unemployment declines by 0.6 and 0.8 percentage points from baseline in the DRI model while the Chase model shows significant declines of 1.7 percentage points for 1983 and 2.1 percentage points for 1984. The Chase results achieve Tobin's goal of a 2 percent reduction in the unemployment rate in 2 years. The outlook for deficits is much improved by the increased economic growth and lower interest rates.

The Chase results show short-term interest rates declining by 373 and 318 basis points in 1983 and 1984, while long-term rates decline by 162 and 133 basis points from baseline. The DRI model has short-term rates declining by a more modest 182 and 223 basis points. However, long-term rates actually increase by 3 and 27 basis points.

On the other hand, the Townsend-Greenspan simulations are substantially different. Apparently, this model captures monetary phenomena and expectations in a substantially different manner from the other two. The Townsend-Greenspan results show no growth in real GNP in 1983 and an actual decline in 1984 of approximately $5 billion. This is partly due to inflation which, while modest in 1983, begins to pick up sharply in 1984, increasing by 1.2 percentage points. Unemployment shows no change through 1983 compared to baseline and a small increase (0.1 percentage point) is posted in 1984. While interest rates decline, the magnitude is negligible. The monetary stimulus generates an interest rate dip in 1983 with interest rates back at the baseline level in 1984, and only small reductions in deficits (due to the small real GNP effects).

In summary, a more expansionary monetary policy generates effects in the expected direction in the models, but the magnitude of these effects is subject to substantial variation. The Townsend-Greenspan model shows almost no effect overall from the monetary stimulus. The Chase results are most favorable owing to the sharp declines in interest rates. In this exercise the DRI model captures the middle ground. It shows some modest expansion with only a slight rise in inflation. This leads to significant

drops in short-term interest rates, but apparently the expectations of future inflation keep long-term rates up.

The figures under the heading, "monetary policy change," in table 12 represent the results of an alternative monetary strategy using the DRI model. The rate of growth of M1 is increased by 1 percentage point above baseline per quarter through 1984. The results suggest that this policy is slightly less stimulative than one in which nominal GNP is the target.

SIMULATION OF CHANGE IN POLICY MIX

Here we consider a change in policy to a tighter fiscal--looser monetary mix. This is expected to result in lower interest rates and lower budget deficits, higher economic growth, and a lower unemployment rate. Inflation is expected to remain virtually unchanged because of a slack economy.

The results of this scenario are reported by firm in table 11 and they are quite different among the firms.

The Chase model reports the most favorable results. Interest rates drop substantially, and the effect is immediate. Three-month Treasury-bill rates are below their baseline values by 187 basis points in 1982, 436 in 1983, and 466 in 1984. Long-term rate declines are more modest but are still around 150 basis points below the baseline values in 1983 and 1984. The Chase results record a real growth above baseline of $19.4 billion in 1983 and $9.5 billion in 1984. This relatively small effect is in part due to a run up in inflation, which results from the adjustment in energy prices. Not adjusting energy prices would result in lowering the inflation rate and raising the estimate for real GNP. Even so, the unemployment rate is well over 1 percentage point lower in both 1983 and 1984 and the deficit reductions are substantial, in the $90 billion to $100 billion range.

The results of the DRI simulations are more modest than those reported by Chase. Short-term rates fall by 127 and 270 basis points in 1983 and 1984. Long-term rates, however, show almost no change from baseline. Real GNP is virtually unchanged from the baseline, although this is partly due to the adjustment of energy prices. Unemployment is at about the same level as in the baseline, but the Federal deficit is much reduced.

As before, the results from the Townsend-Greenspan model are substantially different especially relative to the Chase results. The change in policy mix produces only a modest decline in short and long-term interest rates in 1983. By 1984, these rates are over 1 percentage point higher than their baseline levels. As in the monetary policy experiment, the Townsend-Greenspan model

Table 11

Effect of Policy Change--Tobin Scenario
Fiscal-Monetary Mix Change
(differences from baseline)

| | Chase | | | DRI | | | Townsend-Greenspan | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 |
| Real GNP (bil. $) | 1.1 | 19.4 | 9.5 | 2.5 | 1.8 | -25.2 | -0.3 | -13.4 | -53.2 |
| Inflation rate (GNP defl.) | 0.1 | 1.4 | 0.7 | 0.2 | 1.2 | 0.8 | -0.1 | 0.3 | 3.8 |
| Short-term interest rate | -1.87 | -4.36 | -4.66 | -0.79 | -1.27 | -2.70 | -0.25 | -0.66 | 1.02 |
| Long-term interest rate | -0.73 | -1.57 | -1.38 | -0.03 | -0.03 | -0.07 | -0.14 | -0.32 | 1.14 |
| Unemployment rate | -0.1 | -1.4 | -1.2 | 0.0 | -0.1 | 0.4 | 0.1 | 0.4 | 1.3 |
| Deficit (NIA-bil.$ Calendar Yr.) | -5.6 | -89.6 | -99.6 | -13.3 | -66.7 | -83.7 | -6.1 | -25.6 | -34.6 |

shows only a small impact on the 1983 inflation rate with prices exploding 3.8 percentage points above baseline in 1984. These price changes occur simultaneously with increases in the unemployment rate, which by 1984 is 1.3 points above baseline. The growth of real GNP is below its baseline level in 1983 by $13.4 billion and in 1984 by $53.2 billion. Deficits decline, but by more modest amounts than in the other models.

Finally, in table 12, under the heading "combined policy change," the combined results for our simplified policy exercise are presented from the DRI model. 1/ Relative to the DRI results in table 11, table 12 shows a lower inflation rate, slightly higher real growth, and somewhat lower short-term interest rates. Long-term interest rates and unemployment rates are essentially unchanged.

Tobin scenario summary

The results of our three alternative policy experiments, using three different econometric models, show substantial variation. These variations result primarily from the monetary sectors of the models and the way in which monetary and fiscal policy interact.

The policy mix suggested by Tobin leads to an improved economy only when his assumptions are simulated using the Chase model. When the Townsend-Greenspan model is used, the economy worsens substantially. The DRI model falls somewhere in between with declines in short-term interest rates but no noticeable improvement in long-term interest rates.

The simulations are experimental and are, at best, merely illustrative of how a change in policy might affect economic activity. Chase is currently implementing a new version of its model with a changed monetary sector. The Townsend-Greenspan model shows interesting and provocative results apparently due to the way in which it models the monetary and financial sectors and expectations. The DRI model exhibits interesting effects of monetary policy on the relationship between long- and short-term interest rates.

If we can place any confidence in these results then the insight to be gained for policy is found by looking at the

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1/It will be recalled that these simplifying assumptions are (1) a decrease in Government spending of $30 billion in 1983 and approximately $60 billion in 1984, and (2) an increase in M1 money growth of 1 percent per year above the baseline rate.

Table 12

Effect of Policy Change
Simplified Tobin Scenario
(differences from DRI baseline)

| | Fiscal Policy Change | | | Monetary Policy Change | | | Combined Policy Change | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 | 1982 | 1983 | 1984 |
| Real GNP (bil. $) | -1.2 | -7.5 | -10.6 | 2.1 | 13.2 | 22.2 | 0.9 | 5.6 | 11.1 |
| Inflation rate (GNP Defl.) | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | 0.4 |
| Short-term interest rate | -0.09 | -1.13 | -2.85 | -0.33 | -1.04 | -1.59 | -0.41 | -2.16 | -4.31 |
| Long-term interest rate | -0.01 | -0.06 | -0.16 | -0.01 | 0.00 | 0.07 | -0.02 | -0.07 | -0.08 |
| Unemployment rate | 0.0 | 0.1 | 0.2 | 0.0 | -0.2 | -0.5 | 0.0 | -0.1 | -0.02 |
| Deficit (NIA-bil.$ Calendar Yr.) | -4.2 | -33.6 | -68.7 | -1.8 | -14.2 | -29.0 | -6.0 | -47.8 | -97.0 |



APPENDIX I

results for real GNP. Here, while the models show a range of changes from baseline, the magnitude of these changes are all fairly modest. This implies that while we can stimulate or contract the economy, macroeconomic policy cannot change the economy very much in a short span of time. This argues for a policy of macroeconomic stabilization aimed at longer-run goals.

APPENDIX II

THE CHAIRMAN OF THE
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON, D.C. 20506

August 16, 1982

Dear Mr. Corazzini:

In response to your letter of August 11, I am pleased to provide these comments on your draft report, "An Analysis of Our Nation's Fiscal and Monetary Policies." In our judgment, this report is a useful and informative study. The Council of Economic Advisers agrees with the policy principles as expressed in Chapter Six:

1. Policy should be based on the long run objective of price stabilization and economic growth.

2. Adjustments in policy should be gradual in an effort to reduce the current level of uncertainty and instability now characteristic of the financial and business communities.

3. Monetary and fiscal policies should be coordinated and consistent with long run goals for unemployment, inflation and economic growth that are both desirable and achievable.

As noted in the introduction to Chapter One, time after time the Federal Government has intervened in the economy to achieve a "quick-fix" for problems of high unemployment and low output growth. At other times we have sought quick-fixes to inflation. The longer run consequences of these short-sighted policies have been very costly in terms of trends in unemployment, productivity growth and inflation. The series of misguided short run economic policies over the last 15 years are a major source of our current economic problems. The "quick-fixes" have caught up with us and these effects should not be ignored in any analysis of the current economic situation. We do not agree with the statements (pages 1-3 and 6-12) that "The current recession resulted from a policy decision to reduce the rate of inflation through restrictive monetary policy." By 1980, the economy was in severe trouble, inflation, inflation expectations and nominal interest rates were soaring, growth in capital formation and productivity had dropped sharply and our ability to compete in world markets was falling. These trends created a seriously distorted and unstable economy. While a monetary tightening may have contributed to the decline in real GNP growth since 1979, the Council does not consider this to have been the major factor. From what we now know, a recession would have developed even if money growth had continued at an unchanged rate.

APPENDIX II



At this time, there is renewed pressure for the Federal Government to "do something," to impose another "quick-fix." Such a policy would only worsen the economic situation, imposing further long run costs on our Nation. Many are concerned that such policies will be pursued; that the old refrain of engaging in expansionary policy now, while promising to tighten later, will lead to the same old results -- broken promises and more inflation.

To build confidence that we are committed to the three policy principles set down in Chapter Six, policy must be stable and predictable and must clearly reflect commitment to the long run objectives of price stabilization and economic growth.

Insofar as the analysis and recommendations of this study adhere to the three policy principles laid down in Chapter Six, the Council agrees with the study. Our criticisms arise where these policy principles are ignored. Broadly, our main criticism of this study is that while long run objectives are considered to be of paramount importance, the monetary and fiscal analysis on which the recommendations are based is short run. Questions concerning the ability of Federal policy to change long run expectations and the effects of such shifts on economic growth are essentially ignored. The econometric models used to test policy options are short run, both in outlook and in model structure. While we are aware of the difficulties of long run economic analysis, these difficulties should not divert the analysis and resulting recommendations away from the policy principles.

In addition to these general comments, the Council of Economic Advisers has prepared specific comments on details of your draft report and they are attached to this letter.

I hope that these responses are helpful to you.

Sincerely,

Murray L. Weidenbaum

Mr. Arthur J. Corazzini
Deputy Director
Program Analysis Division
United States General Accounting Office
Washington, DC 20548

Attachment

APPENDIX II

ATTACHMENT

Chapter One

1 (1-3) The policy analysis set down here specifically assumes the existence of a Phillips curve. But reducing aggregate demand (and employment) is not the only way to reduce inflation. The inflation-unemployment trade-off is at best a short run relationship. Further gains (or maintaining current gains) on inflation need not require further output losses. Inducing favorable expectational shifts in the short-run Phillips curve by following sound long-run policies is central to both short and long-run progress in reducing inflation.

2 (1-4) In our opinion, monetary policy in the 1970's both initiated and maintained inflation by short-term efforts to stabilize interest rates and the economy.

3 (1-4) We do not think that "economists generally agree" that slowing money growth will reduce real investment in the long run.

4 (1-6) While at the top of the page it is stated that there "is a danger of a resurgence of inflationary expectations" if money growth is accelerated, at the bottom of the page this credibility problem drops away with only a "marginal swing." What is the analysis (referred to on the next page) which supports this view? This is a critical issue and should be squarely addressed.

5 (1-9) In the first paragraph, it is indicated that the "dominant" view is that the deficit should be reduced, but "less concensus" on whether spending should be cut or taxes increased. In the second paragraph, it is stated that "there is a commonly held view that substantially greater revenue increases will be needed." The two statements are inconsistent.

6 (1-10) The statement that "few economists support a constitutional amendment" implies global knowledge. Would not this be better stated as: most economists probably do not support a constitutional amendment?

7 (1-12) Is it true that the "dominant view" considers the long run to be only 3-4 years? The structure of most macro models implies a considerably longer period to reach the "long-run."

Chapter Two

8 (2-2) Because the simplest models link the GNP "gap" to unemployment as a mere matter of algebraic transformation, the

potential-actual GNP gap is as uncertain as the full employment unemployment rate. Uncertainty over the natural rate implies uncertainty over potential GNP, limiting the usefulness of either concept as a guide to policy.

9 (2-11) We have questions as to whether a strengthening economy would cause a large increase in oil prices. The current "dominant" opinion seems to be that real oil prices will remain stable or fall.

10 (2-11) Problems with the CPI should be stated clearly in footnote 1 (e.g. "the sample is revised from time to time" should be changed to express the problems inherent in a 10-year old fixed sample.)

11 (2-13) The analysis of current developments in total hourly compensation and unit labor costs ignores two important points: (1) the first quarter increase in compensation is due, in part, to the increase in social security tax rates, and (2) when average hours decline, the weight of fixed fringe benefits tend to increase compensation per hour. Growth in the wage rate for private nonfarm workers fell sharply in the first quarter.

12 (2-15) Possibly, some mention of the probability of a procyclical swing in labor productivity is called for as a source of reduced unit labor costs and increased profitability. It is difficult to be pessimistic on employment and productivity at the same time.

13 (2-18) The analysis of the behavior of short-term interest rates is rather casual. Economic theory (or history) may not provide an explanation of why the real rate was so high, but current levels can be explained.

Chapter Three

14 (3-1) Presumably, the second paragraph is reqired. However, the use to which it is put in the third paragraph makes little sense in a short run context (with history as the judge) and a long run context makes no sense at all. The long run goals of monetary policy should be price stability only. In any case, these three tools are almost perfect substitutes in controlling the money stock and not three more or less independent policy instruments.

15 (3-2) The last sentence in footnote 1 is very misleading. Between 1975 and 1979 the Federal Reserve continued to peg the Federal funds rate. The narrow funds rate ranges specified by the FOMC provide clear evidence.

APPENDIX II



16 (3-9,10) If the second argument for high real long-term interst rates holds; that volatility in monetary growth contributes to uncertainty over future money growth rates and inflation, then any short-term increase in money supply growth could put upward pressure on long rates rather than downward pressure as argued.

Chapter Four

17 (4-3) The comments on the small size of tax reductions made here do not square with footnote 1 on the next page.

18 (4-4) The Council of Economic Advises was critical of ACRS (in combination with the investment tax credit) only insofar as investment decisions were distorted by differential tax treatment of various classes of investment goods.

19 (4-4) The statement that "the positive incentives of ACRS on capital formation appear to be overwhelmed by current high real interest rates" is, at best, pointless in this context. At worst, it reflects a very short run outlook. There are important long run effects; why not discuss them?

20 (4-6) Second to last complete sentence -- you mean "accompanied," not "accomplished"?

21 (4-11) The statement that the "widening budget gap" results from a "very pronounced reduction in the growth of tax receipts" is certainly at variance with Figure 6, Net Tax Change. The widening budget gap is due to more rapid growth in expenditures than in tax receipts.

22 (4-11) We do not agree that "it is now evident" that the Tax Act" "makes it impossible to narrow the budget gap." Spending control may be difficult, but hardly impossible.

Chapter Five

23 (5-1) Discussion of the Mid-Session Review (MSR) economic assumptions (here and elsewhere) should not be characterized as an "Administration forecast." As stated in the MSR (page 6):

> "The economic assumptions used in preparing this Review are essentially those used by the Congress in the preparation of the First Budget Resolution on the 1983 Budget, modified to reflect recent actual data for the first half of 1982, plus Administration estimates of their near-term effects on the second half of the year. From the beginning of 1983 onward, the rates of change of prices and output, and unemployment and interest rates ae those assumed in the Resolution. Use of the Resolution

APPENDIX II



assumptions here does not constitute Administration endorsement of these assumptions as forecasts or as economic policy objectives. They are used instead to conform as much as possible with estimates in the Resolution and to facilitate enactment of the critical deficit reduction measures that it embodies."

24 (5-6) Footnote 1 implicitly assumes growth in the labor force and average hours at historical trends. Perhaps this assumption is reasonable, but it should not be made in a casual implicit fashion buried in a footnote.

25 (5-9) Given the forecasting record of these models, and the caveats expressed on pages 5-2 and 5-3, the "consensus among private forecasting firms" does not yield any "clear implication" about any forecast values. Given the historical record, with average recovery real GNP growth rates in excess of 4-1/2 percent, the comment on page 5-8 may well apply. The models have a poor track record in forecasting inflation.

26 (5-11) It is difficult to view high real interest rates as the "cause" of the recession. Interest rates are prices, determined by supply and demand, any casuality must be attributed to determinants of the supply and demand for credit.

27 (5-12) What is the logic underlying the speculation that increases in short-term borrowing will lead to a "somewhat spurious increase in M1"?

Chapter Six

28 (6-5) The current set of econometric models cannot measure the effects of changes in money supply growth on expectations, nor are they constructed to handle policies directed at long-run growth. If "longer term effects" are important why not run the models out further? Either that, or discuss why not.

29 (6-8) On pages 1-7, 8 the view is expressed that the Federal Reserve should "observe a variety of economic indicators." Yet on page 6-8 M1 shift adjusted growth is used as the sole indicator of monetary tightness. Currently, short-term interest rates are below 10 percent and M2 growth has been quite rapid over the last year and a half. The shift adjustment to M1 is also debatable.

30 (6-9) Given the statement that "The turnover rate in M2 does not display such a trend" on page 3-6, does not M2 growth above 9 percent indicate nominal GNP growth in the 8-10 percent range is feasible without a further increase in the money growth rate?

-5-

31 (6-9) What reasons underlie the belief that short-term economic slack is relevant for the formation of long-term inflation expecations? If true, why are current inflation expectations so high?

32 (6-11,12) The simulation results of the DRI model and recommendations of "experts" are characteristic of the business cycle. The calls for a run up of the money supply are an old refrain; expansionary policy now, restrictive later. However, the "later" never came in the past and investors know it. The historical record of "experts'" recommendations on monetary policy and the effects would be a useful addition to this discussion.

33 (6-12) With current short-term rates already already well below recent DRI predictions, should not some doubt be cast on model multiplier results?

34 (6-12) As stated earlier, the first sentence of the Summary is inconsistent with earlier statements made concerning the longer run impacts of misguided short-run policies.

-6-

Appendix I

35 (I-2) The discussion of Tobin's recommendation (or the original "scenario") confuses targets (nominal GNP growth) with policy instruments controlled directly by policymakers.

36 (I-3,4) All these scenarios completely ignore the long-run effects which are considered to be the "basis for policy." As such, the information content is very low. This problem is not minor, and should be addressed at length in this section.

37 (I-8) Finally, the fact that Keynesian models support the predictions of Keynesian economic theory is no surprise. To state that: "the fiscal policy simulation results generally support the predictions of economic theory" ignores debates and developments in macroeconomic theory over the last ten years. There is no unified view of "economic theory" at this time and it is misleading to assume otherwise.

## GAO'S RESPONSE TO CEA'S COMMENTS

1. There is growing awareness among economists that the long-run Phillips curve may be vertical. Nevertheless, it is difficult to deny that a short-run trade-off exists between unemployment and inflation. Policy has not been notably successful at directly "inducing favorable expectational shifts in the short-run Phillips curve." Such shifts generally occur only after changes in real variables, such as unemployment.

2. Insufficient evidence exists to prove the role monetary policy played in initiating each renewed bout of inflation during the 1970s. However, as we state in our report, monetary policy, through efforts to stabilize nominal interest rates, accommodated the inflation.

3. We refer to the high real interest rates that would be maintained by a restrictive monetary policy and large future Federal deficits. There is substantial agreement that continued high real interest rates will substantially reduce real investment.

4. The distinction is in the degree of easing in monetary policy. A number of policy experts believe that a drastic easing may be interpreted as abandoning the present disinflationary stance of monetary policy. On the other hand, a moderate easing in the M1 growth targets may be sufficient to reduce the risk of a continuing contraction of the economy without inducing inflationary expectations. We must caution that the view that a moderate increase in M1 growth will not lead to inflationary expectations is based on the best judgment of a considerable number of well-known economists, and reflects the view that substantial excess capacity in the economy reduces the risk of a resurgence of inflation.

5. The two statements are not inconsistent. While there is substantial support for revenue increases, their importance relative to expenditure cuts is largely uncertain. The principal point is that because of the size of future deficits, expenditures cannot easily be reduced by relying solely on either tax increases or budget cuts.

6. In our discussions with a large number of economists, we found virtually none who supported the balanced budget amendment. We thus feel that the statement as given in the report is reasonable and need not be changed.

7. Change has been made, as suggested.

8. We recognize that there is an ongoing debate about the best way to compute full employment GNP and, hence, the GNP "gap," given various changes in the labor market. However, we have used the procedure commonly used by others, including the Council of Economic Advisers, to calculate the gap between potential and actual GNP.

9. The future behavior of oil prices is uncertain. The suggestion that oil prices may increase as the world economy rebounds is not meant to be a prediction of its likely behavior. Nevertheless, increased demand for petroleum caused by a strengthening world economy will, other things equal, cause oil prices to rise.

10. Changes have been made to the footnote, as suggested.

11. These points are now noted in the report and do not substantially change the analysis presented there.

12. We do discuss the probability of a procyclical swing in labor productivity on page 19. "...the decline in corporate profits is a cyclical phenomenon that will be offset by gains as the economy recovers." We have clarified and amplified this point in the text.

13. Indeed, current high rates can be explained--by many people in many ways. We point out this lack of consensus among economists on page 2. As you point out, neither economic theory nor history provides a clear and precise explanation of why rates are so high. As a result, there is no way to judge the relative importance of the many competing explanations. We discuss some of these explanations in chapter 3.

14. Monetary policy, and thus the tools of monetary policy described in the report, can be used "to control the total flow of money spending." We do not state that monetary policy can simultaneously achieve all the "traditional goals," either in the short or long run. At the same time, it is difficult to imagine achieving any of these goals for any period of time unless the appropriate monetary policy is in place.

15. The footnote on page 24 clearly indicates that the Federal Reserve continued to use interest rates as a guide to the formulation of monetary policy between 1975 and 1979.

16. The "risk premium" argument is related to the variance of money growth about its trend. It does not refer to the trend itself. We see no reason why a higher trend rate of growth will lead to a higher variance; the two are distinctly different.

17. There is no contradiction. The net result of the statement on the size of the tax cuts on page 31 and the footnote on the same page is that the "tax bracket creep" is a substantial source of revenue. The tax cuts enacted under the Economic Recovery Tax Act of 1981 tended to offset these substantial, inflation-induced tax increases, but did not produce a substantial net reduction in the tax burden.

18. Change has been made, as suggested.

19. This statement merely points out that both the tax treatment and current state of the economy, i.e., interest rates, are relevant to an investment decision.

20. Change has been made, as suggested.

21. Figure 6 shows the effect of the personal tax cuts for a family of four at various income levels. It is not relevant to the point raised here. Under Administration estimates, expenditures as a percentage of GNP will decline only slightly to 23.5 percent in 1985. Revenues, on the other hand, will change from 20.6 percent of GNP in 1982 to 18.3 percent in 1985. Thus it is clear that, given projected expenditures, falling revenues account for a large part of the increases that are projected in the Federal deficit.

22. Change has been made, as suggested.

23. Changes have been made throughout chapter 5.

24. Because there is little evidence to suggest that the labor force or average hours will deviate substantially from their historical trends, we do not feel that this statement needs to be highlighted. A reference to it in a footnote should be sufficient.

25. The problems inherent in using large-scale econometric forecasts are well known and are clearly stated in the report. Nevertheless, models can be useful for showing what might happen in response to particular economic actions. Our statement in the report simply points out some inconsistencies in the rate of real economic growth assumed by the Administration, given stated assumptions about future inflation and money growth.

26. We are reporting here that many of those whom we interviewed in the business and financial communities believed that high interest rates are a cause of the recession.

27. Change has been made, as suggested.

28. It is true that changes in expectations are not captured very well in econometric models. This is one reason for their increasingly poor forecasting performance as the models are run further into the future. These are among the reasons that led to our decision not to use a more extended forecast period. Such gains as may have accrued were, in our minds, far overshadowed by the weakness and unreliability of forecasts extending further into the future.

29. Over the period in question, the monetary authorities have used the shift-adjusted growth in M1 as their primary indicator of monetary tightness. In the experts' discussion of how tight monetary policy has been and by how much it should be eased, we have focused on the current Federal Reserve targets. This does not conflict with our suggestion that in the future the Federal Reserve should consider using multiple indicators.

30. The experts advocating sufficient money growth rates to produce a rise in nominal GNP of between 8 percent and 10 percent did so in terms of the M1 measure of the money supply. They could have used M2 but chose otherwise. Had they selected M2, they undoubtedly would have wanted to examine the current short-run relationship between the growth in M1 and M2 to see how closely it coincides with the longer-run trend relationship between the two money measures before they would have concluded that no additional growth in M2 would be required to accomplish the target rate of growth of nominal GNP.

31. There are a number of factors which influence the level of inflationary expectations. One of them is likely to be the current and expected relationship between aggregate demand and full employment output. So long as actual and anticipated increases in aggregate demand are insufficient to push output above its full employment level, there is every reason to believe that the current level of inflationary expectations will not rise.

32. The implied alternative is to do nothing. Most of the experts with whom we talked were in agreement with the need for continued restraint on money growth and continued downward pressure on the price level. They also felt, however, that the pace of the current disinflationary effort was too swift and could be relaxed slightly without setting off the kind of inflationary cycle that has been seen in the past.

33. As we state in the report, these model simulations are not forecasts. The results are meant to be indicative of the effects of certain policy actions; they are not intended to be a precise description of reality.

34. Based on our analysis, this sentence is correct.

35. The suggestion by Tobin of "nominal GNP targeting" has been made by several other economists. While one may agree or disagree with the approach, it should not be rejected out of hand. Indeed, money growth itself is not a policy instrument, as the Federal Reserve does not control the size of the money supply directly.

36. As was pointed out earlier, there are limitations to the use of econometric models for examining very long-run effects of policy actions. At the same time, the implications for the near term of any set of policies can be examined by using the models. One may decide that the long-run benefits of certain policies outweigh the short-term costs, but only if those costs are known.

37. The economic theory referred to here is the "mainstream" theory presented in this report. While we recognize the limitations of the model simulations, it is helpful to know that the simulation results do not contradict the predictions of this theory.

APPENDIX II

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

ASSISTANT SECRETARY

AUG 20 1982

Dear Mr. Anderson:

Secretary Regan requested that the Economic Policy Staff review the draft paper prepared by your staff, "An Analysis of Our Nation's Fiscal and Monetary Policies." He also asked me to express our appreciation for being afforded the opportunity to comment on the draft of the report. These are important issues which warrant continuous monitoring. Treasury staff has made a careful review of the draft report. The following contains their general comments.

1. The report might take a longer-term perspective. Focus is on the period immediately ahead, with little if any discussion of the tradeoffs between the longer-run solutions to the economic problems confronting us and the effects of marginal adjustments designed to affect conditions over the short run. For too many years, focus has been on the period immediately ahead and on measures which might moderate it, with little attention given to how that series of short-run measures might affect the long-run performance of the economy. In particular, the report might contain a discussion of rewards to be derived from a restructing of the economy to put it on a higher long-run growth path. That, of course, was the intent of the fiscal, monetary, and regulatory policies proposed by the Administration on coming to office.

2. As to monetary policy, the report offers an endorsement for the general approach of the Administration and Federal Reserve. That is, achieving a gradual slowing in the trend rate of money growth is a necesary requirement for restoring noninflationary economic growth. However, the report does not give due consideration to the problems inherent to the transition from inflation to disinflation. In particular, minimizing the cost of this shift requires that policy makers demonstrate a firm commitment to the long-run goals. In that regard, it is imperative that the Federal Reserve not only adopt consistent long-run targets for money growth but that those targets be achieved. Thus, the proposal for a "modest" increase in the monetary

targets carries an extreme risk of weakening the credibility of the anti-inflationary efforts. We believe that current targets of the Fed are appropriate and see no reason why this should be altered.

3. Much of the paper centers on the views and policy prescriptions of experts consulted by the GAO. In evaluating the paper, it would be helpful to know who these individuals are, for, as we all know, each analyst brings his own value judgments to bear on these issues. The report takes a "mainstream" approach, or "dominant view" as it is characterized, in its analyses and in its recommendations. It is our view that the "mainstream" policy prescriptions of the past contributed to economic problems of the 1970s. The report makes clear that others were consulted, including those of monetarist views and those who would bring neoclassical economic analysis to bear on the problems facing us. However, their views appear to have been largely dismissed in the report.

4. In this same context, the report settles for policy goals (page 6-4) of 6 to 7 percent unemployment, 6 percent inflation, and 2.5 to 3.5 percent trend real growth. These are the consensus of "economic policy experts," but again, it is difficult to evaluate these goals without knowledge of the value judgments and steps in analysis behind them. We are not convinced that these goals are the best that can be attained.

5. One chapter and the appendix are devoted to results of simulations with three private econometric models in which alternative fiscal and monetary policies are entered into the models. While these sections are enlightening as to the properties of the models, they are not so helpful in providing guidance as to optimum policy. The models were based on historical experience which differs markedly from the current experience, and it is not clear that they are fully relevant to the present situation. Their theoretical underpinnings are controversial, particularly among those who do not hold to the "dominant view."

6. It is assumed that the final report will incorporate the most recently available economic statistics. In some instances, notably with respect to the analysis of productivity and unit labor costs (pages 2-13 to 2-15), the recently available data would lead to somewhat different conclusions.

The foregoing provides general comments on the report. A brief list of more specific comments pertaining to particular statements in the report is attached and may be of value to your staff members working on the final version. Again, I appreciate the opportunity for the Treasury Department to get a careful look at the draft of the report.

Sincerely,

Manuel H. Johnson
Assistant Secretary
for Economic Policy (Designate)

Mr. William J. Anderson
Director
U. S. General Accounting Office
General Government Division
Washington, D.C. 20548

Attachment

APPENDIX II

Specific Comments on GAO Draft Report

1. On page 1-3 it is stated that "A view point was adopted that reducing aggregate demand with a high probability of this leading to recession is the only way we have of reliably reducing the rate of inflation." It is not clear that this was the Federal Reserve's intent, and it certainly was not the intent of the Administration. Many, both inside and outside the Administration, thought expectations would shift in such a way that the outcome would be more favorable than it was.

2. The "other" outlay category in table 6 (page 4-10) is somewhat misleading as it includes the negative outlays from sales of off-shore leases, etc. Since these are projected as rising rapidly in the Administration budget, the line item shows an especially sharp decline, implying sharper outlay cutbacks than are being proposed.

3. Text on page 5-9 states that if the Administration's projections for 1983 and 1984 are to be met, then velocity "would have to rise by an amount not seen in U.S. history." The chart on page 3-7 indicates there have been several years of velocity growth in the 5 to 6 percent range. In the first four quarters following the 1974-75 recession trough it was 6.9 percent. In the latest four quarters it has been about zero.

## GAO'S RESPONSE TO TREASURY'S COMMENTS

### GENERAL COMMENTS

1,2 The report repeatedly stresses the importance of a credible long-run policy orientation. At the same time, we believe that the current economic situation will permit the modest policy changes suggested without seriously endangering the underlying long-term objectives of permanently reduced inflation and improved economic growth. It is true that almost any policy alternative has some risk attached to it. Certainly, as pointed out in the report and in your second comment, there is a small risk that accepting our suggestions for a slowing of the disinflationary policy of the Federal Reserve may revive inflationary expectations. Our discussions with business and financial leaders lead us to believe that this risk is likely to be negligible.

Continuing to press a very strong disinflationary monetary policy, on the other hand, runs the increasing risk of precipitating a severe downturn of historic proportions. We emphasize that the report does not call for a return to the "quick fix" solutions that have contributed to past reflations. Given the extremely rapid deflation of the past year, the options presented in this report seem both reasonable and modest.

3. In preparing this report, we had the opportunity of consulting, both formally and informally, a very large number of experts: academic economists, business and financial economists, and leading businessmen and financiers. While the people with whom we spoke were not randomly selected, we attempted, with substantial success, to include as wide a variety of views as was practicable within the limited timeframe available to us. Our intent in the report is to present as fair a picture as we can of the dominant view of monetary and fiscal policy. We did not intend to present, nor could we have within the space and time limitations, a discussion of all the views and theories available.

4. The policy goals you mention were suggested as feasible by the experts with whom we spoke. They are not goals which either those experts or we espouse as what we would like to see for the economy, especially those for unemployment and inflation. However, they are goals which are realistic, given present conditions. The risk of trying to improve on these goals through the use of monetary and fiscal policies alone is, in our estimation, substantial. For example, efforts to reduce unemployment much below 6 percent might result in a revival of higher rates of inflation unless institutional changes occur in labor markets. Thus, we believe that it is better to set realistic goals for what

macroeconomic policy can achieve. We would certainly also applaud efforts to create conditions allowing for these goals to be improved. These efforts, however, are beyond the scope of this report.

5. The report recognizes the limitations of econometric forecasts, particularly as the forecast period is extended. The simulations presented in the report are meant to be indicative of the response of the economy to specific policy actions. These simulations are not forecasts. They were carried out to illustrate, albeit within the limitations imposed by historical data, the kind of short-term response the economy may have to certain policy actions.

6. Every effort has been made to include the most up-to-date statistics in the report. With respect to unit labor costs, data for the second quarter of 1982 show a continued increase, although at a substantially reduced rate from earlier quarters.

SPECIFIC COMMENTS

1. A belief that expectationally induced shifts would allow the reduction of inflation without the pain of a recession undoubtedly did exist in the Administration. Such a belief was, however, largely unsupported by historical precedent. The great risk of recession was obvious and the decision to pursue the chosen policies signified a willingness to accept the costs of recession if the shifts in expectations failed to occur.

2. The comment is noted. However, the negative outlays compose a significant, though small, part of the Administration's budget and are included in the total expenditures and deficit projections as well.

3. The actual computation of velocity over the four quarters following the trough of the 1974-75 recession is subject to some imprecision. The National Bureau of Economic Research dates the trough as March 1975. The velocity number computed for the first quarter of 1975 would be centered on February, while the downswing was still in progress, whereas velocity computed for the second quarter would be centered on May 1975, during the ensuing upswing. Using the first quarter of 1975 as a base, velocity grew by 7.5 percent during the following four quarters. Using the second quarter of 1975 as a base, velocity grew by 5.6 percent during the following four quarters. Clearly, then, there is some possibility that velocity could grow enough to make it possible for the Administration's projections to be achieved. It should, however, be observed that the rise in velocity

APPENDIX II

following the trough of the 1974-75 recession was during a period in which the short-term interest rates rose (i.e., they were higher in the fourth quarter following the trough, regardless of the base used, than in the first quarter). Presently, the Administration believes the short-term rate will decline over the relevant period in which velocity is supposed to rise. Nevertheless, we will change the word "not" to "seldom" preceding the phrase "seen in U.S. history."

APPENDIX II

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

OFFICE OF STAFF DIRECTOR
FOR MANAGEMENT

August 13, 1982

Mr. William J. Anderson
Director
United States General
Accounting Office
General Government Division
Washington, D. C. 20548

Dear Mr. Anderson:

I am responding to your August 11, 1982, letter to Chairman Volcker forwarding copies of the General Accounting Office report entitled, "An Analysis Of Our Nation's Fiscal And Monetary Policies."

We appreciate being given the opportunity to review and comment on the draft report. However, because of the subject of the report and Congress' intent in passing the Federal Banking Agency Audit Act of 1978, which exempts the monetary policy area from the subject of a review with the Federal Reserve, we feel that it would be inappropriate for us to participate in the review, including commenting on the draft report.

Sincerely,

John M. Denkler

Wharton Econometric Forecasting Associates, Chase Econometrics, and Townsend-Greenspan. Relevant quarterly data are presented in table 8.

In brief, DRI, Wharton, and Chase forecast that the recovery began in the second quarter of 1982, with real GNP rising at an annualized average rate over the last three quarters of 2.40, 3.13, and 3.03 percent. Townsend-Greenspan forecast an upturn starting in the third quarter with real GNP increasing at an annual average rate of 3.45 percent for the last two quarters. For 1983, the respective rates of growth forecast by DRI, Wharton, Chase, and Townsend-Greenspan are 3.0, 3.6, 3.7, and 3.0 percent. These upswings can only be described as "anemic" relative to the recoveries that have characterized the previous seven post-World War II recessions.

The key to the expected recovery is the consumer in every instance. Real disposable income has been boosted by a tax cut in 1982 and another projected for 1983. These cuts will not be seriously undermined by new tax legislation. Since consumers generate on average some 70 percent of GNP, the rise in disposable income is sufficient to return the economy to a positive rate of growth. However, a disappointing rate of growth results from these expenditures because consumers are unable to sustain an expansion alone.

Nevertheless, the consensus among non-Administration forecasters is that the recovery will limp along at least through the fourth quarter of 1984. However, unemployment will remain high. No private forecaster has it dipping below an average of 8.8 percent for 1983. 1/ Housing starts are also depressed throughout 1983. An average of the four forecasts indicates that housing starts will increase slowly during 1983, reaching an annual average rate of 1.46 million units in the fourth quarter of that year.

A closer review and comparison of the forecasts and projections reveals that the Administration is assuming 5.6, 11.2, and 10.9 percent increases in nominal GNP for 1982, 1983, and 1984. For these increases to be realized, the rise in total money spending (the sum of the increases in the money supply and its velocity or turnover rate) must be by the same amount. What are the prospects for this to occur? The 1982 assumption seems quite reasonable given that the Federal Reserve will increase the M1 supply of money by 5.5 percent. The 1983 and 1984 assumptions,

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1/Historically, it has required a 3 percent growth in real output to hold unemployment constant. Each additional increase in real growth of approximately 3 percent will reduce unemployment by 1 percent. Because the projected growth rate is so anemic, it can do little to reduce unemployment.

however, seem excessively optimistic. Our conclusion is based on the announced intention of the Federal Reserve to increase the M1 measure of money by about 5.5 percent for 1983. While it has announced no M1 target for 1984, the Administration had hoped to halve the money growth rate between 1981 and 1986. This implies some reduction below 5.5 percent for 1984. In order for nominal GNP to rise 11.2 percent in 1983 and 10.9 percent in 1984, the average long-run growth of the M1 velocity of money would have to approximately double.

Like all historical relationships, that between money and GNP (i.e., velocity) has varied. We have had periods of sharp increases in velocity, but they have usually been associated with rather large increases in interest rates, such as would characterize the upswing of a business cycle.

During the 1970s the M1 turnover rate or velocity rose an average of 3.4 percent per year, partly as a result of the rise in interest rates. However, the Administration also assumes a general decline in interest rates in 1983 and 1984. It seems improbable that velocity would continue to rise at its historic average while interest rates were declining.

Given the likely prospect for money growth, it appears either that (1) the nominal GNP growth target will be difficult to reach; or (2) the estimated decline in short-term rates is too great.

Even though it seems doubtful that nominal GNP could rise at the rate projected by the Administration, this is not sufficient to reject the Administration's projections for real GNP growth. The rate of increase for 1983, 4.4 percent, is very low for an economy emerging from the trough of a very deep recession. However, given the likely prospect for money growth and its velocity, the key to real growth is the price level. The recent reduction in the rate of inflation is dramatic, even when one examines the recent behavior of the underlying or core rate of inflation. Nonetheless, the future inflation rate would have to be lower than that projected by the Administration if its projections of real economic growth were to be achieved. The private forecasting firms are, in general, a little more optimistic than the Administration about bringing down inflation in 1983 and 1984, and, on the whole, a little less optimistic about 1982. Even though a little more optimistic than the Administration about the future, they are not sufficiently optimistic to enable them to forecast as robust a recovery as the Administration. The CBO and the four private forecasting firms predict weak economic growth in 1983 and 1984. The average of their forecasts is 3.5 percent in 1983 and 3.8 in 1984, 0.9 and 0.3 percentage points lower than the Administration's assumptions for 1983 and 1984.

In summary, the consensus among the forecasting firms is that the Administration's arithmetic does not add up. Money growth is expected to decline. This implies that for nominal GNP to rise as projected, the velocity of money would have to rise by an amount seldom seen in U.S. history. For the real growth goals to be achieved, the rate of inflation would have to be markedly less than that projected by the Administration. Yet the consensus among private forecasting firms is the opposite. The clear implication is that real economic growth will be modest--reducing unemployment only slightly over the next 18 to to 30 months.

## THE NEAR-TERM OUTLOOK FOR INTEREST RATES

Given the current mix of expansionary fiscal policy and tight monetary policy, economic theory would predict a rise in real and nominal interest rates, all else held constant. However, all else is not constant. In particular, the rate of inflation which influences nominal interest rates has been reduced over the last 12 months. To the extent that this decline in past inflation reduces the expected rate of inflation, we would normally witness a decline in nominal interest rates. While short-term rates have come down, until recently they failed to mirror the sharp decline in inflation. For reasons given above, this implies a rise in real interest rates.

Neither the Administration nor the forecasting firms make projections of real interest rates. They do, however, project nominal rates. The Administration is assuming short-term interest rates, as measured by 3-month Treasury bills, to drop from a high of 15.09 percent in the third quarter of 1981 to an annual average of 12.0, 10.7, and 8.8 for 1982, 1983, and 1984. The four major commercial forecasters are less optimistic than this. There is also a relatively widespread agreement that the outlook for continuing large deficits will prevent meaningful declines in long-term real interest rates.

## BUSINESS AND FINANCIAL LEADERS' VIEWS

A consistent thread running through most of our discussions with business and financial leaders is the deep concern that there will be no recovery in the near term because of the continuation of extraordinarily high real interest rates. The high cost of borrowing in both the long and short markets is seen as inhibiting investment and growth, threatening the existence of the saving and loan industry, and increasing the illiquidity of many firms. Many of these firms are finding it necessary to engage in "survival" borrowing--that is, borrowing short to pay off earlier borrowing and to finance expenditures for operations rather than for capital. This is of concern, particularly to the financial institutions, because of the accelerating number of bankruptcies and business failures, even among firms which are generally considered healthy.

Several people with whom we talked told us that their answers should be taken as their own thoughts and opinions and not necessarily those of their firms. But we believe that they are representative of the views of business and financial communities.

## THE STATE OF THE ECONOMY AND ITS PROSPECTS

Most of those interviewed believe that a major recovery from the current recession is unlikely to occur soon without a drop in real interest rates. High interest rates are generally considered to be the primary cause of the recession. Some of those we talked to predict a small upturn in the last part of 1982 or early 1983, but others see little prospect for improvement in the next 12 months given current economic policies. A few stress the possibility of a severe worsening of the recession because of a serious lack of corporate liquidity and very high real interest rates. Together, they leave the economy extremely vulnerable to unanticipated economic shocks, particularly in the financial sector. In contrast, officials at some of the larger commercial banks are optimistic, predicting a moderate recovery in the housing industry and falling interest rates.

While there was obviously a wide range of opinion, most of those interviewed believed that extremely sluggish growth will continue for several quarters. They also expressed the opinion that the principal contributors to this pattern of sluggish growth are the high rates of interest caused by the current mix of monetary and fiscal policies.

## BUSINESS VIEWS ON WHY INTEREST RATES ARE SO HIGH

It is clear that most of those whom we interviewed agree that the primary cause of high interest rates is the combination of slow money growth and limited credit together with the excessive credit demands of the Federal Government. Several of those interviewed also expressed the belief that inflation expectations are not a major factor in explaining today's high interest rates, although they say that any indication that the Federal Reserve is giving up the fight against inflation will immediately add a large inflationary premium to interest rates.

Premiums to compensate lenders for the risk of inflation variability and the fear that high deficits will ultimately cause the Federal Reserve to discontinue its anti-inflationary monetary policy also add to current interest rates, according to some of the financial leaders with whom we talked. Others pointed out the effects of distressed business borrowing. This raises interest rates by increasing the demand for short-term borrowing. It also leads to an increase in M1. This, in turn, may cause the Federal Reserve to clamp down even tighter on the money supply to stay in the target band, thus forcing rates up even more.

Most of those we talked to are not quite sure why interest rates are so high at this point in a recession. They are sure, however, that continued high rates will limit, if not abort, any recovery. Despite their genuine misgivings about the course of economic activity in the near future, however, most of the business and financial leaders feel that it is crucial, in the long run, to squeeze inflation out of the economy, despite high costs. Moreover, several of the people interviewed believed that many of the costs remain to be paid before the anti-inflationary fight is finally won. But there is a fairly broad consensus that these costs can be reduced if fiscal policy is tightened and if the deficit, which they perceive to be out of control, is reduced substantially over the next few years.

# CHAPTER 6

# ANALYSIS OF POLICY OPTIONS

Government is frequently asked to provide immediate solutions to the Nation's economic problems. Our current high interest rates and projected weak economic growth are two such problems. However, any action that will provide substantial immediate relief also presents serious risks to the long-term economic health of the Nation. Indeed, it is the consensus of a number of nationally known economists that the most vital task before the Congress and the Administration is to implement long-term policies that provide a realistic hope of achieving reasonable goals for employment, the price level, and economic growth. A commonly held view is that much of our current difficulty is the result of past efforts to achieve a "quick fix" to immediate economic problems with inadequate attention to the longer-run costs of those solutions. However, the long run is but a series of short-run situations that cannot be completely ignored.

## GOALS FOR ECONOMIC POLICY

The senior economists we consulted suggested a number of policy goals for important macroeconomic variables such as employment, the price level, and economic growth.

### Unemployment

A realistic goal for the unemployment rate is one that will be roughly consistent with no excessive inflationary pressures. Attempts to reduce rates below this level will increase inflation rates because of demand pressures on labor and product markets. Similarly, unemployment rates above this level produce slack in labor and product markets and downward pressure on inflation rates.

The current "benchmark" unemployment rate that is used in Government estimates of potential GNP is 5.1 percent. The policy experts suggested that this is at least one percentage point too low. They estimate the non-inflationary unemployment rate to be between 6.1 percent and 7 percent. This is based on historical episodes (especially in the 1977-79 period) when inflation began to increase rapidly long before unemployment reached 5.1 percent. This was true even after accounting for the effects of the oil price increases experienced in 1979 and 1980.

While several economists noted that an unemployment rate of 6.1 percent or higher was the most that could reasonably be expected given the conventional macroeconomic tools of fiscal and monetary policy, they stressed that policymakers should not be satisfied with that result. They pointed out that specific microeconomic labor market policies directed at improving education, training, job information, and labor market incentives, could possibly reduce the noninflationary unemployment rate.

## Inflation

There was less consensus on an appropriate target for the rate of inflation. This is evident in the fact that the rate of inflation deemed acceptable by the policy experts ranged from 2 percent to 6 percent. Furthermore, while several economists agreed that a reduction in inflation rates was a desirable policy goal, they cautioned that the high cost of unemployment and lost output made it undesirable to lower the inflation rate too rapidly by overly restraining aggregate demand.

Advocates of the lower target rates stressed the harmful effects resulting from continued high rates of inflation. They stated that sustained high inflation rates seem to be associated with variability in the level of inflation. High and variable inflation rates greatly distort the information contained in overall price changes and in the price changes of one commodity or service relative to another. In a market economy where allocative decisions about the use of economic resources are governed largely by relative prices, uncertainty about the movement of prices causes distortions which ultimately undermine the efficiency with which the economy's resources are used.

## Economic growth

In the long run, the Nation's economic potential is governed by the availability of key resources; growth in these resources will ultimately determine the growth potential of the economy. The experts believed it important that our long-run macroeconomic policy targets be consistent with the economy's potential. While they cautioned that attempts to exceed the growth potential would lead to increased inflation, they expressed less certainty about the sustainable level of real economic growth. Estimates of achievable growth in real GNP ranged from 2.5 percent to 3.5 percent.

While focusing on long-run growth potential, the experts agreed that in a situation where the economy has underused resources (high unemployment rates and low capacity utilization rates), the Nation may achieve economic growth rates that are higher than our long-run potential without the risk of rekindling inflation. As unemployment falls and the economy begins to reach its capacity, it would be vital that the growth rate slow to its long-run potential of 2.5 percent to 3.5 percent. Without such a slowing, inflation will sharply increase as it has at the peak of past business cycles.

In summary, the consensus among economic policy experts was that prudent use of the available fiscal and monetary policy tools could be expected to result ultimately in the simultaneous attainment of an unemployment rate of 6 percent to 7 percent, a stable inflation rate of no more than 6 percent, and a sustained real rate of economic growth between 2.5 percent and 3.5 percent.

## NEAR-TERM POLICY OPTIONS

In an effort to reach these goals, the policy experts suggested a number of policy alternatives. These alternatives can be classified under three broad policy options.

1. The exercise of greater fiscal restraint beginning in fiscal year 1984, with no change in monetary policy.

2. A reconfiguration of monetary policy with some immediate increase in the rate of money growth, and no change in fiscal policy.

3. A combination of monetary easing and fiscal restraint.

Our qualitative discussion of these options is supplemented by a number of simulations using three large econometric models of the U.S. economy. These simulations, based on a scenario suggested by James Tobin, a leading proponent of a change in current policy, are only illustrative of some of the likely general effects of implementing the three alternative policy options.

The simulations, in most cases, agree on the general effects of the alternative policies but vary in their magnitude. A more restrained fiscal policy (option 1), implemented by rescinding the 1983 personal income tax cut, results in lower deficits, weaker economic growth, and lower interest rates (see appendix I). A more expansionary monetary policy (option 2) generally lowers short-term interest rates and raises output and employment. In the short run, inflation increases little, but since the projections extend only through 1984, the longer term effects on inflation and the economy are not depicted in our simulations.

A change in policy mix to a tighter fiscal--looser monetary mix (option 3) yields results which vary significantly among the three models. Given the limitations of the models and their projections, the results generally show that such a policy mix will lower short-term interest rates, do little to lower long-term rates immediately, and have negligible effects on real economic growth.

### Greater fiscal restraint

Some experts endorse the general disinflationary thrust of the current monetary policy but advocate greater fiscal restraint in 1984 and beyond. They feel that projected deficits are too large and no relief is in sight because of the future indexation of the tax system and the planned increases in defense and Social Security expenditures. Moreover, they express concern that the projected deficits may increase substantially with very slight changes in the underlying economic conditions.

These experts emphasize two features. First, they endorse the disinflationary goals of monetary policy but consider the mix of monetary and fiscal policies to be the real cause of our economic problems. Second, they focus their attention on the deficits for fiscal years 1984 through 1986. They express less concern about the fiscal year 1983 budget for two reasons. First, there is an inherent lag between the implementation of a fiscal policy change and its effect. Actions taken now are unlikely to affect the fiscal year 1983 economic outlook. Second, any effort to contract fiscal policy now will reduce aggregate demand and prolong the current recession.

Advocates of fiscal restraint advance three reasons for reducing future budget deficits. First, the continuing large deficits create uncertainty in financial markets and increase the fear that they will be financed through future inflationary increases in the money supply. This, in turn, could lead to a rise in long-term nominal interest rates. Second, the large deficits produce higher real rates of interest as the Government absorbs a larger portion of the available flow of savings. Third, higher real rates reduce private sector investment, thus impeding future economic growth.

Although the advocates of this policy option agree that greater fiscal restraint should be exercised, there is some disagreement about the relative desirability of tax increases versus expenditure reductions. Because defense spending, Social Security, and interest payments on the national debt will account for 70 percent of Federal expenditures in future budgets, some experts believe any substantial expenditure reductions must come from these areas. Some suggest that the indexation of Social Security benefits be altered to slow the rate of increase. They also suggest that expenditures be shifted from defense to public infrastructure.

Advocates of fiscal restraint believe it will reduce both nominal and real interest rates. A reduction in future budget deficits will reduce the uncertainty now characteristic of financial markets. DRI model simulations suggest that deficit reductions of approximately $30 billion in 1983 and $70 billion in 1984 are consistent with declines in short-term nominal interest rates of approximately 100 basis points in 1983 (from a baseline level of approximately 12.5 percent) and slightly less than 300 basis points in 1984 (from a baseline of approximately 12 percent). 1/ Long-term nominal interest rates would decline, but on a more modest scale of from 10 to 20 basis points in

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1/A change in the rate of interest of 100 basis points is equivalent to a one percentage point change. For example, a fall in the rate of interest from 12 percent to 11 percent would be a drop of 100 basis points. From 12 percent to 10.5 percent would be a fall of 150 basis points.

1983 and 1984 (from baseline levels of approximately 13 percent and 12 percent). 1/

Moreover, decreased Federal borrowing requirements should encourage private capital formation and lay the groundwork for a higher rate of real economic growth and productivity in the future.

While the proponents of this option emphasize its benefits, they recognize its costs. While future budget deficits may be overly stimulative, attempts to reduce them may slow economic growth because of the corresponding reduction in aggregate demand. The ideal policy is one which provides the needed stimulus to a weakened economy without reducing the level of unemployment below that rate at which inflation accelerates. The problem for policymakers is in identifying that precise rate. For example, with a fiscal tightening of $30.0 billion in 1983, the DRI model projects a drop in real GNP in that same year of under $10.0 billion. This drop represents one-half of one percent of the baseline level of 1983 real GNP.

Easing of monetary policy

While nearly all the experts advocated a continuation of the current disinflationary stance of monetary policy, some considered the actual deceleration in money supply growth to be too drastic. This characterization is prompted by the fact that M1 growth has been reduced by 70 percent from 1979-80 to 1981 with further tightening expected for 1982. 2/ The M1 velocity in 1982 has similarly shown little rise when compared to 1981. These two events combine to yield a slower growth rate in total money spending for 1982 when compared to 1981. As would be expected, this has been accompanied by a rapid increase in unemployment and some reduction in the rate of inflation.

Those advocating some easing of monetary policy are concerned with high unemployment, slow growth, and the condition of interest-sensitive sectors of the economy. They believe

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1/These figures are from a special simulation using a DRI model. While the simulation specifications are not necessarily identical to the policy prescriptions of the experts, the simulation results are illustrative of the likely changes, i.e., direction and order of magnitude, in the value of the variables that can be expected from a given policy change. A fuller discussion of the results may be found in appendix I.

2/This figure is derived using "shift adjusted" data which is discussed in chapter 3. On a nonshift adjusted basis the reduction was only 30 percent.

unemployment can be reduced by allowing M1 growth in the 5 percent to 7 percent range during the coming 18 months. They believe that nominal GNP growth in the area of 8 percent to 10 percent for the next year would yield a modest improvement in the unemployment rate without rekindling inflation.

This option, too, has both costs and benefits. Accelerating money growth may compromise the credibility of the Federal Reserve as an inflation fighter. This could spark inflationary expectations which may increase nominal interest rates. There is reason to believe, however, that inflationary pressures would be minimized for two reasons. First, the economy still would be operating below the level at which shortages of labor and materials would drive up production costs. Second, as long as the economy is still operating with considerable slack, the public would be unlikely to anticipate renewed inflation and, therefore, would be unlikely to demand an inflationary premium in either interest rates or wages.

Possible benefits expected from this option include a drop in real and nominal interest rates, increases in real output, a corresponding drop in unemployment and a more favorable environment for investment.

In our simulations using the DRI model, an increase in the growth of M1 to approximately 7.0 percent in 1983 and 5.5 percent in 1984 (above baseline rates of approximately 6.0 percent and 4.5 percent in 1983 and 1984), generates a drop in short-term interest rates of about 100 and 160 basis points. Long-term rates however, do not drop below baseline. Unemployment decreases by approximately 0.2 and 0.5 percentage points below baseline levels of 8.6 percent and 7.6 percent in 1983 and 1984.

Among the experts urging an easing of monetary policy, some disagree over how the Federal Reserve should conduct monetary policy in the longer run. Some believe that the Federal Reserve should abandon the use of any targets (either the monetary aggregates or interest rates). Those who argue for continued use of targets disagree over whether it is more appropriate to use monetary aggregates, credit aggregates, or interest rates.

A 5 percent to 7 percent growth in M1 over the next 18 months would be a relatively modest departure from present policy. The announced Federal Reserve goals are 2.5 percent to 5.5 percent growth, with the stated intention to operate at the upper end of the target range.

Over the longer run, as unemployment approaches 7.5 percent, these experts would urge the Federal Reserve to reduce the growth rate of M1 in an effort to bolster the disinflationary effort. A gradual reduction in M1 growth would then be sufficient to slow the growth rate of nominal GNP by 1 percent per year until the rate of increase was 5 percent to 6 percent per year.

A reconfiguration of monetary policy and fiscal contraction

A majority of the experts we consulted advocated this option. They believe that it offers the benefits of monetary easing and fiscal contraction while avoiding some of their costs.

First, this combination would minimize the credibility problem for the Federal Reserve if it is seen to be a compromise between the monetary and fiscal authorities. Monetary expansion could be seen as a short-run tradeoff for greater fiscal restraint. Moreover, diminishing the outyear deficits would reduce the fear that they would be financed through inflationary expansions in the money supply. Second, by decreasing the size of the deficit, the effect of monetary policy on the pace of economic activity becomes more certain. This would make it easier to disinflate the economy. Third, this combination is more growth-oriented than either monetary easing or fiscal contraction alone.

Proponents of this option stress one caveat. They believe that immediate fiscal contraction would exacerbate the current recession. They consequently urge a delay in major fiscal action until fiscal year 1984. However, if current fiscal contraction were combined with current monetary expansion, the chances of a further serious reduction in the level of economic activity and employment would be reduced substantially.

The results of a DRI simulation for this option show short-term nominal interest rates falling by approximately 200 and 400 basis points (below baseline levels of approximately 12.5 percent and 12 percent) in 1983 and 1984. Long-term nominal interest rates, however, show almost no change from baseline, with declines of about 10 basis points in 1983 and 1984 (from baseline levels of about 13 percent and 12 percent). There is no convincing explanation for the large difference in effect on short- and long-term rates. Real GNP is predicted to grow about $5.0 billion and $11.0 billion over baseline projections in 1983 and 1984 which is about one-half of 1.0 percent of baseline GNP, while unemployment declines by about one-tenth of one percentage point in 1983, and two-tenths in 1984, from baseline levels of 8.6 percent and 7.6 percent in 1983 and 1984.

The principal risk is that the Federal Reserve will be seen as having abandoned its disinflationary policy. That could reignite inflationary expectations.

SUMMARY

The Nation is currently in the midst of a severe recession that has resulted from a policy decision to disinflate the economy through a restrictive monetary policy. Given the degree of economic slack as measured by the low level of industrial capacity utilization and high unemployment rate, the Congress is being

asked to take corrective action. A prominent feature of the numerous proposals being considered is the degree of concern about interest rates.

While there is some degree of consensus about the relatively weak recovery projected for the latter half of 1982, there is considerably less agreement about the near-term outlook for the level of interest rates. A prominent explanation for the high level of real interest rates is the restrictive monetary policy. The reduction in the growth of the money supply has resulted in tight credit conditions and high real interest rates. Other factors, including large future budget deficits, may be contributing to the record high levels. As a consequence of the uncertainties surrounding the relative importance of each of these contributory factors, there is no consensus on what interest rates will do over the next 2 years.

This uncertainty is characteristic of the entire economic outlook and accounts for the range of policy recommendations that have been made to the Congress. Nonetheless, one viewpoint may be characterized as a dominant one. In general, this dominant view supports an approach to economic policy based on the following principles:

1. Policy should be based on the long-run objective of price stabilization and economic growth.

2. Adjustments in policy should be gradual in an effort to reduce the current level of uncertainty and instability now characteristic of the financial and business communities.

3. Monetary and fiscal policies should be coordinated and consistent with long run goals for unemployment, inflation and economic growth that are both desirable and achievable.

All of the three policy options discussed in this chapter have been advocated by their proponents as alternative means of achieving these long-run goals while simultaneously preserving the needed short-run flexibility to cope with current economic problems. In two of the three options, proponents explicitly advocate a marginal loosening of monetary policy as the appropriate action to alleviate our current economic situation. In the third option, proponents believe fiscal restraint alone is sufficient to bring about a drop in interest rates and spark real economic growth.

## SIMULATIONS OF ALTERNATIVE POLICIES

The discussion in chapter 6 focuses, in a qualitative way, on the general options for macroeconomic policy in the current economic environment. To provide some quantitative dimension to these options, we conducted a number of simulation experiments using three of the commercial large-scale macroeconomic models of the economy. These simulations were conducted using the models of Data Resources, Inc. (DRI), Chase Econometrics, and Townsend-Greenspan, and were designed to explore the economic implications of the three general options for monetary and fiscal policy which were discussed earlier. The simulations were run on the quarterly models of each firm and the results were extended through 1984.

Our basic goal was to see how and to what extent altering current policy or adopting an alternative policy might affect aggregate economic activity, including the level of interest rates. We also tried to determine whether relatively small changes in policy, such as those which might be implemented in the very short run, would have a noticeable effect on various indicators of economic variables.

These simulations are essentially experiments and may not replicate the actual results of the proposed policies for several reasons. First, econometric models do not perfectly represent economic reality. Second, they may not capture the lags in policy correctly. Third, models are quantitative tools whose output is subject to considerable professional judgment in formulating a "forecast." We asked the firms to keep their judgmental adjustments to the simulations to a minimum. Thus, the results do not represent "forecasts" by the firms of the policies we asked them to implement.

### ALTERNATIVE POLICY SCENARIOS

Given the structure of each model all that is needed to conduct the simulation exercises is to specify the desired magnitude of change in fiscal and/or monetary policy. Current macroeconomic policy might be redirected toward a considerable number of options. Rather than simulate large numbers of options, we chose to specify three different changes in the direction of policy. In doing so, we adopted major components of James Tobin's suggested changes in monetary and fiscal policies. 1/

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1/See James Tobin's "The Wrong Mix for Recovery," Challenge Magazine (May/June 1982).

APPENDIX III



# Congress of the United States
## House of Representatives
## Committee on Appropriations
### Washington, D.C. 20515

April 26, 1982



Honorable Charles A. Bowsher
Comptroller General
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Bowsher:

The Committee is very concerned with the continuing recession. Though there are many industries and factors involved, there are two areas of major importance to the nation's economic health. They are the protracted recession in the housing industry and the effect that monetary and fiscal policies are having on interest rates. This Committee's jurisdiction includes many programs which impact on these subjects.

The housing industry has been in a recession for more than three years. On an annual basis, housing starts have totaled less than 1,000,000 for seven consecutive months. Most analysts agree that the housing industry is experiencing its most difficult conditions since World War II. It has been estimated that 200,000 firms related to building and supplying the nation's housing have failed in recent years. Hundreds of thousands of construction jobs have been lost. The effect on basic industries such as lumber has been devastating in certain areas of the country, particularly in the Pacific Northwest and the South.

The fiscal and monetary policies undertaken by the government, including the Federal Reserve System, have not been successful in reducing interest rates to levels which will stimulate the economy. The restrictive monetary strategy espoused by the Federal Reserve System has apparently retained a tightened credit policy to the extent that many corporations and individuals have been unable to obtain capital for needed expansion, and the Federal Reserve does not appear willing to try any other approach as has been necessary in other recessions and even in the great disastrous Depression of the 1930's.

APPENDIX III



Accordingly, the Committee requests that the General Accounting Office conduct two comprehensive reviews. The first should assess existing Federal policies relating to home construction. The review should include suggestions of ways in which the nation's housing industry could be revived, contributing to the overall economic recovery. Special emphasis should be devoted to proposals which will aid the logging of timber and the lumber industry. The second review should be a thorough analysis of the nation's monetary and fiscal policies with suggestions for change. Special attention should be placed on the effect of the restrictive monetary policy of the Federal Reserve System on present and future economic growth.

It is anticipated that in the conduct of both reviews with suggestions, the General Accounting Office will be expected to obtain the views of experts in industry and educational institutions. In addition, to the extent permitted by law, executive agencies will be expected to provide such assistance as may be available and required to complete the studies and plans. Both reviews and specific plans should be completed no later than August 31, 1982 and transmitted to the Committee.

On a separate but related subject, the Committee is calling on the Department of Agriculture to develop a plan to protect and restore the basic national wealth represented by hundreds of millions of productive acres being destroyed or threatened by certain infestations. These matters are of critical importance to our present and future economic strength and the Committee appreciates your continued cooperation.

Sincerely,

Jamie Whitten

Chairman

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