February
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The Outlook for Economic Recovery

A Report to the Senate and House Committees on the Budget —Part I

As Required by Public Law 93-344

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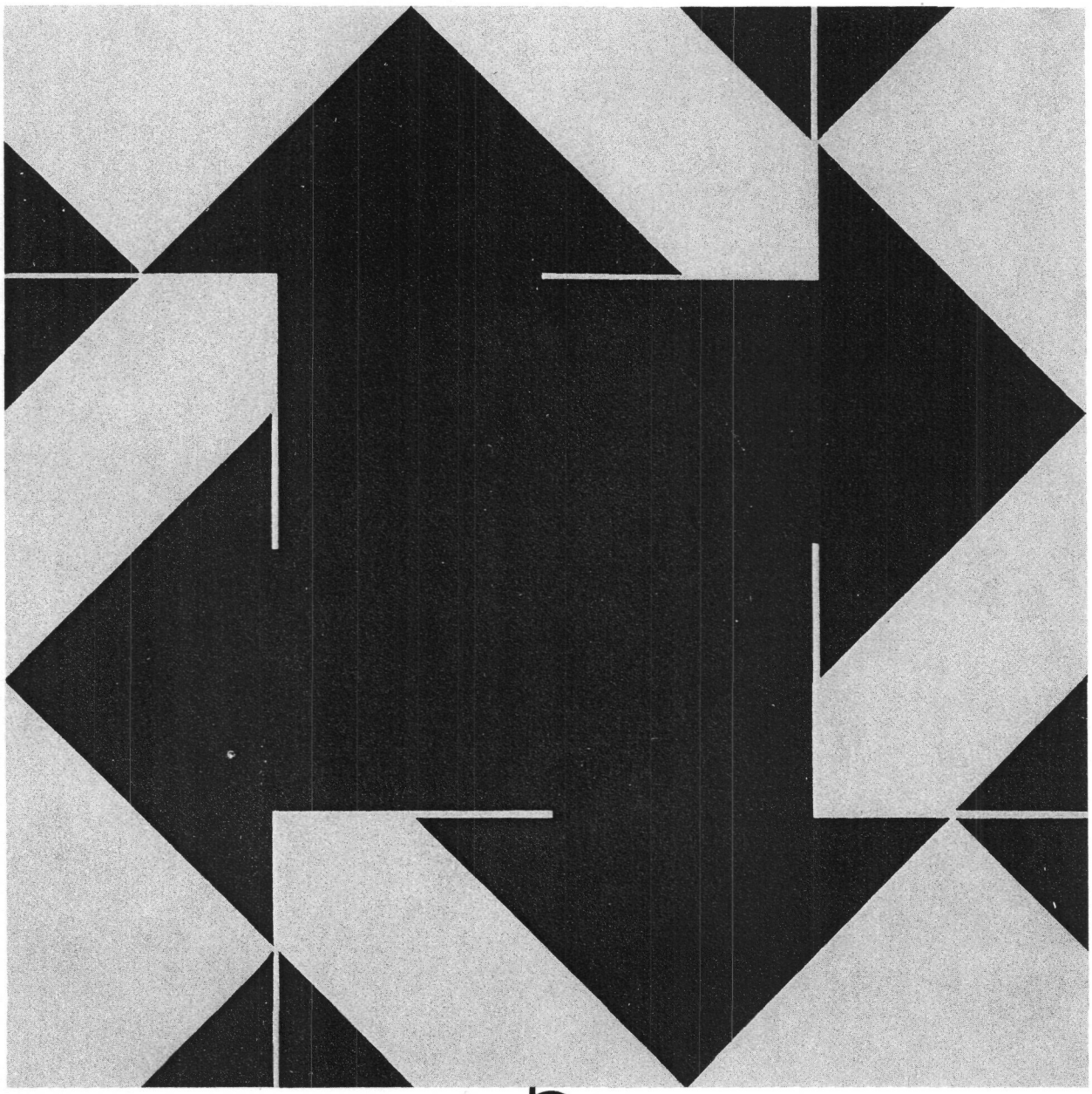

CONGRESS OF THE UNITED STATES

CONGRESSIONAL BUDGET OFFICE

THE OUTLOOK FOR ECONOMIC RECOVERY

The Congress of the United States
Congressional Budget Office

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NOTES

Unless otherwise indicated, all years referred to in this report are calendar years.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force. The Bureau of Labor Statistics will soon publish unemployment rates based on the total labor force, including the military stationed in the United States.

Details in the text and tables of this report may not add to totals because of rounding.

PREFACE

The Congressional Budget Office (CBO) is required by section 202(f) of the Congressional Budget Act of 1974 (Public Law 93-344) to submit an annual report on budgetary options to the House and Senate Committees on the Budget. This year's report is in three parts. This volume, Part I, examines the state of the economy and the outlook, fiscal and monetary policy choices, and policies to reduce unemployment. Part II, Baseline Budget Projections for Fiscal Years 1984-1988, provides a baseline for the consideration of multiyear budget options; the projections show what would happen if current taxing, spending, and lending policies were to continue unchanged for the next five fiscal years. Part III, Reducing the Deficit: Spending and Revenue Options, presents for Congressional consideration a number of broad strategies to reduce projected budget deficits and various specific options for cutting outlays and increasing revenues. In accordance with CBO's mandate to provide objective and impartial analysis, these reports contain no recommendations.

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Director

February 1983

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CHAPTER I. SUMMARY AND INTRODUCTION

The recession in the U.S. economy is now the deepest and the longest of the post-World War II period. Contrary to expectations of a year ago, the decline continued through the second half of last year, reducing output to levels achieved four years earlier; by year-end, unemployment rates were at double-digit levels not observed in this country since 1940. Moreover, most economists do not anticipate rapid recovery or a substantial improvement in the dismal unemployment picture this year.

The inflation outlook has improved markedly. The record slack in the U.S. economy, together with a depressed world economy, have sharply reduced inflationary pressures. During 1982, the inflation rate was lower than for any calendar year in the last decade.

The outlook for the future is highly uncertain. Although most forecasters anticipate an upturn in the months ahead, they disagree over how much the economy will grow during the next several years. There are two broad reasons for this: a high degree of uncertainty concerning the prospective behavior of both monetary and fiscal policy and their impact on the economy; and uncertainty about the effect of the debt burden of the developing countries on world trade. Monetary and fiscal policy are critical because they will strongly influence the course of the economy in coming years.

Administration and Federal Reserve spokesmen have indicated that the goal of economic policy is a moderate recovery that would permit a continuing decline in inflation. It is not clear how they would respond to other outcomes, such as stronger growth coupled with higher inflation. Consequently, some of the differences among forecasters reflect different opinions about how the Federal Reserve will behave once recovery is under way. Some believe it will emphasize reducing inflation, whereas others believe it will emphasize short-run growth.

The outlook for fiscal policy is, perhaps, even more uncertain. It is not clear what measures the Administration and the Congress will take to reduce the extremely large federal deficits that current budget policies would generate in future years. In the current economic environment, it may not be desirable to raise taxes or lower spending during the coming year, because that might weaken the recovery. But unless legislation is enacted to reduce deficits in future years, tight credit conditions may threaten the recovery, especially the resurgence of investment needed to enhance long-run economic growth.

RECENT ECONOMIC DEVELOPMENTS

During the last several years, economic growth has been exceptionally volatile, with several periods of decline and recovery. But essentially the economy has not grown since 1979. When the current recession began in the summer of 1981, the economy had not fully recovered from the brief but deep 1980 recession, and at the end of 1982 the economy was operating much further below capacity than at any time since the Depression.

The 1981-1982 recession resulted largely from high interest rates that had already cut deeply into residential construction and auto sales even before the recession began. Between the third quarter of 1981, when the recession began, and the first quarter of 1982, real gross national product (GNP) declined 2.6 percent--nearly all of the decline being in inventory investment. Weak sales, high interest rates, and declining inflation caused most businesses to cut their inventories sharply. Net exports were also weak, and have continued to decline in response to global recession and the high exchange rate of the dollar. Although business investment held up fairly well early in the recession, perhaps because of the tax cut and the expectation of an early recovery, it has declined sharply during the last year in response to continuing weak final sales and high real interest rates. As shown in Table 1, output dropped sharply in the last quarter of 1981 and the first quarter of 1982. After two quarters of very weak growth, with some inventory building, the economy renewed its decline in the fourth quarter of last year. As a result, unemployment rose steadily, reaching a record 10.7 percent in the last quarter.

Interest rates fell as usual in the early months of the present recession. But they rose again sharply at the end of 1981 and remained at very high levels during the first six months of 1982 despite weak demands, record unemployment, and declining inflation. The high rates during this recession period have been attributed to a sharp increase in money demand that was only partially accommodated by the Federal Reserve, and to the realization that federal credit requirements would be very large in future years. The unusual and unexpected behavior of interest rates in the first half of 1982 deepened and prolonged the recession.

The record slack in the economy has contributed to the sharp decline in inflation. As measured by the Consumer Price Index (CPI), inflation declined from a 12.6 percent rate during 1980 to a 4.5 percent rate during 1982. The growth of the fixed-weight GNP deflator, a broad measure of production costs, declined from 10.3 percent to 5.0 percent in the same period. More than half of the decline in inflation appears to stem from lower import prices--related to the oil price decline and the appreciation of

TABLE 1. RECENT ECONOMIC INDICATORS

	1979	1980	1981	1982	1981 Q3	1981 Q4	1982 Q1	1982 Q2	1982 Q3	1982 Q4
Levels (billions of 1972 dollars)										
GNP	1479.4	1474.0	1502.5	1475.5	1510.4	1490.1	1470.7	1478.4	1481.1	1471.7
Inventory Change	7.3	-5.0	9.0	-8.5	16.5	4.8	-15.4	-4.4	3.4	-17.7
Net Exports	37.2	50.6	42.0	30.3	39.2	36.5	36.9	35.7	27.5	21.1
Rates of Change (at annual rates in 1972 dollars)										
GNP	2.9	-0.4	1.9	-1.8	2.2	-5.3	-5.1	2.1	0.7	-2.5
Final Sales	3.5	0.5	1.0	-0.6	1.0	-2.3	0.2	-0.9	-1.3	3.2
Consumption	2.7	0.3	1.8	1.0	2.9	-3.3	2.5	2.5	0.6	5.0
Business Fixed Investment	7.4	-2.2	3.5	-3.8	9.3	0.6	-5.0	-11.8	-7.7	-9.0
Residential Investment	-5.2	-20.2	-4.8	-10.9	-31.9	-25.3	-10.2	12.9	-5.9	23.7
Government Purchases	1.3	2.3	0.9	1.4	3.6	7.0	-2.9	-5.3	8.4	11.3
Industrial Production	4.4	-3.6	2.6	-8.1	1.4	-16.5	-11.7	-6.6	-3.4	-8.7
Averages (percent)										
Unemployment Rate	5.8	7.2	7.6	9.7	7.4	8.4	8.8	9.4	10.0	10.7
Inflation Rate (CPI-U)	11.3	13.5	10.3	6.1	11.8	7.8	3.2	4.6	7.6	2.8
Treasury Bill Rate	10.1	11.4	14.0	10.6	15.1	11.8	12.8	12.4	9.3	7.9

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

the dollar, factors that were themselves related to the recession and high interest rates. But the recession has also brought down the underlying inflation rate in the economy: wage gains declined from 9.6 percent during 1980 to 5.9 percent during 1982, and underlying inflation declined by about three percentage points in the same period.

In response to reduced inflation, a mounting financial crisis, and the failure of the economy to recover as expected, the Federal Reserve changed policies last summer, placing greater emphasis on promoting economic growth. Previously announced money aggregate targets have been suspended and money growth has been quite rapid. Nominal interest rates have declined steadily since last July, though they remain very high in real terms, especially for a recession period. Some interest-sensitive sectors of the economy have responded to the decline in rates. Auto sales seem to have picked up somewhat in recent months, though this sector has not yet shown significant strength. The growth in housing starts since last spring has been substantial, and appears to be gaining momentum. Given the backlog of demand for housing and autos, a further pick-up may be anticipated as interest rates decline. Defense spending has also been a significant positive factor and will continue to be so. Whether general recovery will begin in the months ahead is still not clear, however. Likewise there is much uncertainty about the strength of the recovery, once started, partly because of the unresolved policy issues mentioned above.

THE CBO ECONOMIC PROJECTIONS

The CBO baseline projection shows moderate growth, well below the average cyclical recovery, on the assumption that monetary policy will in fact limit growth in line with the moderate growth goals enunciated by Administration and Federal Reserve spokesmen. But because of the uncertainty regarding both monetary and fiscal policy and the international situation, it is more difficult than usual to anticipate the condition of credit markets and the strength of the recovery in the year ahead. Accordingly, in addition to its baseline projection CBO has prepared two alternative projections--showing a low-growth path with higher unemployment and lower inflation than the baseline projection, and a high-growth path with lower unemployment and higher inflation.

The Baseline Projection

The short-run forecast, shown in Table 2, incorporates the following policy assumptions.

TABLE 2. THE CBO SHORT-RUN FORECAST

Economic Variable	1981:4 to 1982:4	1982:4 to 1983:4	1983:4 to 1984:4
Nominal GNP (percent change)	3.3	8.9	9.6
Real GNP (percent change)	-1.2	4.0	4.7
GNP Implicit Price Deflator (percent change)	4.6	4.7	4.6
Unemployment Rate (calendar year average)	9.7	10.6	9.8
Three-Month Treasury Bill Rate (calendar year average)	10.6	6.8	7.4

- The tax and spending policies are those in effect at the end of the 97th Congress, including the recently enacted increase in gasoline taxes and all appropriation action to date. Defense spending is at the level for fiscal year 1984 that was specified in the budget resolution for fiscal year 1983. On a unified budget basis, these assumptions result in outlays of $800 billion in fiscal year 1983 and $850 billion in fiscal year 1984.

- In regard to monetary policy, the money aggregate, M2, is assumed to grow at 9 percent annual rates during 1983 and 1984. If velocity growth is close to the historical average, monetary policy appears consistent with the projection. However, if velocity growth deviates sharply from average historical growth rates (as it did during 1982), CBO assumes that the Federal Reserve will adjust its money targets in an attempt to ensure moderate growth in nominal GNP.

The short-run forecast also assumes no food or fuel price shocks. Food prices are expected to rise moderately during the next two years, at 4 percent this year and 5 percent next year. World oil prices are assumed to

be flat through 1984. However, an assumed 10 to 15 percent decline in the trade-weighted value of the dollar is expected to provide some pressure on prices by raising the cost of imported goods.

The longer-range economic projections for the 1985-1988 period, displayed in Table 3, are not an attempt to forecast probable economic conditions for those years. They are noncyclical projections that assume what appears to be an attainable average rate of growth. Whether this growth path is attainable with the tax and spending policies now in place is not certain. Monetary policy is assumed to be directed at achieving a further reduction in inflation, but not so rapid a reduction as to prohibit a gradual winding down of the unemployment rate in the outyear projections. It is further assumed that no price shocks occur (oil and food prices rise with general inflation), and that productivity grows at a trend rate of 1½ percent per year.

The baseline economic forecast shows real growth in GNP of 4.0 percent from the fourth quarter of 1982 to the fourth quarter of 1983 and 4.7 percent the next year. The unemployment rate is expected to decline gradually to 9.4 percent by the final quarter of 1984. In its initial phase, the recovery reflects an end to the inventory adjustment and increased activity in the housing and auto sectors as a result of declines in interest rates. Business investment is expected to be weak this year but to make a significant contribution to growth in 1984. Over the ensuing four years, the economy is assumed to grow at a 3.6 percent annual rate, with unemployment decining slowly to 7.5 percent by 1988.

Inflation, as measured by the GNP deflator, is 4.7 percent (fourth-quarter-to-fourth-quarter) in 1983 and 4.6 percent in 1984 in the CBO short-run forecast. Thereafter it is assumed to decline very gradually to 3.8 percent by 1988. Short-term interest rates, as measured by the three-month Treasury bill rate, are projected to average 6.8 percent in calendar year 1983, rising slightly as the recovery proceeds to 7.4 percent in calendar year 1984. Both short and long rates are assumed to drift down slowly in the outyears, though somewhat faster than the decline in inflation.

Alternative Economic Projections

Although the Federal Reserve may be attempting to achieve a path of moderate real growth and declining inflation, there is no certainty that it will succeed. The past year has shown monetary policy once again to be a very blunt instrument. The extremely tight credit conditions of the first six months of 1982 and the resulting continued deterioration of output were not

TABLE 3. CBO BASELINE AND ALTERNATIVE PROJECTIONS, CALENDAR YEARS 1983-1988

Economic Variable	1983	1984	1985	1986	1987	1988
CBO Baseline Projections						
GNP (percent change)	6.8	9.6	9.0	8.1	7.6	7.4
Real GNP (percent change)	2.1	4.7	4.1	3.7	3.5	3.5
GNP deflator (percent change)	4.6	4.7	4.7	4.3	3.9	3.8
CPI-U (percent change)	4.5	5.0	4.7	4.1	3.9	3.7
Unemployment Rate (percent)	10.6	9.8	9.0	8.4	8.0	7.5
Three-Month Treasury Bill Rate (percent)	6.8	7.4	7.2	6.6	6.1	5.9
Alternative Projections						
GNP (percent change)						
High-growth path	9.0	11.3	9.5	9.1	8.9	9.1
Low-growth path	5.4	7.9	7.9	7.2	6.6	6.4
Real GNP (percent change)						
High-growth path	4.0	6.0	4.2	4.0	4.0	4.0
Low-growth path	0.8	3.3	3.3	3.2	3.0	3.0
CPI-U (percent change)						
High-growth path	4.6	5.3	5.0	4.6	4.6	4.8
Low-growth path	4.5	4.9	4.4	3.8	3.4	3.2
Unemployment Rate						
High-growth path	9.9	8.5	7.7	7.0	6.4	6.0
Low-growth path	11.2	10.9	10.3	9.8	9.4	9.0
Three-Month Treasury Bill Rate (percent)						
High-growth path	4.4	5.4	5.7	5.0	5.0	4.9
Low-growth path	8.4	9.9	8.9	7.7	7.2	6.3

foreseen by the Federal Reserve when it chose its money targets for 1982. Similar events, which would mean faster or slower growth than intended, cannot be ruled out in the next few years, particularly in an environment of high federal credit demands. Many other developments, though perhaps less likely, could significantly affect recovery: major defaults on their external debts by developing countries, or a sharp drop in oil prices resulting from disagreements among the OPEC countries.

To show how events might alter the economic outlook, two alternative economic paths are presented in Table 3. The high-growth path shows a "normal" cyclical recovery, with more than 5 percent growth during the first three years and 4 percent thereafter. As compared with the baseline economic projection, the high-growth path shows a more rapid decline in unemployment, to 6 percent by 1988, but somewhat higher inflation, particularly in the outyears. The low-growth path shows a very weak recovery, with unemployment rates averaging about 10 percent in the 1983-1988 period, but with more rapidly declining inflation.

THE CBO BUDGET PROJECTIONS

The baseline budget projections incorporate the tax and spending policies in effect at the end of the 97th Congress with defense spending in fiscal year 1984 at the level specified in the 1983 budget resolution. 1/ As shown in Table 4, a deficit of about $194 billion is projected for fiscal year 1983 and $197 billion for 1984. The projected deficit rises slowly thereafter to $267 billion by 1988, assuming the same policies together with the CBO baseline economic projections. The deficit as a percent of GNP is about 6.1 percent in fiscal year 1983, well above the previous record of 4 percent in 1976 (see Figure 1). The ratio declines during the 1983-1988 period but remains at 5.6 percent in 1988, according to the CBO baseline projection.

These extremely large deficits result from: (1) the current slack in the economy, together with the baseline projection of moderate growth and declining inflation, which reduces revenue growth more than outlay growth; (2) the large tax cuts enacted in the past two years; and (3) substantial increases in defense, Social Security, Medicare and Medicaid, and interest payments under these assumptions.

1/ For a detailed description of the baseline budget projections see Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1984-1988 (February 1983).

TABLE 4. CBO BASELINE UNIFIED BUDGET PROJECTIONS, FISCAL YEARS 1983-1988

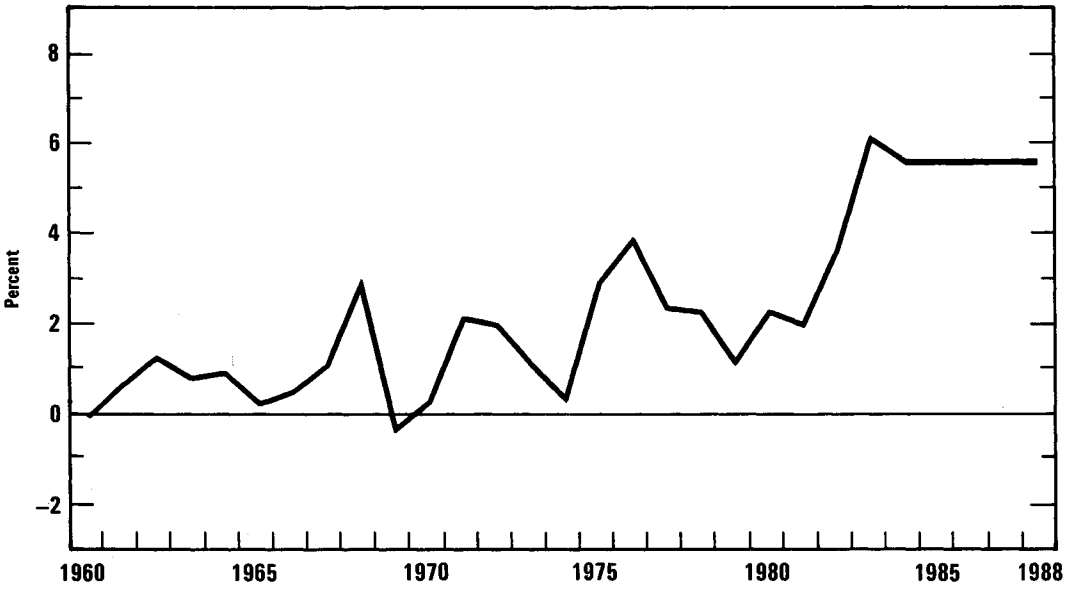
	1983	1984	1985	1986	1987	1988
	In Billions of Dollars					
Revenues	606	653	715	768	822	878
Outlays	800	850	929	999	1,072	1,145
Deficit	194	197	214	231	250	267
	As a Percent of GNP					
Revenues	19.0	18.7	18.7	18.5	18.4	18.3
Outlays	25.0	24.3	24.3	24.1	24.0	23.9
Deficit	6.1	5.6	5.6	5.6	5.6	5.6

As shown in Table 5, the deficit estimates are greatly affected by economic assumptions, even assuming the same tax and spending policies. The low-growth alternative projection shows deficits rising to more than $300 billion by fiscal year 1986. The high-growth path, on the other hand, shows much lower federal deficits. By fiscal year 1986, for example, the deficit is $172 billion--about $60 billion below the baseline estimate. Although deficits are not on a downward path even with the high-growth path, they do decline sharply relative to GNP. Nevertheless, unless policies are changed, the federal deficit is projected to be $183 billion in fiscal year 1988 even with the high-growth path.

POLICY ALTERNATIVES

The present high unemployment rate, and the prospect that it will continue for several years, have given rise to many proposals seeking to reduce it or to alleviate hardship. Undoubtedly, policies that generate rapid economic growth would make the largest contribution to reduced unemployment. However, the baseline budget projection shows that fiscal policy is already moving in a stimulative direction. Further budget stimulus could generate tighter credit conditions. An expansive monetary policy would be likely to improve short-run growth prospects with less threat to interest rates if budget deficits are reduced concurrently. Ultimately, expansionary

Figure 1.
Unified Budget Deficits as a Percent of GNP



SOURCES: Office of Management and Budget; Congressional Budget Office.

policies would risk higher inflation, particularly when economic slack is reduced. Policymakers are thus faced with a choice: emphasize the reduction of unemployment at some risk of inflation or emphasize fighting inflation at the risk of continued high unemployment.

If the emphasis is to be on fighting inflation, efforts can nevertheless be made to reduce the hardship of unemployment. These would include extending unemployment insurance benefit periods and closing some of the gaps in the "safety net" for the unemployed. Programs to alleviate hardship could be combined with measures designed to reduce the noncyclical or structural component of unemployment. This approach might include increased job training, efforts to improve mobility, and information about jobs, along with measures to reduce artificial impediments to employment such as discrimination and minimum wages. Such programs would not have a large impact on total unemployment during the next few years, given the slack in the economy, but might make a significant contribution in later years. For the short run, job-creating programs could be adopted such as

TABLE 5. ALTERNATIVE UNIFIED BUDGET PROJECTIONS, FISCAL YEARS 1983-1988 (In billions of dollars)

	1983	1984	1985	1986	1987	1988
In Billions of Dollars						
High-Growth Path						
Revenues	615	676	743	798	862	933
Outlays	792	830	904	971	1,041	1,116
Deficits	177	155	162	172	179	183
Low-Growth Path						
Revenues	599	637	686	730	777	825
Outlays	804	868	958	1,032	1,110	1,187
Deficits	205	232	272	302	333	363
As a Percent of GNP						
High-Growth Path						
Revenues	19.0	18.7	18.7	18.4	18.3	18.1
Outlays	24.4	23.0	22.8	22.4	22.1	21.7
Deficits	5.5	4.3	4.1	4.0	3.8	3.6
Low-Growth Path						
Revenues	18.9	18.7	18.6	18.5	18.4	18.4
Outlays	25.3	25.5	26.0	26.1	26.3	26.5
Deficits	6.5	6.8	7.4	7.6	7.9	8.1

public service jobs and public works. Most of the above programs, however, would entail larger federal deficits unless offset by cuts in other spending programs or increases in taxes.

It is now generally agreed that a balanced federal budget is not an attainable goal for the near future. Moreover, substantial tax increases or spending cuts undertaken to reduce the fiscal year 1983 deficit would probably weaken or delay economic recovery. Caution is also suggested in 1984, but most analysts favor legislative changes this year that would reduce deficits in the later years of the recovery.

Failure to reduce the outyear deficits would mean that the federal sector would absorb a very high proportion of available credit during the recovery, which could drive up real interest rates and crowd out private investment. To the extent that business investment became a casualty of high federal deficits, long-run gains in productivity could be reduced, thereby adversely affecting U.S. living standards and competitiveness in world markets. There might also be a renewed clash between monetary and fiscal policy resulting in a low-growth economy or, possibly, a stop-go economy. Uncertainty about future monetary and fiscal policies may also be one reason for the present high levels of long-term interest rates that hold back recovery.

Although efforts to reduce future deficits are likely to have favorable effects in credit markets, it is difficult to say how much deficit reduction would be necessary to avoid crowding out of private investment and other adverse effects of deficits. Elimination of the noncyclical, or "structural," component of the deficit--that is, the part of it not caused by recession--is favored by many. However, there are many possible definitions of structural deficits. (Chapter IV describes four such measures and provides deficit estimates for each.)

With the projected actual deficit at $267 billion in fiscal year 1988, CBO has calculated that the deficit reduction necessary to achieve a balanced structural deficit in that year ranges between $115 billion and $260 billion, depending on which definition of structural deficit one chooses. By any reasonable measure, the elimination of the noncyclical deficit in fiscal year 1988 would be a major undertaking. Even achieving a minimum target of a downward trend in projected deficits during the recovery would take substantial policy changes.

In a companion publication, CBO reviews numerous possible program changes that would reduce the deficit. 2/ A substantial reduction would require that no major component of the budget be exempt from change. Cuts in defense and entitlement programs, as well as some increase in taxes, would be necessary to start the deficit on a downward trend.

The overall economic impact of deficit-reducing measures would depend critically on monetary policy. Many analysts believe that deficit-reducing measures in combination with a moderately accommodative monetary policy would reduce the likelihood of crowding out investment and

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2/ Congressional Budget Office, Reducing the Deficit: Spending and Revenue Options (February 1983).

would significantly improve long-run economic growth without significant inflationary effects. There is always a risk, however, that policy may become too expansive and generate higher inflation.

CONCLUSION

It is now widely agreed that spending cuts and tax increases will be needed to reduce the projected deficits to acceptable levels when the economy is recovered. If the recovery is more vigorous than projected by CBO, the deficit will be lower and it will be easier to attain this goal. On the other hand, if the economy does not recover as quickly as projected by CBO, the deficits will be larger. In this circumstance, it may be desirable to delay for a time the implementation of spending cuts and tax increases in order to avoid adverse affects on the recovery with accompanying hardships for many people. Ultimately, however, the deficit will have to be reduced in order to avoid crowding out private investment.

CHAPTER II. THE ECONOMIC SITUATION

The current recession is now the worst since the Depression. In the fourth quarter of 1982, unemployment was close to 11 percent, and manufacturers used less than 68 percent of capacity. The recession began in July 1981, after an incomplete recovery from the 1980 recession, and has lasted longer than any other recession since World War II. Inflation, however, has fallen substantially over the past two years--the growth of the fixed-weight GNP deflator dropped from 10.3 percent in 1980 to only 5 percent in 1982, and other measures decelerated similarly (see Figure 2).

Four major economic developments contributed to the current situation:

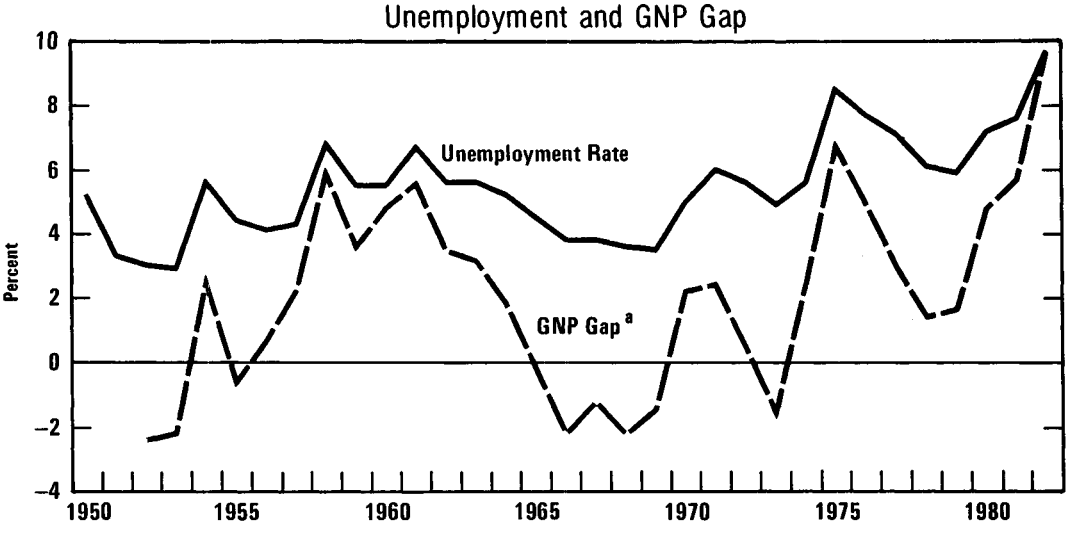
- The direction of monetary policy changed in 1979. Before 1979, the Federal Reserve Board emphasized controlling credit conditions (that is, interest rates) in an attempt to achieve orderly financial markets and economic growth. By the end of 1979, as the nation became convinced of the overriding importance of inflation control, the emphasis shifted to restricting the growth of the money supply. This change of emphasis occurred in other countries as well. The money growth set by the Federal Reserve Board has achieved a substantial reduction in inflation, but has also contributed to record high interest rates, which produced a deep recession.

- Oil prices, which contributed two large inflationary shocks to the economy in the 1970s, have been flat or falling since 1980. The big increase in oil prices in 1979 was a major factor in inflation at the time the Federal Reserve decided to give priority to controlling inflation. That decision, together with the recession overseas, has helped to hold down oil prices since 1980. The result has been a substantial reduction in the contribution of oil prices to inflation, and wide swings in the flows of money between oil producers and the rest of the world.

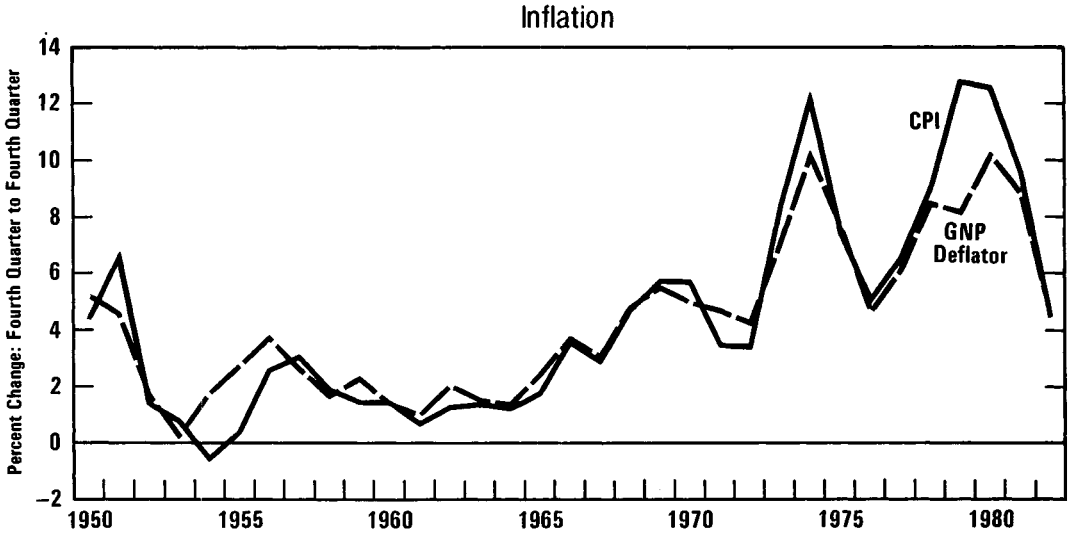
- The federal budget became less stimulative in 1981, but fiscal policy changes were being put in place that implied massive increases in projected federal deficits in the future. In the context of a tight anti-inflationary limitation on the supply of credit, this projected increase in federal borrowing, far beyond

Figure 2.

Measures of Economic Performance



[a] Percentage gap between actual and potential real GNP. Potential GNP is as calculated by BEA through 1981, and projected to 1982 at 2.5 percent growth by CBO.



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

RECENT FISCAL POLICY CHANGES

The federal budget became more restrictive in 1981. owing to the inflation-induced increase in personal income tax rates. The change in the deficit, measured at standard levels of employment, between 1980 and 1981 amounted to about 0.7 percent of GNP, and thus may have contributed to the downturn in 1981.

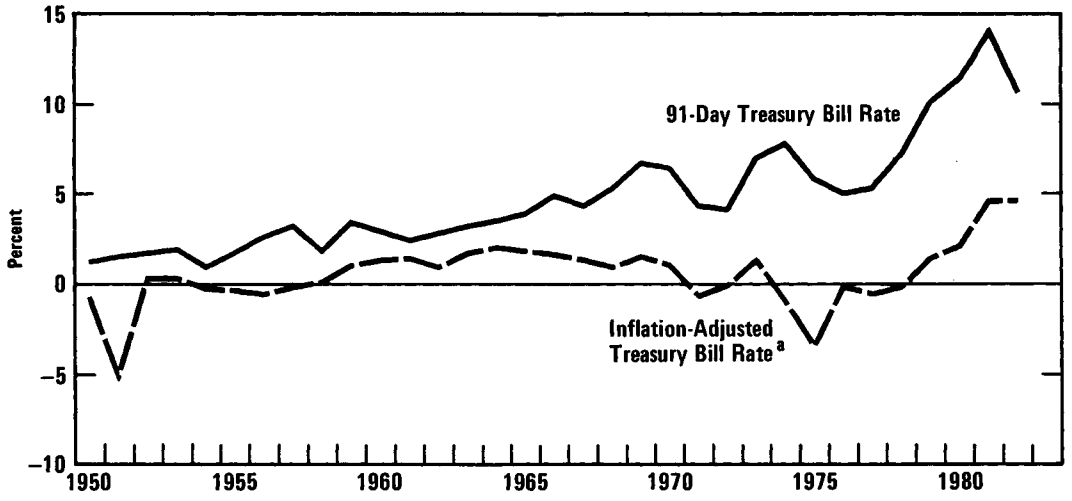
The Economic Recovery Tax Act of 1981 (ERTA) reflected a shift in the goals of fiscal policy toward creating a climate for long-run economic growth. This was thought to require reductions in marginal tax rates, improved incentives for saving and investment. and substantial reductions in the size of the government sector. Taken together, these proposals implied a massive increase in the federal deficit, unless strong economic growth generated a large increase in revenues. Some thought that the ERTA changes would generate higher economic growth in the short run. In fact, instead of rapid growth in 1982 there was a recession and as a result the projected federal deficit has ballooned. The prospect of massive federal credit demands in future years may have contributed to expectations of high interest rates in the future, and along with restricted money growth raised real interest rates in 1981 and 1982.

Recognition of the problems caused by these projected deficits led to the Tax Equity and Fiscal Responsibility Act of 1982, which modified some investment incentives and increased revenues in other ways. This act may have helped, together with a less restrictive monetary policy, to reduce interest rates in the second half of 1982, but still left projected federal deficits at record levels (see Chapter IV).

what can be ascribed to the recession, has contributed to record high real and nominal interest rates over the past two years (see Figure 3).

- The international economy is also in a recession, brought about in part by generally restrictive monetary and fiscal policies in major industrial countries. While these policies have succeeded in reducing inflation significantly, they have contributed to a world-wide contraction in economic activity and trade. Major foreign currencies have been weakened by a "flight to quality" to the U.S. dollar and precious metals, and the developing countries are experiencing severe debt service problems in the wake of high world interest rates and reduced demand for their exports.

Figure 3.
Short-Term Interest Rates



SOURCES: Federal Reserve Board; Congressional Budget Office.

[a] 91-day Treasury bill rate, adjusted for inflation measured by the GNP deflator in the quarter following issue.

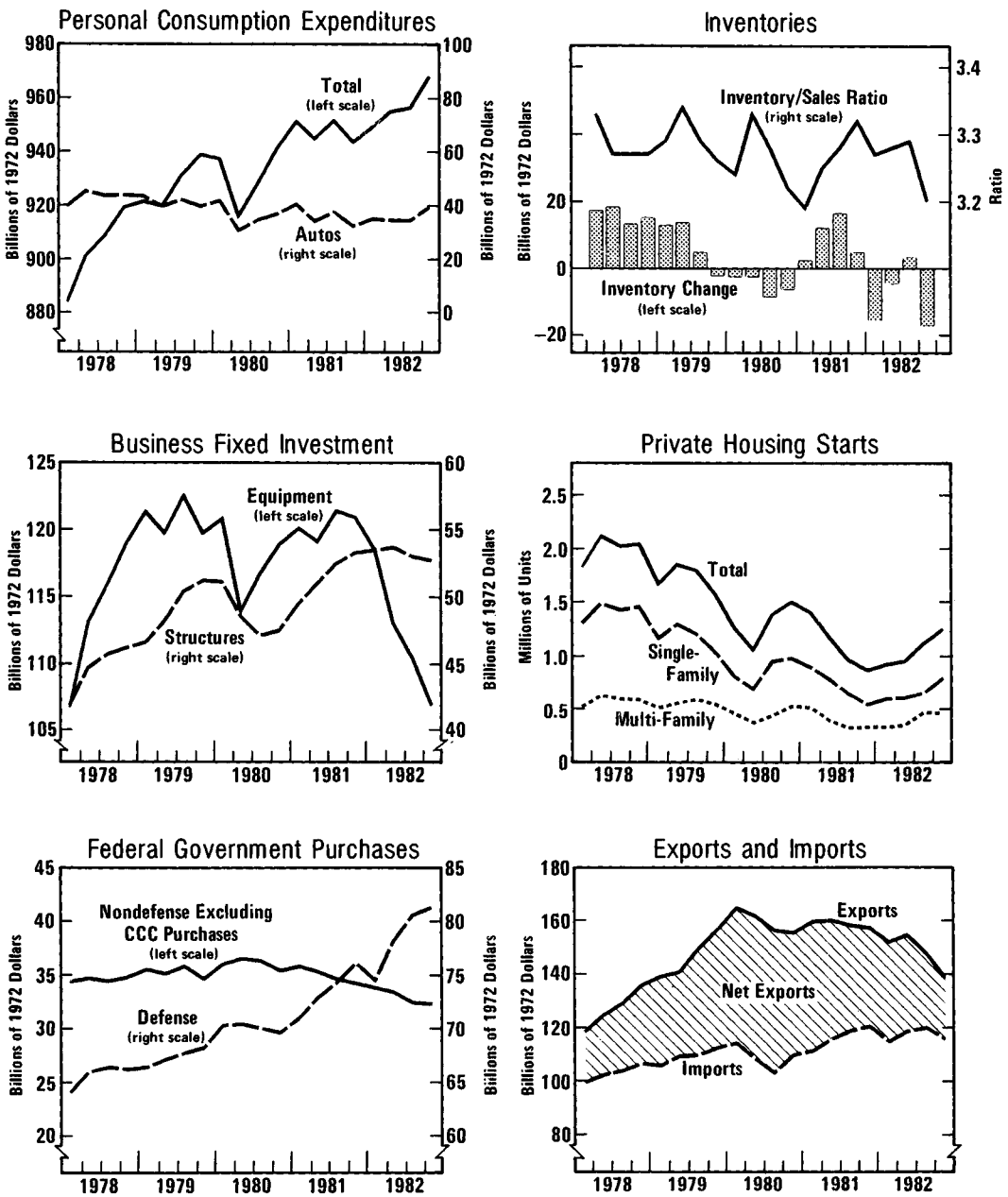
These four developments have brought about, in the United States, a substantial reduction in inflation from the high rates of the late 1970s. This disinflation, however, has been extraordinarily costly in terms of most of the traditional measures of economic success: it has pushed interest rates, unemployment, and bankruptcies to record levels, causing a recession of record magnitude and duration. In terms of the long-run goal of increasing economic growth, the past few years have also been costly because they have discouraged business from investing and individuals from looking for work.

This chapter reviews the factors contributing to the decline in inflation, the costs of this decline in terms of the two recessions since 1979 in the United States and overseas, and the prospects for recovery and economic growth in the remainder of the 1980s.

The current economic situation is summarized in Figure 4, Table 6, and the box on the Economy, which appear on the following pages.

Figure 4.

Components of Real GNP



SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census.

TABLE 6. STAGES OF THE RECESSION: CHANGES IN THE COMPONENTS OF REAL GROSS NATIONAL PRODUCT
(In billions of 1972 dollars, at annual rates)

	Full Recession (1981:3 to 1982:4)	First Stage (1981:3 to 1982:1)	Second Stage (1982:1 to 1982:3)	Last Stage (1982:4)
Gross National Product	-38.7	-39.7	10.4	-9.4
Inventory Change	-34.2	-31.9	18.8	-21.1
Final Sales	-4.6	-7.8	-8.3	11.5
Consumption	16.6	-2.3	7.2	11.7
Business equipment	-14.5	-2.9	-8.1	-3.5
Business structures	0.1	0.9	-0.5	-0.3
Residential	-1.2	-4.0	0.7	2.2
Defense	7.0	0.2	6.1	0.7
Federal nondefense	5.9	3.3	-4.3	6.9
Excluding CCC	-2.3	-0.8	-1.4	-0.1
State and local	-0.3	-0.8	0.0	0.5
Net Exports	-18.1	-2.3	-9.4	-6.4
Exports	-21.4	-6.1	-4.2	-11.1
Imports	-3.4	-4.0	5.3	-4.7
MEMO:				
Inventory Change Plus CCC Purchases a/	-26.0	-27.7	15.9	-14.1
Final Sales Excluding CCC Purchases	-12.8	-12.0	-5.4	4.5

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

a/ Commodity Credit Corporation (CCC) purchases of stocks of farm products are treated conventionally in the National Income and Product Accounts as a component of nondefense purchases and final sales, although they are in many ways similar to inventory-building by farmers.

THE ECONOMY

Two recessions have occurred since 1979. In early 1980, a "credit crunch" caused a short, two-quarter recession. Recovery brought new interest rate increases, and in mid-1981 a new recession. The recession had not ended at the end of 1982.

Inflation dropped dramatically between 1980 and the fourth quarter of 1982: from 12.6 percent to 2.6 percent measured by the CPI, and from 10.9 percent to 5.7 percent measured by the less distorted fixed-weight PCE deflator.

Interest rates, which in 1981 were unprecedently high, have fallen in the second half of 1982 in response to an easing of monetary restrictions, measures to reduce the deficit, and international capital flows, but still remain at record levels in relation to current inflation rates.

The current recession started with a sharp downturn from the third quarter of 1981 to the first quarter of 1982. Real GNP fell $40 billion (2.6 percent), of which $32 billion reflected inventory correction. Then, through the third quarter of 1982, the inventory correction slowed and real GNP rose slightly, but net exports and business equipment investment dropped $9 billion and $8 billion respectively. Further inventory adjustment, and a $6 billion fall in real net exports, produced another $9 billion decline in real GNP in the fourth quarter of 1982.

Unemployment reached 10.8 percent at the end of 1982, a postwar record. Discouraged workers were 1.7 percent of the labor force, the highest ever for this measure.

Consumption remained a positive factor through the recession because personal tax cuts offset falling labor incomes.

The inventory swing in the first half of the recession resulted from an adjustment of inventories to very high real interest rates and to the early end of the recovery from the previous recession. Oil inventories fell dramatically, reflecting lower oil demand and expected lower oil prices. Sharp cutbacks in auto and truck inventories, together with CCC purchases of farm products, accounted for most of the $21 billion inventory adjustment in the fourth quarter of 1982.

The net export decline reflected a 47 percent appreciation of the dollar since mid-1980, as well as recession overseas. The correction in oil inventories cut oil imports sharply in the first half of the recession. But the oil inventory correction ended in the second quarter of 1982, and real net exports fell $15 billion to the end of 1982. In nominal terms, net exports went from a surplus of $26 billion in 1981 to a deficit of $7 billion in the fourth quarter of 1982.

Business investment stayed strong for a time partly because of forecasts last year that the recovery would start in 1982. Plans were revised down as the recession progressed, and now suggest further declines next year.

Real defense spending rose $7 billion in the last three quarters of 1982, and is likely to be more important from now on.

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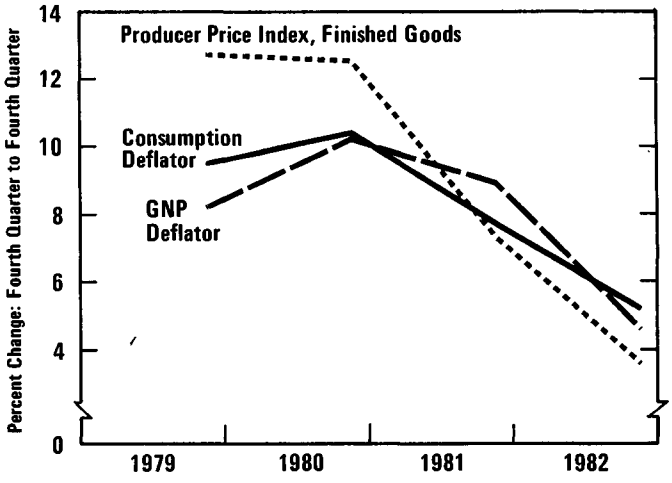
Figure 5.
Deceleration in Inflation



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

THE REDUCTION IN INFLATION

By any measure, the reduction in inflation over the past two years has been impressive. Among the commonly used measures of inflation, the Consumer Price Index for all urban consumers (CPI-U), which grew at a 12.6 percent rate during 1980, increased only 4.5 percent during the four quarters of 1982; the fixed-weight deflator for personal consumption expenditures increased 10.9 percent in 1980 and only 5.3 percent in 1982; the fixed-weight GNP deflator, a broad measure of production costs, slowed from 10.3 percent to 5.0 percent over the same period; and the Producer Price Index for finished goods, a narrower measure, decelerated from 12.5 percent to 3.6 percent (Figure 5). The last time GNP inflation was this low was in 1972, when wage and price controls were in effect.

What accounts for the decline in inflation?

- Wage growth has been slowed substantially.
- Oil prices have fallen since 1980.
- The exchange rate, which was falling in the late 1970s, has risen in the 1980s, thus decreasing the price of imports.
- After a run of bad years in the 1970s, good harvests have brought lower food prices in recent years.
- House prices and mortgage rates, which previously introduced an upward distortion in the CPI measure of inflation, have recently had the reverse effect.

Wages. The current recession has brought about a substantial reduction in wage growth, which is the main determinant of underlying inflation. The average hourly earnings index over the 12 months of 1982 grew only 5.9 percent, well below the 9.3 percent in 1980. This rate of earnings growth is lower than in any period free from wage controls since 1968.

The slowing of wage growth since 1980 may be overstated by the slowing of the average hourly earnings index. The employment cost index, a better measure that is somewhat broader in coverage and removes the effect of occupational mix on average wages, has decelerated from 9 percent to about 7 percent since 1980, or only two-thirds the deceleration in the average hourly earnings index over the same period (see Table 7). 1/

The current recession differs from other recent recessions in two major respects: unemployment is much higher, and the reduction in inflation--especially in oil, food, and other commodity prices--has been much larger. The high unemployment has undoubtedly been a major factor in slowing the growth of nominal wages, but the process has been made easier by the decline in inflation. In fact, prices have slowed more than nominal wages, and consequently real wages have risen in 1981 and 1982--as they have in previous recessions (see Figure 6). 2/

High unemployment and the increasingly desperate condition of many companies appear to have had a large impact on major collective bargaining agreements, leading to much lower wage and benefit packages than in the past. The change began in 1980, when the Chrysler Corporation persuaded its workers to accept actual pay cuts to avoid bankruptcy. There have since been several major contract reopenings--an almost unprecedented occurrence that has had a significant impact on economy-wide wage statistics.

1/ The average hourly earnings index adjusts for overtime in manufacturing, interindustry employment shifts, and seasonality. The employment cost index adjusts in addition for changes in occupational mix within industries. These occupational mix changes have proved to be important, suggesting that the cyclical movement of the average hourly earnings index is distorted.

2/ The only past periods of substantial declines in real wage rates have been associated with the massive oil price increases since 1970, rather than with recessions and unemployment. See Congressional Budget Office, The Prospects for Economic Recovery (February 1982), Chapter IV.

TABLE 7. MEASURES OF WAGE AND COMPENSATION CHANGE FOR THE NONFARM BUSINESS SECTOR (In percent)

	Year Ending					
	Dec 1978	Dec 1979	Dec 1980	Dec 1981	Sept 1982	Dec 1982
Compensation Change						
Compensation per Man-hour a/	8.9	9.5	10.6	8.8	6.9	6.6
Employment Cost Index b/	N/A	N/A	9.8	9.8	7.2	N/A
Union	N/A	N/A	N/A	10.7	7.9	N/A
Nonunion	N/A	N/A	N/A	9.4	6.7	N/A
Major Collective Bargaining Agreements c/						
First year	8.3	9.0	10.4	11.3	3.3	N/A
Average over life of contract	6.3	6.6	7.1	9.2	2.5	N/A
Wages and Salaries Change						
Average Hourly Earnings Index d/	8.6	8.3	9.3	8.2	6.1	5.9
Employment Cost Index b/	7.6	8.7	9.0	8.8	6.9	N/A
Union	8.0	9.0	10.9	9.6	7.4	N/A
Nonunion	7.6	8.5	8.1	8.5	6.6	N/A
Major Collective Bargaining Agreements e/						
First year	7.6	7.4	9.5	10.1	3.8	N/A
Average over life of contract	6.4	6.0	7.1	8.1	3.5	N/A

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

a/ Quarterly data, not adjusted for overtime or industry, or occupation mix changes.

b/ Adjusted for overtime, industry and occupation mix changes.

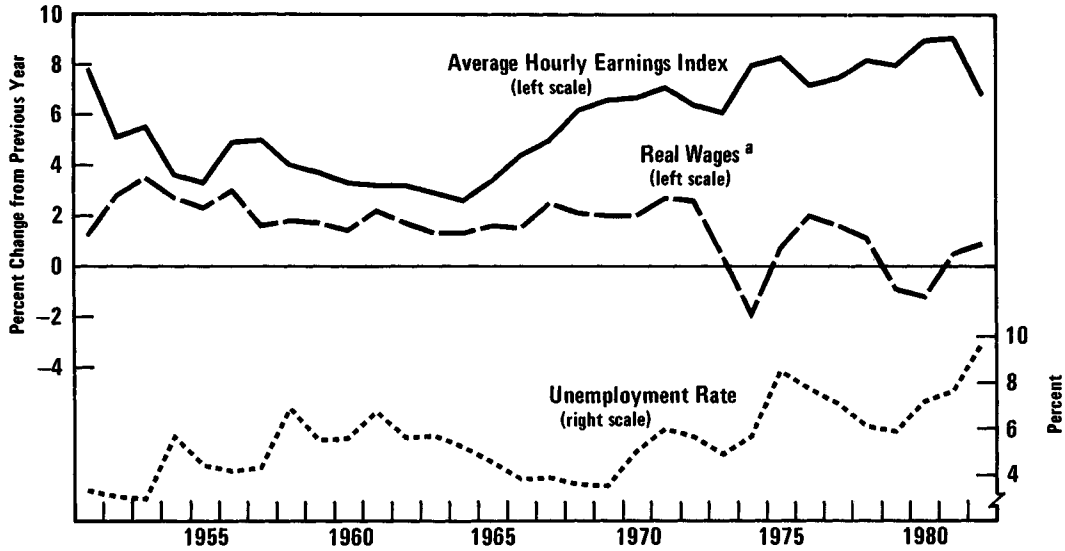
c/ Settlements in the period covering 5,000 or more workers.

d/ Adjusted for overtime in manufacturing and for industry mix changes.

e/ Settlements in period covering 1,000 or more workers.

Figure 6.

Wages and Unemployment



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics, U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

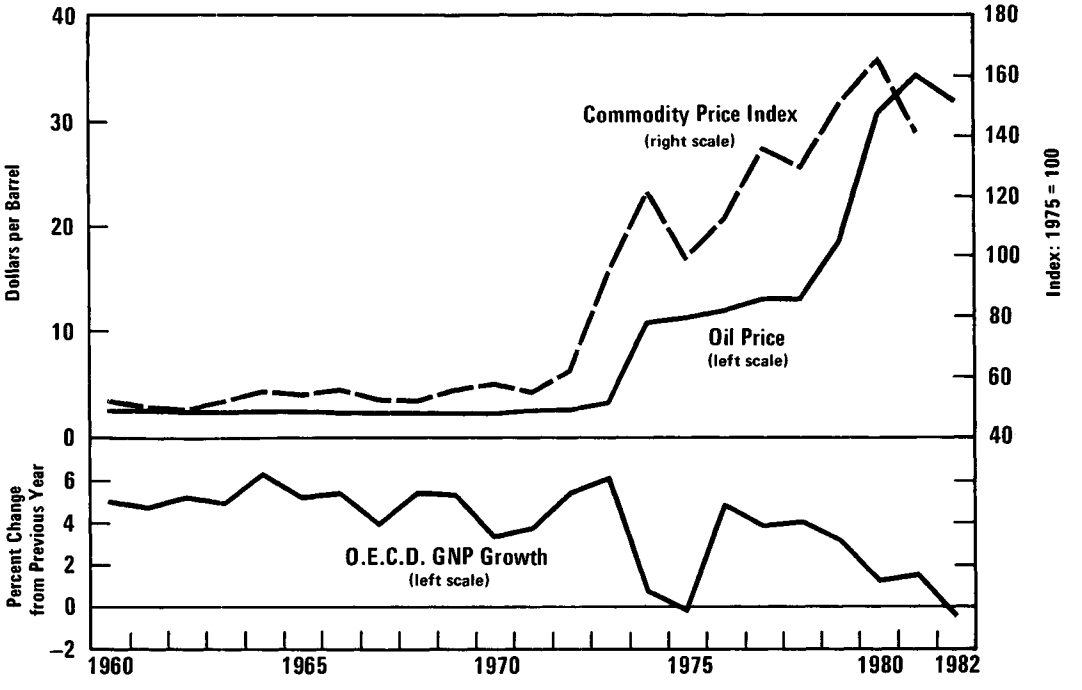
[a] Average hourly earnings index deflated by personal consumption deflator.

These concessions were frequent at the end of 1981 and in the first few months of 1982. Since then, union resistance to further concessions has been reported, and in some cases pressure to roll back previous concessions even in the face of continued high unemployment.

The reduction in wage growth in the major collective bargaining sector has clearly been important, and raises the question whether it represents a permanent change toward more competitive wage rates. The question will not be answered until unemployment rates return to more normal levels: if under those circumstances collectively bargained wages do not accelerate ahead of other wages, it will be clear that an important reduction in wage inflation has been achieved.

Oil Prices. In 1972, the marker price of oil was $2.50 per barrel. The price rose suddenly to about $11.50 per barrel by 1974, and then stayed virtually flat until 1979-1981, when it jumped again to $34 per barrel (see Figure 7). These enormous increases were possible because of the OPEC cartel and because rapid economic growth in the United States and in many other countries had caused the demand for oil, as for other commodities, to press on supply.

Figure 7.
Oil and Commodity Prices



SOURCES: International Monetary Fund; Organization for Economic Cooperation and Development; U.S. Department of Commerce, Bureau of the Census.

Since 1981, the marker price of oil has declined to $33.40, and its value in international markets has dropped to $29.30, despite massive production cutbacks. Saudi Arabian production is currently at about half of its 1979 peak, and Kuwaiti production is at its 1954 level. Other OPEC countries have not shared equally in the cutbacks, but so far at least the major Persian Gulf producers seem willing to accept the reduction in output necessary to maintain OPEC cohesiveness.

Oil prices declined despite lower production because:

- The dollar has appreciated strongly against the currencies of many countries with which OPEC trades, and the dollar price of goods OPEC imports has fallen. Thus OPEC has been able to permit falling dollar oil prices, while still enjoying increases in its ability to purchase imports. The real price of oil for countries

other than the United States has risen, while that for the United States has fallen.

- The 1979 oil price increases (much larger than those in 1973-1974) set off a new round of oil conservation measures, which will continue as the world's capital stock is replaced by more energy-efficient machines.

- The worldwide recession itself cut oil demand.

- High interest rates have meant tremendous increases in the cost of holding oil inventories, and as a result inventory levels have fallen substantially. Oil importers in the United States, for instance, are holding lower stocks than usual and relying on their suppliers to produce more oil to meet increases in demand.

The inventory correction was particularly sharp in the first half of 1982, and pushed spot oil prices down below $30 per barrel, although with emergency production sharing agreements OPEC was able to maintain its official posted price at $34 per barrel for Saudi light. The January 1983, OPEC meeting introduced new production limits. It is not clear, however, whether this agreement, which calls for further substantial cuts in Saudi production, will succeed in preventing possibly large reductions in oil prices in the near future.

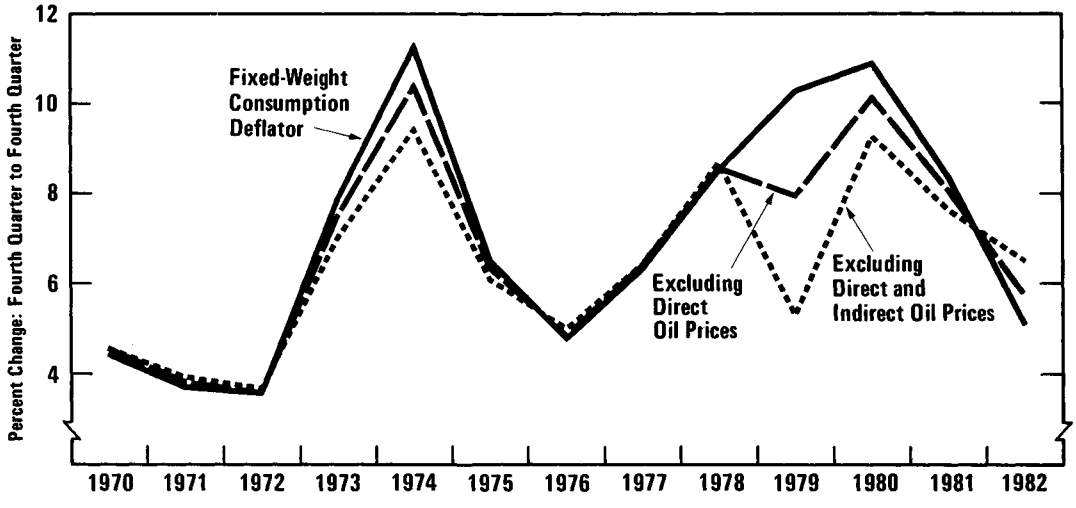
The impact of these oil price movements on U.S. consumer prices can be seen in Figure 8. A significant proportion of the changes in consumer prices can be accounted for by the changes in oil prices--both directly in gasoline and fuel oil prices and indirectly in the cost of oil used to produce other things.

Exchange Rates. Another major influence on inflation is movement in exchange rates. Since 1970, when the Bretton Woods system of roughly fixed exchange rates was breaking up, the dollar has followed a roughly U-shaped course against an average of foreign currencies, falling until 1979, flat through 1980, and rising by 47 percent from mid-1980 to the end of 1982 (Figure 9). 3/

3/ The reasons for the appreciation of the dollar are discussed in detail later in this chapter.

Figure 8.

Contribution of Oil Prices to Inflation



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Congressional Budget Office.

NOTE: Direct oil prices are prices for fuel oil and gasoline. The contribution of indirect oil prices is assumed to be about as large as that of direct oil prices, since about half of oil consumption is used in the production of goods and services.

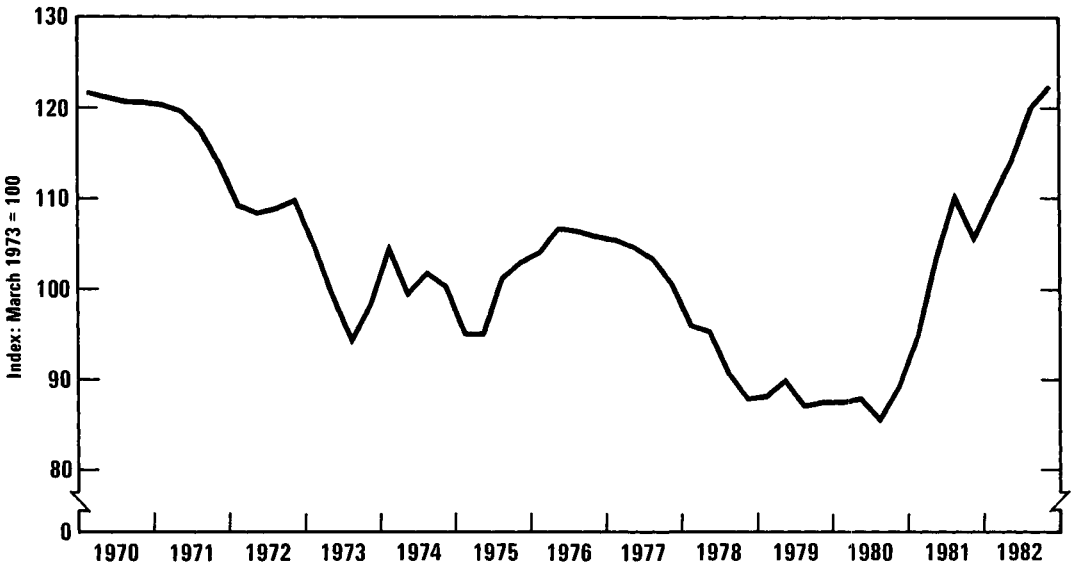
Exchange rates affect prices in the U.S. economy through several channels:

- An increase in the value of the dollar reduces the rate of increase in the dollar prices of imports. If these relatively lower prices are passed on to consumers, inflation is reduced.
- Lower prices for imports make them more competitive with domestic goods, helping to reduce domestic prices.
- A high exchange rate makes it harder to sell goods overseas and therefore increases domestically available supplies and tends to reduce prices.

A commonly used rule of thumb is that a 10 percent appreciation in the exchange rate should reduce U.S. prices by about 1 percent, over a period of one to two years, below what they otherwise would have been. If this rule of thumb is even approximately correct, then the 30 percent appreciation of the dollar from mid-1980 to mid-1981 may have reduced

Figure 9.

Value of the Dollar Against Other Currencies



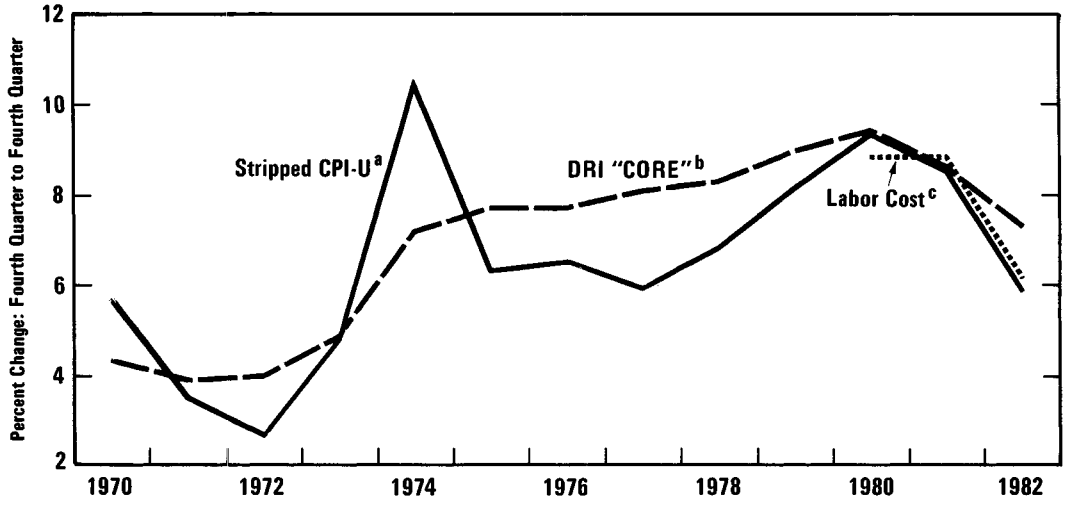
SOURCE: Federal Reserve Board.

U.S. inflation by as much as one percentage point in both 1981 and 1982: the impact of the further appreciation since then presumably has not yet been fully felt.

Food Prices. The last two years, and particularly 1982, have seen remarkable harvests both in the United States and abroad. In contrast to the 1970s, when poor harvests contributed to increasing commodity prices, good harvests have recently tended to hold down the price level.

Underlying Inflation. What is the best measure of inflation? Some of the decline in inflation shown by commonly used measures is spurious. The CPI rose much more in the late 1970s than other measures, and has decelerated more over the past two years (see Figure 2). The reason is well known by now: the treatment of homeownership in the current CPI has tended to overstate inflation whenever house prices rose faster than house rents, and whenever mortgage interest rates increased at all, as they did during much of the 1970s. Since 1981, house prices and interest rates have

Figure 10.
Measures of Underlying Inflation



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Data Resources Inc.; Congressional Budget Office.

[a]CPI-U less food at home, energy, homeownership, and used cars.

[b]A measure of inflation that excludes components due to price shocks and to varying pressures of demand.

[c]Employment Cost Index, less 1 percent trend productivity growth.

reversed course, causing the CPI to understate inflation in 1982. This distortion has now been corrected in one of the two CPI measures. 4/

One way to avoid the distortions and special factors discussed so far is to look at a measure of underlying inflation--that is, internally generated inflation, excluding the effects of shocks such as oil and food price changes, and excluding distortions such as that created by the treatment of homeownership in the CPI. Figure 10 presents several alternative measures of

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4/ The CPI for urban consumers now uses an alternative measure of homeownership costs (beginning with the data for January 1983), but the CPI for urban wage and clerical workers, which is used for most cost-of-living adjustments, will continue to use the old measure until 1985.

underlying inflation. All of them tell roughly the same story: inflation has decelerated since 1979, probably by about three percentage points. 5/

THE RECESSIONS OF THE 1980s

By conventional standards, two recessions have already occurred in the 1980s. However, the recovery from the first recession had barely begun before the second recession hit in mid-1981. It is thus convenient to treat the two recessions as a single episode of stagnation, in which there has been on average no growth since early 1979. The period since 1979 has been costly both in terms of unemployment and lost output, and also in terms of the loss of much-needed capital formation.

Lost Output and Unemployment. At the end of 1982, the economy was operating much further below its current capacity than at any time since the Depression. The most dramatic indicator is the unemployment rate, which reached close to 11 percent at the end of the year. A conventional calculation (Okun's Law) of the relationship between unemployment and lost output suggests a gap between actual and potential output of about 12 percent. 6/ An alternative calculation, which assumes that, without a recession, GNP would have grown about 2.5 percent per year since early 1979, when output was close to full capacity, yields a current gap of about 9 percent. This is to be compared with a gap of about 7½ percent at the bottom of the 1975 recession, hitherto the largest, and a gap of about 5½ percent at the bottom of an average postwar recession (see Figure 11).

The loss in output can be traced to the major economic developments with which this chapter began:

- The near tripling of oil prices from 1978 to 1980, which transferred an enormous amount of real purchasing power away from the oil importing countries and toward the oil producing countries,

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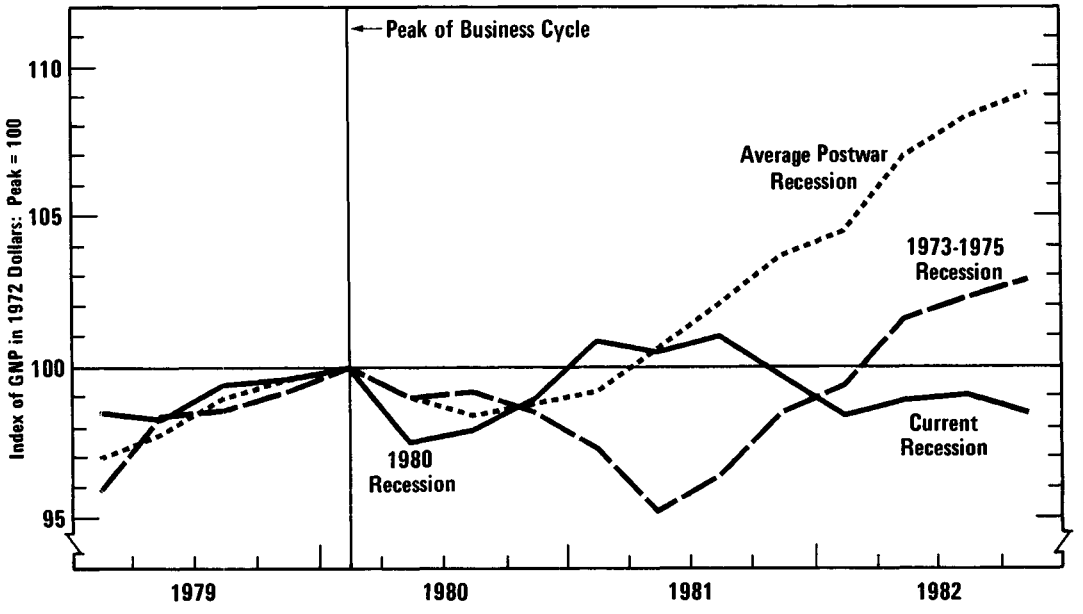
5/ The DRI "CORE" measure, which shows a smaller deceleration, is constructed so that it does not react quickly to changes in the inflation rate.

6/ Okun's Law states that unemployment increases by about 0.4 percentage points for each 1 percent shortfall of GNP below potential output. If 6 percent unemployment is regarded as a feasible unemployment rate when the economy is operating at potential, then the current gap is about 12 percent.

Figure 11.
GNP Losses Since 1979—Comparison with Previous Recessions



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

and within the United States away from oil consumers to oil producers. This contributed to the recession, as similar events did in 1973-1975, because of the difficulty of adjusting capital flows and spending patterns to shifts of this magnitude. The shift in purchasing power was much larger than in 1973-1975, but the international financial system was probably better prepared to accommodate it.

- Shifts in fiscal and monetary policy, which brought record high interest rates, discouraging investment in housing, business fixed capital, and durable goods. The housing and auto industries, in particular, have done very badly in the 1980s.

- The world recession, together with a rising U.S. exchange rate, which brought about a dramatic reduction in U.S. net exports. These fell by more than any other final sales component during the current recession.

The loss of output in the two recessions of the 1980s has been quite close to what some recently estimated conventional economic models would have predicted if inflation was to be reduced by about the three percentage points it has fallen since 1980. This relationship, often known as the "Phillips Curve," was estimated during the 1970s to require a cumulative sacrifice of 10 percent of a year's GNP in order to achieve a permanent one-percentage-point reduction in the inflation rate. A more recent estimate puts the output sacrifice lower, at around 5 percent of a year's GNP. The cumulative loss of GNP since 1979 may be between 15 and 20 percent of a year's GNP, depending on how much GNP might be assumed to have increased in the absence of a recession; this is consistent with an inflation reduction of between 1.5 and 4 percentage points. The actual reduction, as noted above, is about three percentage points, and is likely to be permanent. 7/

The lack of economic growth since 1979 has brought the unemployment rate to nearly 11 percent, the highest level in 40 years, and nearly five percentage points higher than in 1978-1979. As in earlier recessions, almost all the increase in unemployment was among people who had formerly been employed, rather than among new entrants to the labor force. (Chapter V discusses the current labor market situation in detail.)

Business Fixed Capital Formation. Recessions usually cause a decline in investment, both because corporate profits are low and because there is little incentive to purchase new equipment when existing equipment is idle. In most postwar recessions, business fixed investment has dropped (in percentage terms) about twice as much as output. Investment has also fallen during the current recession, but by less than in the past. In the early part of the recession (from the third quarter of 1981 to the first quarter of 1982), business fixed investment dropped only a little. This may have been because businesses believed the consensus forecast that the recession would end early in 1982, and because the tax cut boosted cash flows. As it became clear that the recession was not over, investment (particularly in business equipment) fell rapidly during 1982. And surveys of investment plans in the fall of 1982 suggest a further 5 percent or so real decline in investment in

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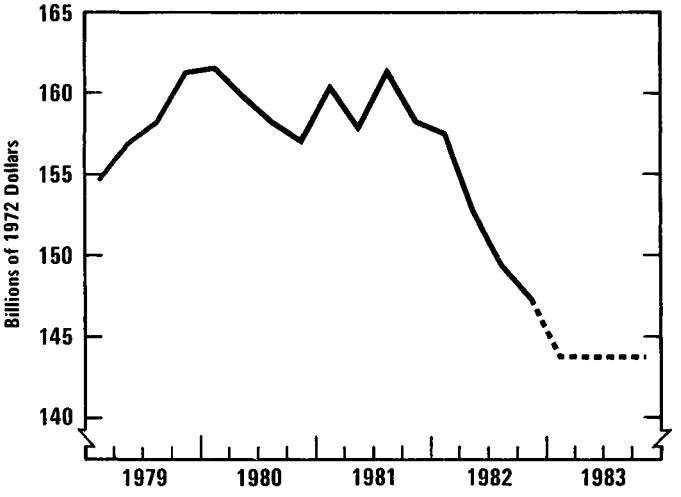
7/ See Arthur Okun, "Efficient Disinflationary Policies," American Economic Review, vol. 68, no. 2 (1978), and Robert J. Gordon and Stephen R. King, "The Output Cost of Disinflation in Traditional and Vector-Autoregressive Models," Brookings Papers on Economic Activity, 1982:1, pp. 205-44. See also Chapter V of this report.

Figure 12.
Plant and Equipment Spending



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

new plant and equipment in 1983. 8/ Current economic forecasts do not predict strong growth in 1983, and hence there may be little improvement in capacity utilization that would lead to upward revision in spending plans (see Figure 12).

The current recession contains two new factors: high real interest rates and new tax incentives for investment.

- o Real interest rates, which determine the profitability of borrowing to finance new investment, usually fall during recessions, and in fact usually become negative. 9/ Since 1980, real interest rates have been at unprecedentedly high levels: even the declines in rates since the summer of 1982 left real rates on long-term bonds in the neighborhood of 7 percent at the beginning of 1983. This is a powerful disincentive for investment.

8/ Business investment spending on a National Income Accounts basis often recovers from a recession faster than the plant and equipment spending plans survey suggests. But the outlook for the segment of business spending reflected in the survey remains bleak.

9/ Real interest rates are interest rates adjusted for expected inflation. Since expected inflation is unobservable, real interest rates may be approximated by adjusting interest rates for the inflation actually experienced.

- The depreciation provisions of the Economic Recovery Tax Act of 1981 (ERTA) substantially increased the tax deductions available for new investments, and thus increased cash flow and reduced the after-tax cost of investment. And lower inflation means smaller increases in the replacement cost of assets to be financed out of depreciation allowances: this further increases the value of the tax allowances. The depreciation provisions were originally scheduled to become more generous in 1985, but this was cancelled by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). At the same time, the arrangements that enabled companies with low taxable profits to benefit from the depreciation provisions through leasing were cancelled. Nevertheless, the new law and lower inflation leave a greater tax incentive to invest, in line with a generally recognized need for more capital formation to create the conditions for long-run growth.

The current high real interest rates probably swamp the more liberal depreciation now available. As noted above, real interest rates are currently at least seven percentage points above their usual level at this point in a recession: this increase is roughly twice as big as the decrease in real after-tax rates resulting from the effects of lower inflation and of ERTA on investment. 10/

Residential Construction. Housing investment has been hit even more severely than business fixed investment. During the 1970s, construction of single-family homes boomed in order to satisfy a rapidly growing demand for owner-occupied housing. Recent high mortgage rates have reversed this trend, putting housing out of the reach of many people. To give an idea of the magnitudes involved, a purchase of a typical new single-family house in 1970, financed by a 30-year fixed-rate mortgage for 75 percent of the value of the house, would have cost about $171 per month, or 20.8 percent of median family income. 11/ By 1979, that ratio had risen to 30.2 percent, and by early 1982 to 44.2 percent. By this time, financing the purchase of the same typical house cost about $853 per month, five times as much as in

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10/ Economic Report of the President, February 1982, p. 123. The discussion on that page calculates that the real before-tax rate of return required to justify new investment at a fixed real after-tax interest rate has fallen by about three percentage points as a result of lower inflation and ERTA.

11/ A typical house is a house like the average house sold in 1977.

1970. The recession, too, has discouraged house purchases both by holding down household incomes and by increasing the probability of unemployment and the consequent risk of defaulting on mortgages.

The result of these factors has been to reduce single-family housing starts from 1.2 million units in 1979 to about 700,000 units (annual rate) in the second half of 1982. Multi-family starts have not fallen quite so much, since they have not depended on the ability of individual homeowners to finance purchases at high mortgage rates. Several government programs, too, have helped to support multi-family housing starts, while ERTA has offered improved tax treatment of rental housing.

Recent data on house sales and housing starts suggest that this sector is on the road to recovery. Since interest rates turned down in mid-1982, single-family starts have increased by about 150,000 units at an annual rate. This improvement presumably reflects the easing of mortgage payments with lower nominal interest rates, since real rates remain very high. The carrying cost for purchase of a typical house has so far fallen only a little, to about 38 percent of median family income, but further declines in mortgage rates are expected.

Financial Strains. Bankruptcies, loan defaults, and loan delinquencies have risen to record levels in this recession.

Nonfinancial corporations have had to defend their solvency on two fronts: the recession has cut into sales and profits, while at the same time high interest rates have eaten into corporate cash flow. Recently, interest rates have declined and profits have begun to improve. But the risk that interest payments will be a burden on cash flow now seems likely to continue through the early years of the recovery. Most recessions, as noted above, reduce real interest rates to zero or below, giving corporations the opportunity to lock in low interest rates by funding their short-term debt with money borrowed long term. In normal recessions, the ratio of long-term to short-term debt increases, protecting the corporation from higher interest rates as the economy recovers. In the current recession, however, real-long term rates have stayed at unprecedented levels (see Chapter IV), so that corporations have not been able to refinance at low rates.

Many financial corporations are also experiencing severe strains. Thrift institutions, which borrow short-term money from depositors and lend it long, have been faced with increases in short-term rates that have not been matched by increases in the returns on their assets. The progressive deregulation of the thrifts has permitted them to offer new accounts that enable them to compete effectively for funds, and thus the traditional loss of thrift deposits (disintermediation) as short rates rise has been largely

avoided. But book profits have been wiped out by the consequent increase in the cost of funds used to finance fixed-rate asset portfolios. And many financial institutions would now have negative worth if their assets were carried at market rather than at book value.

AN INTERNATIONAL RECESSION

Other countries have, like the United States, suffered from faltering growth, contracting world trade, and difficulties in adjusting to the consequences of generally anti-inflationary policies. In many respects, the global economy mirrors the ills of the U.S. economy with generally restrictive policies that have engineered the world's most prolonged recession since World War II. The global economic consequences of these policies and the resultant recession have been severe:

- o World trade has contracted sharply as other economies have adopted restrictive policies. Unlike in the U.S., fiscal as well as monetary policies have generally been tightened.

- o The escalation in world interest rates, has brought about major realignments in international currency values. U.S. rates have risen even more than the others, with the result that the dollar has soared in the past three years.

- o The global recession, soaring world interest rates, and a rising dollar exchange rate, have exacerbated already difficult international debt service obligations for most developing economies and created the risk that debt defaults will shake the stability of the domestic and international financial systems.

Since World War II, U.S. policies have promoted and the U.S. economy has benefited from the increasing integration of world trade and financial markets. Integration means, however, that each economy is more exposed to what happens elsewhere. The current recession has shown how open the U.S. economy is to the influences of global economic activity, and how sensitive other economies are to the policies of the United States.

Industrial Economies. Economic activity in all of the industrial economies weakened to an unexpected extent during 1982, and the volume of world trade contracted. Unemployment in the United States and in European industrial countries exceeded 10 percent by the end of the

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year. 12/ This dismal performance was in large degree caused by similar restrictive policies pursued simultaneously by all countries, generally with more negative effects than intended. Nevertheless, these policies were more successful in reducing inflation than many had thought probable (see Figure 13).

Much of the downturn in global economic activity stemmed from restrictive U.S. credit conditions. The U.S. recession reduced U.S. demand for imports, diminishing employment and output abroad. High U.S. interest rates attracted foreign money to dollar-denominated assets here and abroad. To counter the damaging effects on exchange rates of these massive shifts into dollars, other countries adopted restrictive monetary policies and their interest rates soared.

It would be an overstatement, of course, to argue that the current condition of the global economy is attributable solely to U.S. policies. A consensus had developed in the industrial economies that inflation should be reduced, and that reductions in spending by central governments were necessary for long-term viability. Most foreign governments consequently urged the United States to adopt anti-inflationary policies, and have done so themselves.

The coming years look fairly bleak for many industrial countries. The United States, which has often been the locomotive of the Western economy, is not likely to provide much forward momentum. Trade volumes are likely to be weak and a traditional recovery--industrial nations exporting their way out of a recession--may be difficult to achieve since all are simultaneously at the trough of the business cycle. Even the Japanese economy, which has weathered the 1970s best, is now in for harder times. Its exports, which have provided much of Japan's real growth in recent years, are stagnating while domestic demand continues flat. In Europe, the coming year is likely to see some difficult policy efforts to deal with unemployment, which stands at unprecedented levels. Job creation has not kept pace with the growth of the labor force for several years now, and labor force growth is likely to increase in the next few years.

The slump in world trade raises the danger of a surge in protectionism. Recessions lead to pressures on governments to maintain domestic employment by establishing barriers to foreign goods or subsidizing domestically

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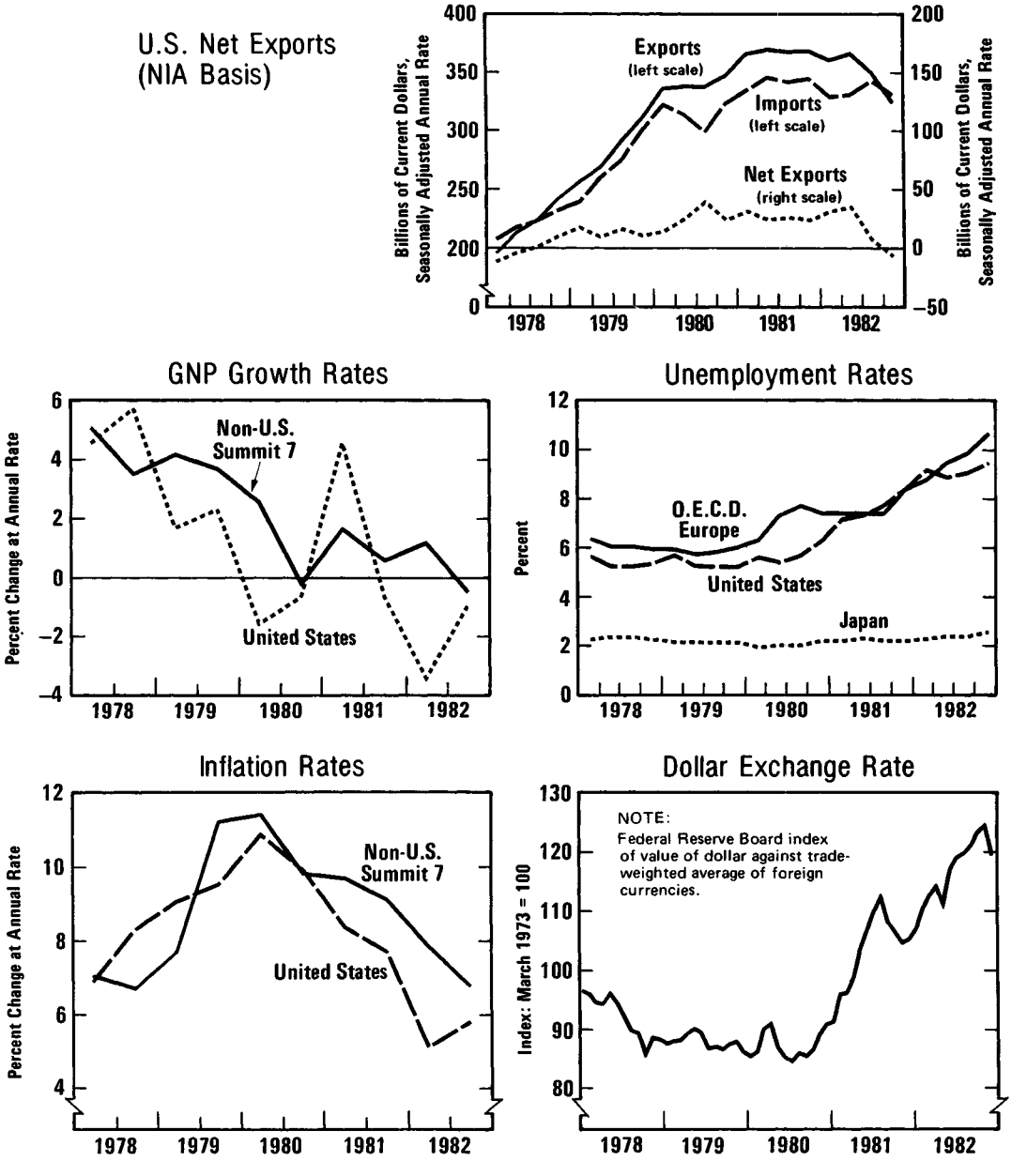
12/ Japanese unemployment rates, which have remained relatively stable, are not directly comparable with those for the United States and Europe because of economic, social, and statistical differences.

Figure 13.
International Economic Indicators



SOURCES: Organization for Economic Cooperation and Development; U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

made goods. Considering the severity and duration of the current recession, such protectionist measures have been fewer than might have been expected.

In the United States, protectionist sentiments are particularly acute with respect to Japanese manufactures (especially autos), and the agricultural and steel trade policies of the European countries. The "reciprocity" and the automobile domestic content bills considered--but not enacted--by the Congress during 1982 were manifestations of these sentiments. Nor are foreign economies immune to the protectionist clamor. Japan, on its part, is about to invoke its 62-year-old antidumping law for the first time in history against surging textile imports.

Foreign Exchange Rates. The dollar remains strong in comparison to other currencies, reflecting relatively higher real interest rates in the United States. The Federal Reserve weighted-average exchange rate index for the dollar against its ten largest competing currencies has appreciated over 40 percent since mid-1980 (see Figure 13). Other currencies, especially those of developing economies struggling with huge levels of dollar-denominated external debt, stand much lower in terms of the dollar. The dollar exchange rate will most likely fall over the coming year as U.S. interest rates decline and the U.S. trade position deteriorates further, but the magnitude of the decline is uncertain.

The dollar's strength has also been sustained by unusually strong dollar demand combined with weak supply as evidenced by:

- o A continued demand for dollar assets due in part to capital movements (including "capital flight" from developing countries) based on perceptions of economic and political instability;

- o A continued demand for dollar loans resulting from developing-country debt service problems;

- o A slowdown in international credit flows resulting from tight credit conditions in the United States and retrenchment by U.S. banks as well as banks in Europe and Japan.

Tight credit conditions in the United States constrained the global dollar supply in the first half of 1982. However, a decline in the volume of net capital outflows in the third and fourth quarters reflects reluctance of U.S. banks to commit funds for international lending. Though domestic credit has increased, it is being absorbed by domestic borrowers, with the Treasury requiring a large proportion of it. This has resulted in a continued constraint on the supply of dollars available to foreign investors and borrowers. Even though U.S. interest rates fell in the second half of 1982

and narrowed the U.S.-foreign interest differential, the dollar exchange rate continued to rise.

The continued strength of the dollar has depressed growth in U.S. exports and permitted relatively stronger import penetration than would normally occur given the sluggish domestic economy (see Figure 13). Since trade effects lag behind exchange rate movements, a further deterioration in the U.S. trade balance is likely over the next two years. This will lead to some turnaround in the value of the dollar as against other currencies in 1983 and 1984. But a return to the dollar's 1980 values--a reversal of some 30 percent--is unlikely if a differential between U.S. and foreign interest rates continues and if U.S. monetary authorities tighten monetary aggregate targets at any sign of renewed inflation.

Developing Economy Debt Problems. The global recession, which has posed such large problems for the industrialized economies, has had even more severe consequences for the developing countries. The scope of their financial problem is suggested by the following:

- The aggregate current-account deficits expected for the developing economies in 1982 will exceed $75 billion. In 1983 and for some years to come, these deficits may exceed $50 billion. The deficits represent more than a doubling of their external balance shortfalls of the mid-1970s.

- Nearly half of the external debt of the developing economies--estimated at $650 billion at year-end 1982--is of less than one-year maturity, suggesting that an increasing volume of refinancing will be required in 1983.

- A record 22 debt reschedulings occurred in 1982, involving more than $45 billion of loans--up from $10.8 billion for the 14 reschedulings of 1981.

- For many of the major borrowing countries (such as Mexico, Argentina, Brazil, and Poland), 1982 debt service ratios--amortization and interest payments relative to exports--were in excess of 100 percent. A ratio in excess of 25 percent is normally considered risky.

In the mid-1970s, the developing economies increased their external borrowing. They were motivated by the need to finance higher-cost oil imports, by easier access to private international financial markets that were recycling the surplus funds of the OPEC countries, and by what appeared to be better economic prospects for many developing countries.

Toward the end of that decade, however, a disastrous sequence of events occurred:

- o World oil prices soared again in 1979, increasing developing economy import bills, while commodity markets in general slumped in 1980, shrinking their export earnings.

- o The global recession of 1981-1982 shattered the economic development plans of the developing economies when demand for their exports dwindled.

- o The substantial appreciation of the dollar after 1980 made the largely dollar-denominated external debt of the developing economies more expensive to service in terms of local currencies.

- o Finally, the favorable interest rate terms initially enjoyed by these economies turned markedly unfavorable as the increasingly short-term, variable-rate debt had to be rolled over.

Some developing countries--Mexico and Argentina are extreme cases--may experience sharp economic contractions possibly threatening their political stability and future creditworthiness. The effect on developed countries, many of which send over a third of their exports to the developing world, could be severe. Over 38 percent of total U.S. exports in 1981 went to the developing economies--as much as was exported to the combined markets of Japan and Europe. U.S. exports to the developing economies for 1982 could be off as much as 10 to 20 percent, representing a 4 to 8 percent reduction in U.S. exports. Many of these exports are intermediate inputs into the production processes underlying development for these economies, so the base for renewed developing economy growth, and hence demand for future U.S. exports, is sharply curtailed. Other industrial economies face similar repercussions.

The U.S. Treasury and the Federal Reserve System, working with the Bank for International Settlements, provided emergency funding to help hard-pressed developing economies service their debt in 1982. Subsequently, the International Monetary Fund provided longer-term funding on condition that the recipient countries take measures to reduce their current account deficits. The success of these actions depends on recovery from the present global recession and on continued private commercial bank lending to these countries. Should either of these conditions not materialize, further bilateral and multilateral efforts to shore up these economies will be required. A series of substantial debt defaults by the larger borrowers among the developing economies would strain the stability of the international financial system.

FUNDAMENTALS OF RECOVERY AND GROWTH

Some of the fundamental conditions for economic growth look better now than they have in several years:

- o Inflation is lower;
- o The financial position of consumers can support an acceleration of consumption growth;
- o Inventories are leaner than they were in 1981;
- o Trend productivity growth may be somewhat higher;
- o Tax and spending programs are now providing substantial stimulus.

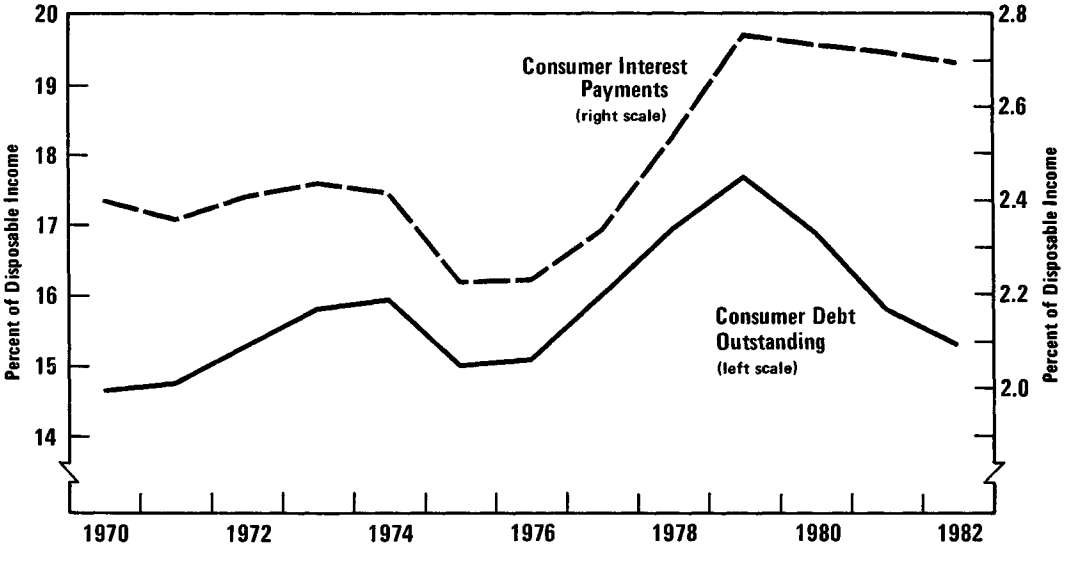
On the other hand, some of the fundamentals still look bad: real interest rates remain high, and the current high exchange rate means that the U.S. competitive position is poor.

Lower inflation reduces the incentive for unproductive and costly inflation-hedging activities (particularly efforts to economize on cash balances, and diversion of loanable funds to excess investment in housing). Lower inflation is also often thought to mean less uncertainty about the future, since when inflation is high people cannot be sure that their incomes will keep up. And if Federal Reserve targets constrain the growth of nominal GNP in 1983 and 1984 (see Chapter IV), lower inflation will make possible higher growth in real GNP. Finally, much of the recent reduction in inflation has come through reductions in the prices of oil and other imported goods, enabling real incomes to grow.

There is some risk that inflation may accelerate as the economy recovers. The risk arises from the possibility that the exchange rate may fall, perhaps by 10 to 20 percent, pushed by the turnaround in net exports. If the Federal Reserve finds it necessary to lower interest rates in order to permit recovery, then the decline in the exchange rate could come faster. This would, by the rule of thumb described earlier in this chapter, add as much as one-half to one percentage point to the inflation rate in 1983 and 1984.

Consumers have cut back sharply on their debt in response to the high interest rates of the past few years: thus, despite higher interest rates, consumer debt service has remained reasonable in relation to current income (see Figure 14). But household net worth has fallen because of high interest rates and the collapse of the housing market. During the 1970s,

Figure 14.
Consumer Finances



SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

household net worth grew primarily because of the boom in house prices. In the first years of the 1980s, house prices ceased to grow, while rising interest rates meant declining stock and bond prices. As a result, real household net worth fell. But declining interest rates in the second half of 1982 sparked a stock market rally that restored the losses in the stock and bond components of consumer wealth, and lower mortgage rates are likely to do the same for the housing market. Thus consumer net worth probably rose in the second half of 1982.

Although the effects on spendable income of the two tax cuts in the past year were offset by declines in employment (so they had scarcely any noticeable effect on consumption), the next tax cut is expected to be accompanied by rising employment. Surveys show that consumer confidence

has improved in the last half of 1982, though this seems keyed to expected improvements in financial conditions in the future rather than to actual improvements in current financial conditions or buying conditions. But the main concern of consumers has shifted from inflation to unemployment as the inflation rate has fallen and unemployment has risen.

Excess inventories which built up in a few industries--notably autos--in 1981 have now been cut. Auto inventories account for much of the recent decline in inventories. Stocks in the hands of dealers remained stubbornly high relative to sales, until they were reduced with the aid of rebates, below-market financing, and other incentives in 1982. A short-lived upturn in sales in May seemed to reflect a surge of buying by people waiting for an incentive program before they made a purchase, but sales then returned to previous depressed levels and unwanted inventory-building resumed. The sharp auto inventory reduction in the fourth quarter of 1982 was made possible only because deep cuts in auto production, coinciding with lower interest rates and new incentive programs, generated a further, and this time apparently more durable, increase in sales. Auto inventories are now low enough to permit resumption of higher production levels.

Inventory levels have not fallen by very much in other sectors during this recession, despite high interest rates and low sales growth. Inventory/sales ratios for manufacturing and trade are thus a little above trend. Farm inventories are at record levels, owing to the excellent 1982 harvest and low demand levels (and despite large Commodity Credit Corporation purchases).

Productivity Growth. There is a possibility, too, of faster underlying productivity growth during the next few years. Underlying productivity growth is what remains after cyclical factors are taken out. It is difficult following the first oil shock, and possibly also following the second oil shock. Several reasons have been put forward for the slowing of underlying productivity growth, and some of these now seem likely to be reversed:

- The oil price increases of the 1970s slowed productivity growth by making energy-intensive capital obsolete, and encouraging producers who used less energy (and perhaps more labor) in production. Oil prices have fallen in the past two years, and significant increases are not anticipated in view of OPEC's difficulty in maintaining the current price.

- The postwar baby boom created a bulge of young people entering the labor force from 1970 to 1980. Thus the average age of the labor force fell over this period, and the growing number of inexperienced workers may have reduced productivity growth. In

the 1980s, the labor force is expected to begin maturing: new entrants will be fewer, and the 1970s cohort will gain experience and improve their productivity.

- Rising real interest rates and the recession have completely swamped the impact of the 1981 tax incentives on investment. But if interest rates fall back to a normal range and the economy enjoys a normal recovery, the rate of capital formation could rise and spur productivity growth.

IMMINENT RECOVERY?

Positive Signs

Housing starts surged in the fourth quarter, particularly in November. Some of the increase may have been due to unseasonably good weather so there may be a plateau in later months. But house sales have been rising, and lower mortgage rates have made home purchase more affordable. The increase in starts would add about $ 4 billion in 1972 dollars to GNP in the first quarter of 1983, adding about 1 percentage point to the first quarter (annualized) growth rate. And new home sales will add to home furnishing purchases.

Auto sales responded dramatically to sales promotions in November, and did not drop all the way back in December. The resulting cut in auto inventories supports a planned increase in auto production that could add $6 billion to GNP in the first quarter, or about 1½ percentage points to the (annualized) growth rate.

Inventory liquidations may well be over. Auto inventories have finally been reduced below normal levels and lower short-term interest rates reduce the incentive for further inventory cuts.

Consumer confidence increased markedly at the end of 1982. Attitudes towards market conditions for buying cars and houses were particularly improved, and reflected perceptions of lower interest rates and prices.

The military spending buildup is beginning, and is expected to add about 0.5 percentage points (or $7 billion) to GNP over the next four quarters.

Unemployment may be levelling off. Initial insurance claims fell sharply in early January.

The index of leading indicators has risen for most of the past year, and rose again in December.

Negative signs

The exchange rate remains high, portending further major losses in net exports.

Interest rates are still at record levels compared with current inflation.

Investment plans suggest a further cutback in business fixed investment in 1983. Orders for nondefense capital goods may have stopped declining, but the order backlog is still falling.

Sensitive crude materials prices in December still showed no sign of increased demand. Scrap prices, in particular, fell at an accelerating rate in November and December.

Christmas sales were poor, despite renewed consumer confidence and early seasonal markdowns in November.

CHAPTER III. THE CBO ECONOMIC AND BUDGETARY PROJECTIONS TO THE YEAR 1988

Extremely tight credit conditions during the first half of 1982 deepened and prolonged the recession in the U.S. economy last year. The already severely depressed interest-sensitive sectors of the economy such as housing and automobiles remained depressed, and weakness spread to other sectors of the economy. The domestic situation was exacerbated by, and contributed to, economic malaise internationally as world trade stagnated after its decline in 1981.

The policies adopted during the last two years have pulled the economy in opposite directions: fiscal policy was designed to provide stimulus to the economy while monetary policy was to remain tight. The goals of this policy mix were to move the economy toward a path of sustained growth while at the same time reducing inflation. It was believed that the new credibility of monetary policy would allow it to reduce inflation without stifling recovery, while fiscal policy would lead to a strong upturn in economic performance. The outcome of this combination of policies proved disappointing: Inflation declined sharply, but at the cost of record unemployment.

During this two-year period, tight money was seen to have its traditional effect of reducing inflation while increasing unemployment. Very high interest rates operated to reduce final demands and to bring about a paring of inventories. Housing, investment, autos, and other interest-sensitive sectors of the economy were adversely affected, just as in the past. The impact on the world economy was significant, and fed back on the domestic economy through a rise in the exchange value of the dollar coupled with large reductions in exports. The drop in inflation resulted from (a) a decline in wage gains because of record slack in labor markets, (b) lower prices on product markets as inventories were slashed, (c) lower food and fuel prices, and (d) low import prices because of the strength of the dollar. Most empirical evidence suggests that the decline in inflation was about what traditional economic models would have projected.

Early last year, monetary and fiscal policy appeared to be working against each other. But large actual and prospective federal deficits prompted a partial reversal of the stimulative fiscal policy. The failure of the recovery to materialize, together with rising unemployment and financial strains, also led to a less restrictive monetary policy during the second half of 1982. The Federal Reserve has permitted money aggregates

to grow rapidly, and interest rates have trended down. But it is by no means certain that monetary policy can achieve moderate growth with declining inflation, especially in the face of large and persistent federal deficits.

This chapter presents the CBO baseline forecast for 1983-1984 and long-run economic projections through 1988. Because the outlook contains so many uncertainties, CBO also presents two alternative projections through 1988, along with their consequences for the budget. The previous chapter surveyed recent developments in the economy. Issues of monetary and fiscal policy are examined at greater length in Chapter IV.

TABLE 8. THE CBO FORECAST FOR 1983 AND 1984

Economic Variable	Actual 1981	Actual 1982	Forecast 1983	Forecast 1984
Fourth-Quarter to Fourth-Quarter (percent change)				
Nominal GNP	9.6	3.3	8.9	9.6
Real GNP	0.7	-1.2	4.0	4.7
GNP Implicit Price Deflator	8.9	4.6	4.7	4.6
Consumer Price Index				
Urban consumers	9.6	4.5	4.8	4.8
Urban wage and clerical workers	9.4	4.5	3.8	4.5
Calendar Year Average (percent)				
Unemployment Rate	7.6	9.7	10.6	9.8
3-Month Treasury Bill Rate	14.0	10.6	6.8	7.4

NOTE: Forecast ranges are not shown in this table, despite a very high level of uncertainty in the forecast. Instead, alternative "paths" are given in Table 9.

THE OUTLOOK

The CBO projections for 1983-1984 are a forecast, conditional on current budget policies. The longer-run projections for 1985-1988 are not a forecast but a growth path based on assumptions of moderate noncyclical growth with gradually declining inflation. It is uncertain whether the projected growth path is attainable with tax and spending policies now in place. The projections incorporate the following assumptions:

- Budget policies are those in place at the end of the 97th Congress, including the recently enacted increase in gasoline taxes and all appropriation action to date. The projections also assume the defense spending level for 1984 specified in the 1983 budget resolution. Total federal government outlays, on a unified budget basis, are estimated to be $800 billion in 1983 and $850 billion in 1984.

- In regard to monetary policy, the money aggregate, M2, is assumed to grow at a 9 percent annual rate during 1983 and 1984. If velocity growth is close to the historical average, monetary policy appears consistent with the projection. However, if velocity growth deviates sharply from average historical growth rates (as it did during 1982), CBO assumes that the Federal Reserve will adjust its money targets in an attempt to ensure moderate growth in nominal GNP.

- Food prices are assumed to rise about 4 percent this year and 5 percent next year, and no faster than general inflation thereafter.

- World oil prices, denominated in dollars, are assumed to be flat through 1985 and then to rise at the rate of U.S. inflation through 1988.

- Productivity is assumed to trend upward at 1½ percent a year during the decade. Actual productivity growth is expected to rise above this rate during the cyclical recovery.

Conditional on these assumptions, the CBO forecast (1983-1984) shown in Table 8, and the outyear projections (1985-1988), shown in Table 9, may be summarized as follows:

- The rate of expansion of real GNP, on a fourth-quarter-to-fourth-quarter basis, is forecast to be 4.0 percent over 1983 and 4.7

TABLE 9. ALTERNATIVE ECONOMIC PROJECTIONS (By calendar year)

Economic Variable	1983	1984	1985	1986	1987	1988
GNP (billions of current dollars)						
High Path	3331	3706	4059	4427	4822	5263
Baseline	3266	3580	3903	4221	4540	4878
Low Path	3222	3476	3749	4021	4286	4559
Real GNP (percent change, year over year)						
High Path	4.0	6.0	4.2	4.0	4.0	4.0
Baseline	2.1	4.7	4.1	3.7	3.5	3.5
Low Path	0.8	3.3	3.3	3.2	3.0	3.0
GNP Implicit Price Deflator (percent change, year over year)						
High Path	4.8	4.9	5.1	4.9	4.8	4.9
Baseline	4.6	4.7	4.7	4.3	3.9	3.8
Low Path	4.5	4.4	4.4	3.9	3.5	3.2
CPI-U (percent change, year over year)						
High Path	4.6	5.3	5.0	4.6	4.6	4.8
Baseline	4.5	5.0	4.7	4.1	3.9	3.7
Low Path	4.5	4.9	4.4	3.8	3.4	3.2
CPI-W (percent change, year over year)						
High Path	3.5	4.4	5.0	4.6	4.6	4.8
Baseline	3.8	4.6	4.4	4.1	3.9	3.7
Low Path	4.2	4.8	4.2	3.7	3.4	3.2
Unemployment Rate (annual average, percent)						
High Path	9.9	8.5	7.7	7.0	6.4	6.0
Baseline	10.6	9.8	9.0	8.4	8.0	7.5
Low Path	11.2	10.9	10.3	9.8	9.4	9.0
3-Month Treasury Bill Rate (annual average, percent)						
High Path	4.4	5.4	5.7	5.0	5.0	4.9
Baseline	6.8	7.4	7.2	6.6	6.1	5.9
Low Path	8.4	9.9	8.9	7.7	7.2	6.3

percent over 1984. In the ensuing four years, the baseline path calls for growth averaging 3.6 percent.

- Prices, as measured by the GNP implicit price deflator, are forecast to rise 4.7 percent in 1983 and 4.6 percent over 1984. Inflation then averages 4.1 percent over the next four years.

- The unemployment rate, on a calendar year basis, is forecast to average 10.6 percent in 1983 and 9.8 percent in 1984. Over the next four years, the baseline assumes a gradual decline to 7.5 percent in calendar year 1988.

- Short-term interest rates, as measured by the three-month Treasury bill rate, are projected to average 6.8 percent in 1983 and 7.4 percent in 1984. Over the next four years, the baseline projection calls for an average of 6.5 percent.

It is by no means certain that, over the longer term, the Federal Reserve will be able to achieve moderate growth and declining inflation in the face of continued large federal government deficits and a resumption of private credit demands. This potential conflict represents the key question facing policymakers this year. The baseline projection presumes that a severe conflict between monetary and fiscal policy does not develop. These issues are discussed in more detail in Chapter IV.

Reasons for Recovery

As discussed in more detail in the previous chapter, a number of indicators point to a recovery commencing sometime later this year:

- Residential construction is accelerating. Housing starts, an advance indicator of construction activity, have risen sharply.

- Personal consumption expenditures picked up late in 1982.

- The inventory correction, although larger than anticipated, is thought to be nearly over.

- The easing of credit conditions should raise domestic demands, and the projected recovery abroad should bolster U.S. exports.

- Consumer debt positions have improved and spendable income will receive a boost from the July tax cut.

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- Recent upsurges in the stock and bond markets point to increases in consumer wealth.

- There are thought to be very large pent-up demands for autos and housing.

- Defense spending is expected to be quite strong over the next several years.

- The recently enacted (net) business tax cuts, combined with low inflation, should lead to strong demands for new investment, once final demands pick up.

But other indicators suggest that a sustained recovery may not begin soon, or that it will not be robust by historical standards:

- The near-term outlook for investment is very poor: capacity utilization is at an all-time low and nondefense capital goods orders remain weak.

- Interest rates, adjusted for inflation, remain very high.

- Exports may continue to decline because of weak growth abroad, increasing protectionism, and the burden of debt in the developing countries.

- High unemployment encourages cautious consumer behavior. The resurgence in the demand for autos, in particular, appears to be fragile and dependent on continued price reductions.

- Unemployment will retard income growth, particularly wages and salaries, over the months ahead.

MAJOR UNCERTAINTIES IN THE OUTLOOK

The key to the projected recovery is a continuing downtrend in inflation and an easing of credit sufficient to permit a resumption of economic growth. If financial conditions become somewhat less restrictive, as CBO forecasts, then the personal tax cut scheduled for later this year plus the reductions in business taxes should boost private spending and help the recovery. Over the near term, fiscal and monetary policy may work together to stimulate the economy. However, long-term interest rates are still very high and are restraining growth.

Once the recovery commences, the potential exists for another policy conflict. Large deficits may compete with private demands for credit as the economy gradually moves toward full employment. If the monetary authorities return to targeting slower growth in money aggregates, competing demands for credit may lead to increased interest rate pressures through 1988. Whether growth can be sustained under these conditions is questionable.

The major uncertainties in the outlook, then, center on possible changes in federal policy and whether they will support a smooth and sustained recovery. Other uncertainties arise from conditions in the world economy. Three related issues are of concern to the forecast:

- The outlook for oil prices is uncertain. The inability of OPEC to reach a firm agreement on oil prices during its meeting in January, suggests that oil prices may actually fall somewhat over the near term. Although some businesses and countries might suffer, a decline in oil prices would improve the domestic inflation outlook still further and probably cause a pick-up in world economic growth. Another sharp rise in oil prices is, of course, still possible, particularly later in the decade, and continues to represent an inflation risk.

- The exchange rate, which has risen faster and further than most forecasters expected, might also fall more than anticipated. CBO expects the exchange rate to fall by 10 to 15 percent over the forecast period. Ultimately, such a drop would raise domestic prices by 1 to 1½ percent, but would improve U.S. competitiveness in world markets. A sharper decline cannot be ruled out, however, and further declines may occur later in the decade--putting additional upward pressure on inflation.

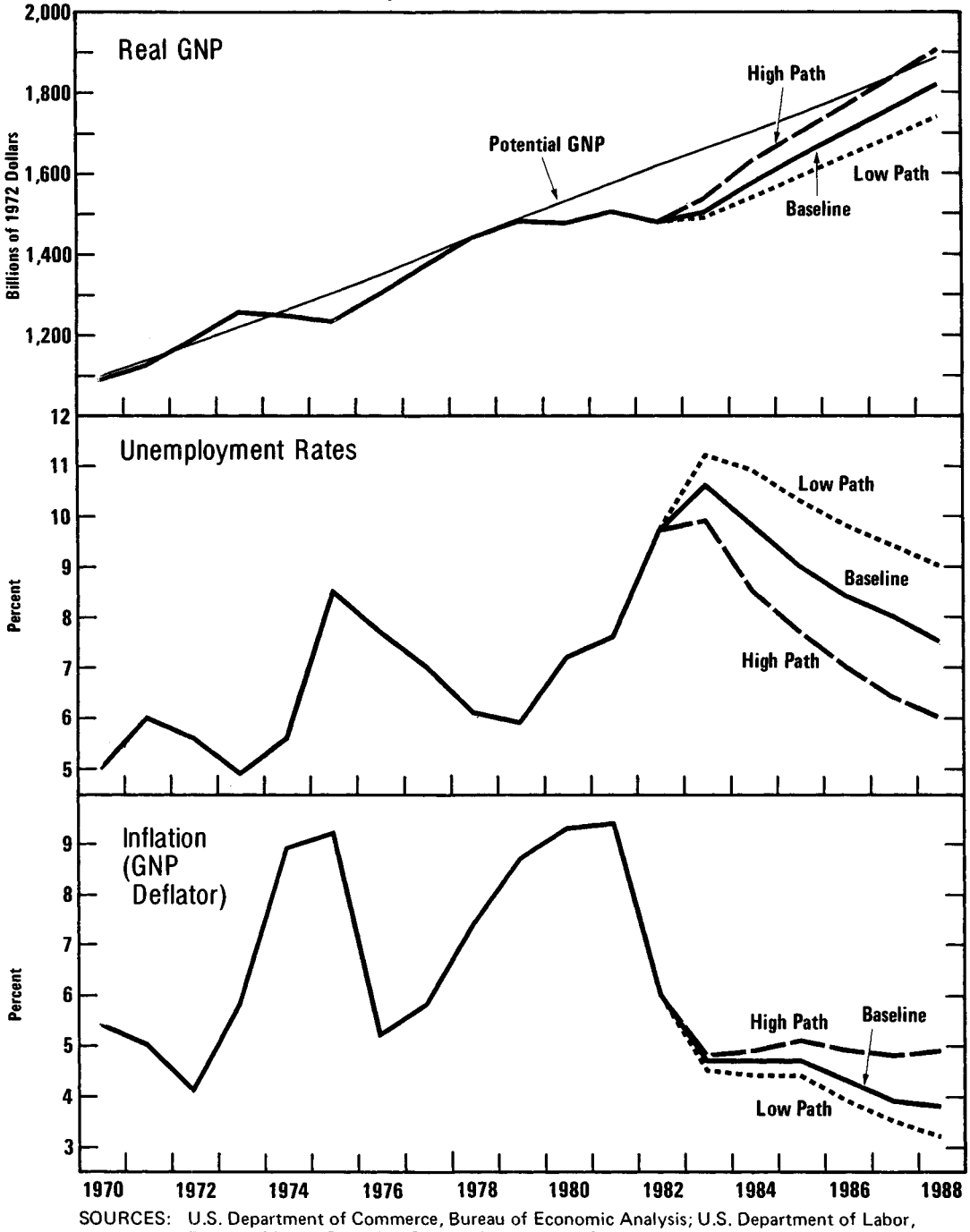
- The large debt burden of the developing countries could cause a sharp decline in world trade and, hence, in world output and growth. This is discussed in Chapter II.

ALTERNATIVE ECONOMIC PATHS AND BUDGET ESTIMATES

To highlight the uncertainty in the economic outlook, two alternative growth paths for the economy through 1988 are presented in Table 10 and in Figure 15. The "high" path assumes more real growth, lower interest rates, lower unemployment, and somewhat higher inflation. Real GNP grows at approximately the rate of a normal post-World War II cyclical recovery in the first three years. Thereafter, real growth continues at 4 percent

Figure 15.

CBO Baseline Economic Projections and Alternatives



SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Congressional Budget Office.

NOTE: Potential GNP is computed on the basis of a 6 percent unemployment rate (see Chapter IV).

annually. Inflation, as measured by the GNP deflator, averages 4.9 percent a year from 1983 to 1988, and the unemployment rate drops to 6.0 percent in that year. The "low" path, on the other hand, assumes lower real growth, higher interest rates, higher unemployment, and lower inflation. The growth rate of real GNP averages 2.8 percent a year over the 1983-1988 period, inflation averages 4 percent, and unemployment drops only to 9 percent by 1988.

The top panel of Figure 15 presents the three GNP paths relative to a hypothetical GNP path that has been standardized to 6 percent unemployment over the projection period. 1/ As can be seen in the figure, the economy is still operating with substantial excess capacity by 1988 along the baseline projection path. With the high path, the economy finally crosses the potential GNP path at the end of the period; with the low path, however, the gap is closed only slightly. The second panel of the figure tells essentially the same story in terms of movements in the unemployment rate. Along the low path, the unemployment rate remains very high throughout the period. Only with the high path does the unemployment rate move down to the 6 percent rate that some analysts believe is "full employment." The third panel of the figure presents the alternative paths of inflation thought to be consistent with the projected paths of output. The paths vary only slightly--in sharp contrast to the jagged historical path--because no price shocks are assumed. In the high path, the rate of inflation remains essentially unchanged at about 5 percent, whereas in the low path it drops to around 3 percent. 2/

Estimates of federal revenues, outlays, and deficits based on the three paths are shown in Table 10. In each case the budget policies are the tax and spending programs in effect at the end of the 97th Congress, with defense spending in 1984 at the level specified in the 1983 resolution. Under the CBO baseline assumptions, receipts fall faster relative to the level of GNP than do outlays, and the deficit continues to rise. Over the 1985-1988

1/ The capital stock underlying this hypothetical path is that presumed in the baseline. Under the high growth path, stronger investment will raise the capital stock relative to the baseline and thus the economy's capacity to produce output at an unemployment rate of 6 percent.

2/ Many analysts would argue that the low path would lead to widespread business failures both here and abroad, with substantially lower inflation than that shown in the low path. Similarly, many believe that there would be a greater acceleration of inflation in the high path, particularly if it were the result of an expansive monetary policy.

TABLE 10. BASELINE BUDGET PROJECTIONS UNDER ALTERNATIVE ECONOMIC PATHS (By fiscal year, in billions of dollars, unified budget basis)

	1982	1983	1984	1985	1986	1987	1988
Revenues							
High Path	618	615	676	743	798	862	933
Baseline	618	606	653	715	768	822	878
Low Path	618	599	637	686	730	777	825
Outlays							
High Path	728	793	830	904	971	1041	1116
Baseline	728	800	850	929	999	1072	1145
Low Path	729	804	868	958	1032	1110	1187
Deficit							
High Path	111	178	155	162	172	179	183
Baseline	111	194	197	215	231	250	267
Low Path	111	205	232	272	302	333	363
Memo: Deficits as a Percentage of GNP							
High Path	3.7	5.5	4.3	4.1	4.0	3.8	3.6
Baseline	3.7	6.1	5.6	5.6	5.6	5.6	5.6
Low Path	3.7	6.5	6.8	7.4	7.6	7.9	8.1

period, the deficit averages about 5½ percent of GNP. Under the high growth path, revenues rise above the baseline because of higher real growth and inflation. Outlays fall because of the lower unemployment rate, lower interest rates, and lower cumulative deficits. 3/ In dollar terms, the deficit remains stubbornly high throughout the period, although as a percent of GNP it falls to about 3½ percent. The low path produces effects on revenues and outlays in the opposite direction, and the deficit rises dramatically. By

3/ The higher inflation raises outlays, but not by enough to offset the impact of the other changes in the economy.

1988, it is estimated to be over 8 percent of GNP--substantially above the postwar record rate estimated for the current fiscal year.

There is no guarantee that the tax and spending estimates will prove consistent with the path of the economy as shown in the baseline and alternative outyear projections. Interactions between changes in interest rates and fiscal policy, for example, are very important but difficult to project. The feedback of international developments on the economy stemming from changes in credit conditions is also hard to anticipate. Nevertheless, the qualitative story told by these estimates--that the deficit will remain very high, given any reasonable growth path--seems incontrovertible.

CHAPTER IV. FISCAL AND MONETARY POLICY

High interest rates played a major role in bringing on the recession; they will likely be a major determinant of how fast the economy recovers and how long the recovery lasts. But interest rates depend heavily on fiscal and monetary policies, and the outlook for both of these is clouded with uncertainty. Large and increasing federal deficits threaten to raise interest rates during the recovery, and it is as yet unclear what measures will be taken to reduce them. Monetary policy is also an important factor, but the Federal Reserve has not indicated what course it will take in the months and years ahead. Some analysts believe that this uncertainty about fiscal and monetary policies is placing upward pressure on long-term interest rates and contributing to current weakness in the economy.

Proposals to reduce the federal deficit in the current year and in 1984 are opposed by many economists on the ground that to do so would slow recovery. Most agree, however, that deficits in later years should be reduced in order to keep federal borrowing from crowding out private investment. There is less agreement about monetary policy. Some advocate an expansive monetary policy to avoid a financial crisis, reduce interest rates, and encourage economic recovery. Others fear that this would cause a resurgence of inflation. The disagreement reflects issues of fact, such as the relationship between money growth and inflation, and also value judgments concerning the relative cost to society of inflation and unemployment. Administration and Federal Reserve spokesmen have indicated that their goal is a moderate recovery, consistent with a decline in unemployment and further reduction in the inflation rate. This may be a difficult task. Recent experience has shown, once again, that macroeconomic policies that reduce inflation also cause unemployment, at least in the short run. Thus, the difficult choice is whether to give greater emphasis to reducing unemployment or to fighting inflation.

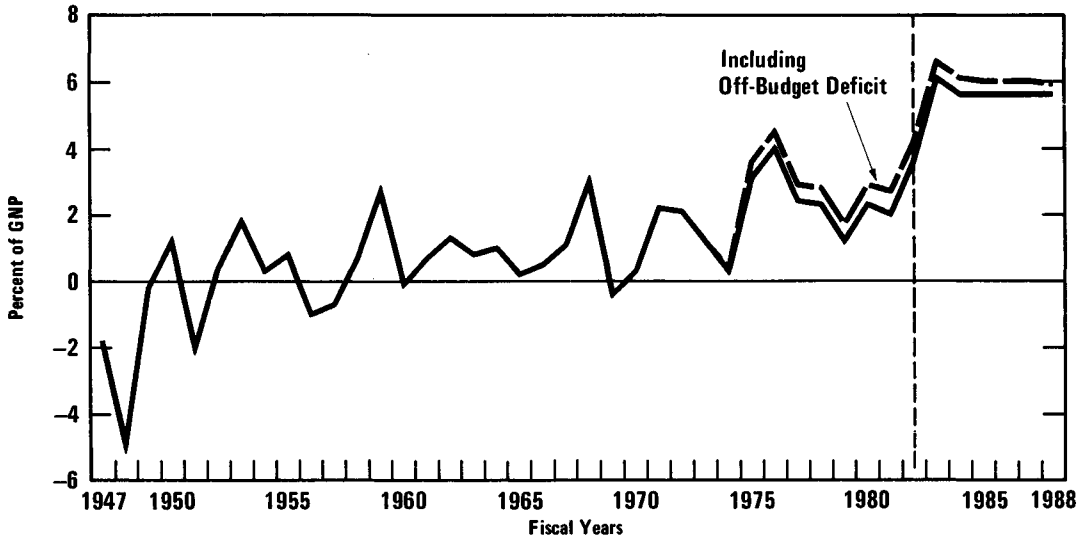
This chapter examines the outlook for the federal deficit, monetary aggregates, and interest rates. Together with the next chapter, it discusses options open to the Congress and the Federal Reserve in determining policy for the period ahead.

FISCAL POLICY

The federal deficit is expected to reach a record high of $194 billion in fiscal year 1983 and, unless budget policies are altered, it will continue to rise during the next five years to $267 billion, according to CBO projections.

Figure 16.

Unified Budget Deficit as a Percent of GNP



SOURCES: Office of Management and Budget, U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

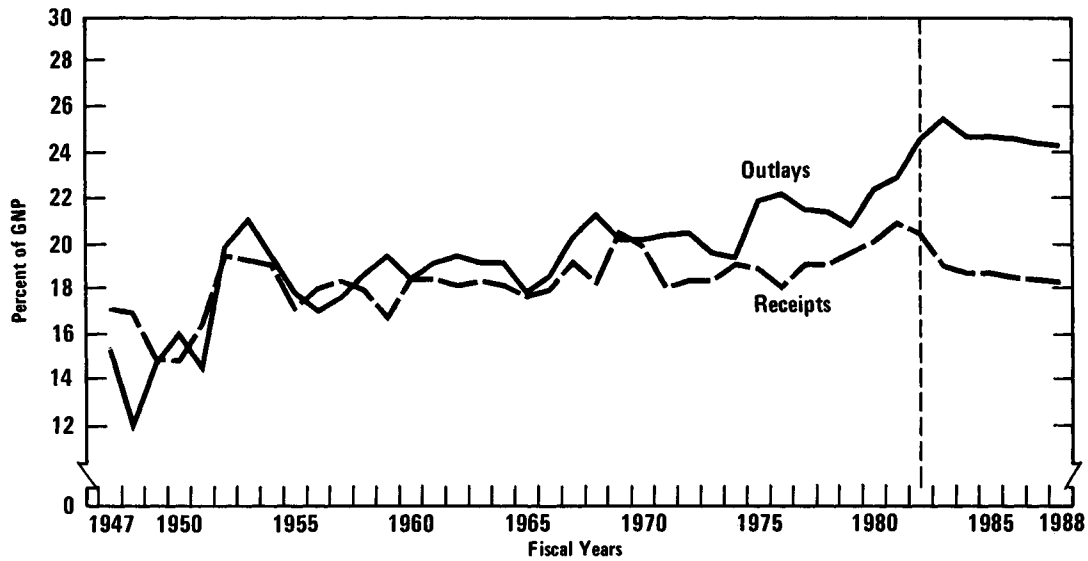
Most economists agree that a continually rising deficit, when economic slack has been greatly reduced, would be inappropriate because the need to finance such large deficits would draw funds away from business investment, and thereby reduce long-run economic growth. Given the current state of the economy, however, it is debatable whether the Congress should try to reduce significantly the 1983 and possibly the 1984 deficits, because it might endanger the recovery. The same argument does not apply to the 1985-1988 deficits, however.

The Economic Implications of Rising Deficits

The sharp rise in the deficit in 1982 and again this year in part reflects budget policies, particularly the recently enacted tax cuts and the rise in defense spending. However, roughly two-thirds of the 1983 deficit appears to be the result of economic slack. Although a weak economy accounts for most of the deficit in the current year, the deficit is not projected to decline as usual during the recovery. In fact, given the CBO baseline economic projections, the deficit will continue rising at least through 1988, assuming no change in budget policies now in place. Moreover it does not decline relative to GNP in the 1984-1988 period (see Figure 16).

Figure 17.

Unified Budget Receipts and Outlays as a Percent of GNP



SOURCES: Office of Management and Budget; U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

This is because major changes have occurred in tax and expenditure policies. Federal spending as a proportion of GNP remains very high by historical standards--higher than in any postwar year before 1982 (see Figure 17)--largely because of the build-up in defense spending, rising interest payments, and the growth of entitlement programs. At the same time, revenues show a relative decline from 20.9 percent of GNP in 1981 to 18.3 percent in 1988--the third lowest ratio since 1966--largely because of the Economic Recovery Tax Act of 1981.

One way to measure the impact of policy changes on the budget is to estimate what the deficit would be if unemployment remained at a fixed rate. Changes in the resulting "standard-employment" budget isolate the effects of policy actions, because the impacts of changed economic conditions are largely removed. 1/ Such calculations show that

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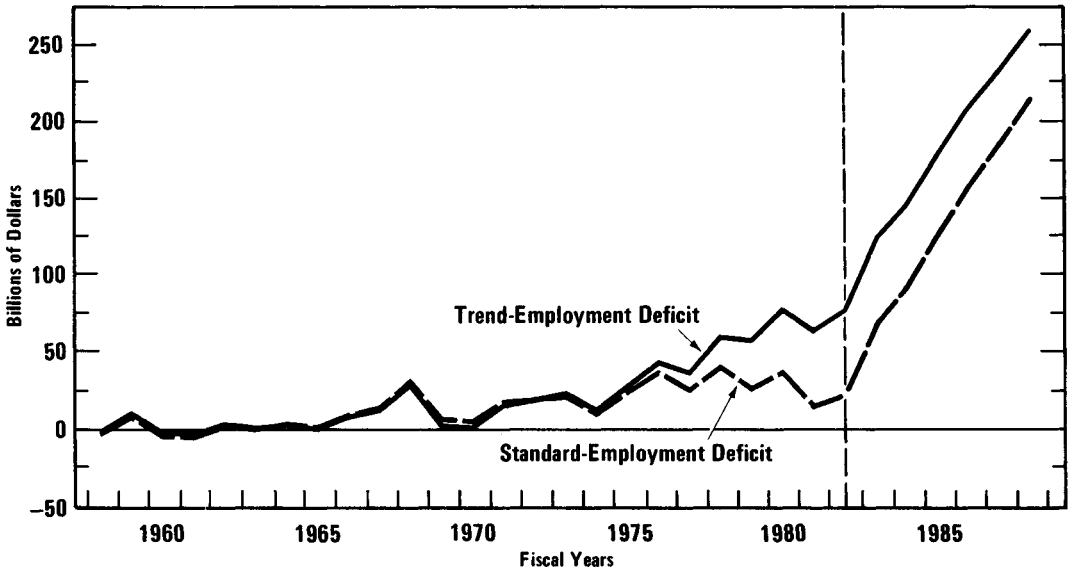
1/ When measured at high rates of resource utilization, this concept is often called the high-employment budget.

Figure 18.
Standard-Employment and Trend-Employment Deficits (Unified Budget Basis)



SOURCE: Congressional Budget Office.

fiscal policies, rather than economic conditions, account for a growing proportion of the budget deficit in outyears. According to CBO estimates, unless policies in place are changed, the standard-employment budget deficit will rise from $23 billion in fiscal year 1982 to $215 billion in fiscal year 1988 (see Table 11). By this measure, fiscal policy would provide a near record dose of sustained stimulus in the 1984-1988 period (see Figure 19).

The magnitude of the budget stimulus is also illustrated by CBO's high-growth path projections shown in the preceding chapter. This "optimistic" projection assumes an average postwar recovery, in addition to lower interest rates and higher inflation than CBO uses in the calculations of the standard employment budget. But even in this optimistic projection, the deficit remains very high, $183 billion in fiscal year 1988.

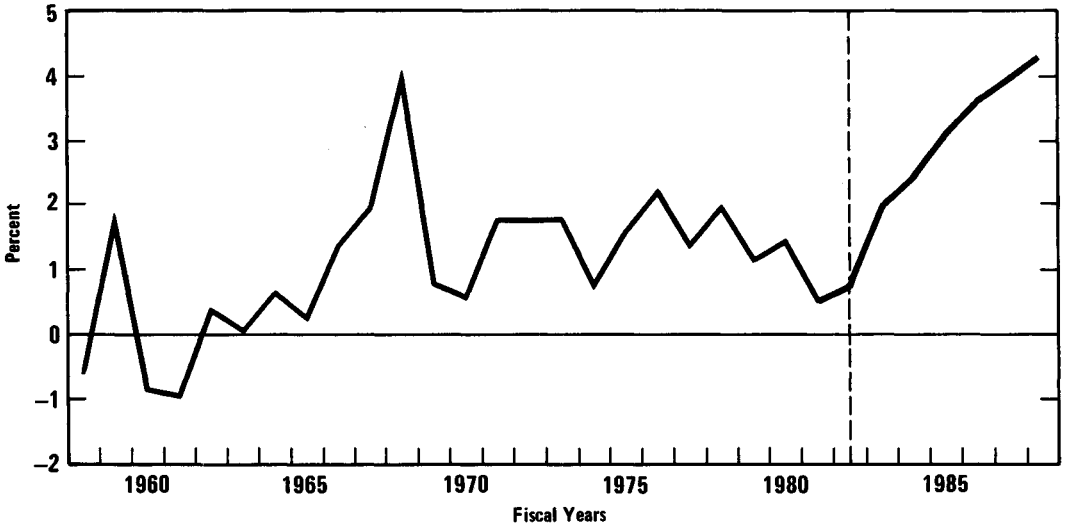
TABLE 11. THE BUDGET OUTLOOK, FISCAL YEARS 1983-1988

	Actual 1982	Estimated 1983	Projections 1984	1985	1986	1987	1988
In Billions of Dollars							
Unified Budget Deficit	111	194	197	214	231	250	267
Revenues	618	606	653	715	768	822	878
Outlays	728	800	850	929	999	1072	1145
Off-Budget Deficit	17	17	15	16	19	17	17
Total Federal Deficit a/	128	210	212	231	250	267	284
Standard-Employment Deficit b/	23	69	91	128	159	187	215
Publicly Held Debt	929	1128	1340	1571	1820	2087	2372
As a Percent of GNP							
Unified Budget Deficit	3.6	6.1	5.6	5.6	5.6	5.6	5.6
Revenues	20.4	19.0	18.7	18.7	18.5	18.4	18.3
Outlays	24.0	25.0	24.3	24.3	24.1	24.0	23.9
Standard-Employment Deficit (Percentage of Standardized GNP) b/	0.7	1.9	2.4	3.1	3.6	4.0	4.3

a/ Defined as the sum of the unified budget and off-budget deficits.

b/ Unified budget basis, calculated at 6 percent unemployment, with 2.6 percent average growth in the corresponding level of GNP during the 1983-1988 period.

Figure 19.
Standard-Employment Deficit as a Percent of Standardized GNP (Unified Budget Basis)

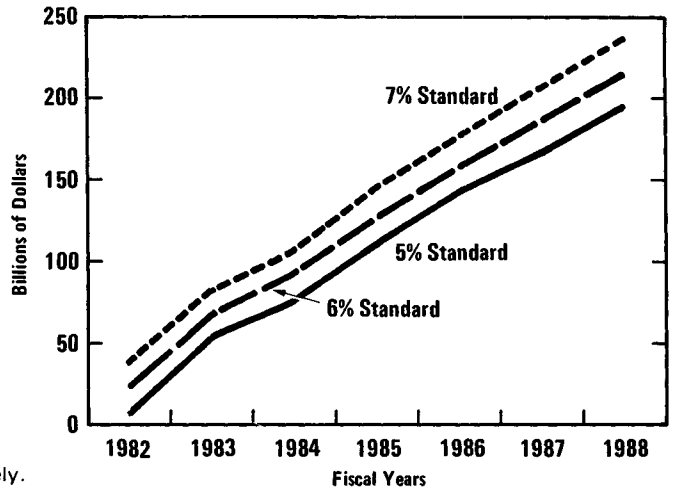


SOURCE: Congressional Budget Office.
NOTE: Forecast standardized at 6 percent unemployment.

Many economists believe that fiscal stimulus in the current year, and possibly in 1984, should not be significantly reduced because to do so might inhibit the recovery. But the outyear budget deficits could have adverse effects if the economy is operating at high levels of output. Such stimulus could clash with anti-inflationary monetary policy. The prospect of such large deficits may also be a factor in current high long-term interest rates. If so, they may already be impeding the growth of housing starts and the purchases of consumer durables--important to economic recovery. Later, these deficits are also likely to crowd out business investment--a primary source of long-run economic growth.

Figure 20.

Alternative Standard-Employment Deficits (Unified Budget Basis)



SOURCE: Congressional Budget Office.

NOTE: These alternatives differ by the level of employment and output used to standardize the budget. The "5% standard" is the same as the "full-employment budget" concept, and currently assumes 5 percent unemployment. The "6% standard" and "7% standard" assume one percentage point and two percentage points higher unemployment, respectively.

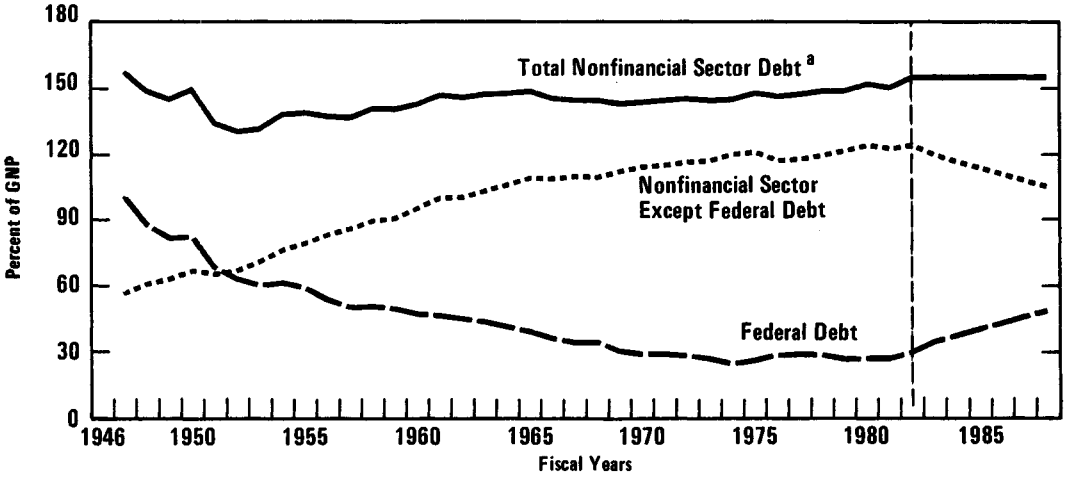
Alternative Guidelines for Deficits

How much do future deficits have to be reduced to avoid the adverse effects on the economy mentioned above? Because a balanced budget does not appear to be an attainable or desirable goal during the next few years, some other norm or guideline would be useful.

One possible norm would be a balanced standard-employment budget. With this standard, the size of the deficit reductions would depend somewhat on the constant rate of unemployment chosen for the calculation. For example, with a constant 6 percent unemployment rate, the standard-employment deficit would be $215 billion in fiscal year 1988. By comparison the deficit would be $196 billion if a constant 5 percent unemployment rate were used, and $235 billion, if a constant 7 percent unemployment rate were chosen (see Figure 20).

A different approach would involve balancing the budget over the course of the business cycle. This would require balancing the budget at trend or average levels of employment and output. The trend-employment deficit, which is generally higher than the standard-employment deficit,

Figure 21.
Outstanding Debt of Nonfinancial Sectors



SOURCES: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

[a] Assumed to be constant percent of GNP from 1982 to 1988.

is estimated to rise to $261 billion by fiscal year 1988, with policies now in place (see Table 12).

There are several other possible standards. One norm that has recently received attention would involve eliminating the "primary deficit," estimated to be $163 billion in fiscal year 1988. (The primary deficit is the budget deficit plus off-budget deficit, excluding net interest payments and Federal Reserve payments to the Treasury.) It can be shown that eliminating the primary budget deficit would lead to a declining trend in the federal debt-GNP ratio, as long as the effective interest rate is less than the rate of growth of GNP. 2/ Historical experience suggests that this standard would likely permit a rise in private borrowing relative to GNP and

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2/ James Tobin, "Budget Deficits, Federal Debt, and Inflation In Short and Long Runs," paper presented at a Conference Board meeting, "Toward a Restructuring of Federal Budgeting," Washington, D.C., December 2, 1982.

TABLE 12. ALTERNATIVE STANDARDS FOR REDUCING THE DEFICIT (By fiscal year, in billions of dollars)

Alternative Standards	1984	1985	1986	1987	1988
Deficit to be Eliminated					
Standard-Employment Deficit a/	91	128	159	187	215
Trend-Employment Deficit b/	146	181	209	235	261
Primary Deficit c/	129	136	145	154	163
Structural Primary Deficit d/	31	55	77	94	113

SOURCE: Congressional Budget Office.

a/ Unified budget standardized at 6 percent unemployment.

b/ Unified budget standardized at trend employment.

c/ Unified budget plus off-budget deficits, excluding net interest payments and Federal Reserve payments to the Treasury.

d/ Primary deficit standardized at 6 percent unemployment.

thereby improve prospects for business investment (see Figure 21). Alternatively, the primary budget could be balanced at a constant unemployment rate. At a 6 percent unemployment rate, this would require a $113 billion reduction in the deficit in 1988. With this rule, the federal debt-GNP ratio would not reach a declining trend until after 1988.

By any of these standards, the task confronting the Congress is formidable. To eliminate the noncyclical or structural component of the 1988 deficit (standardized at 6 percent unemployment) would require deficit reductions amounting to $113 billion to $215 billion depending on the treatment of interest payments and other factors. Major reforms in both tax and spending structures would be necessary to achieve such goals. No major tax or spending program could be excluded from the process without making the task more difficult and imposing an additional burden on beneficiaries of other programs.

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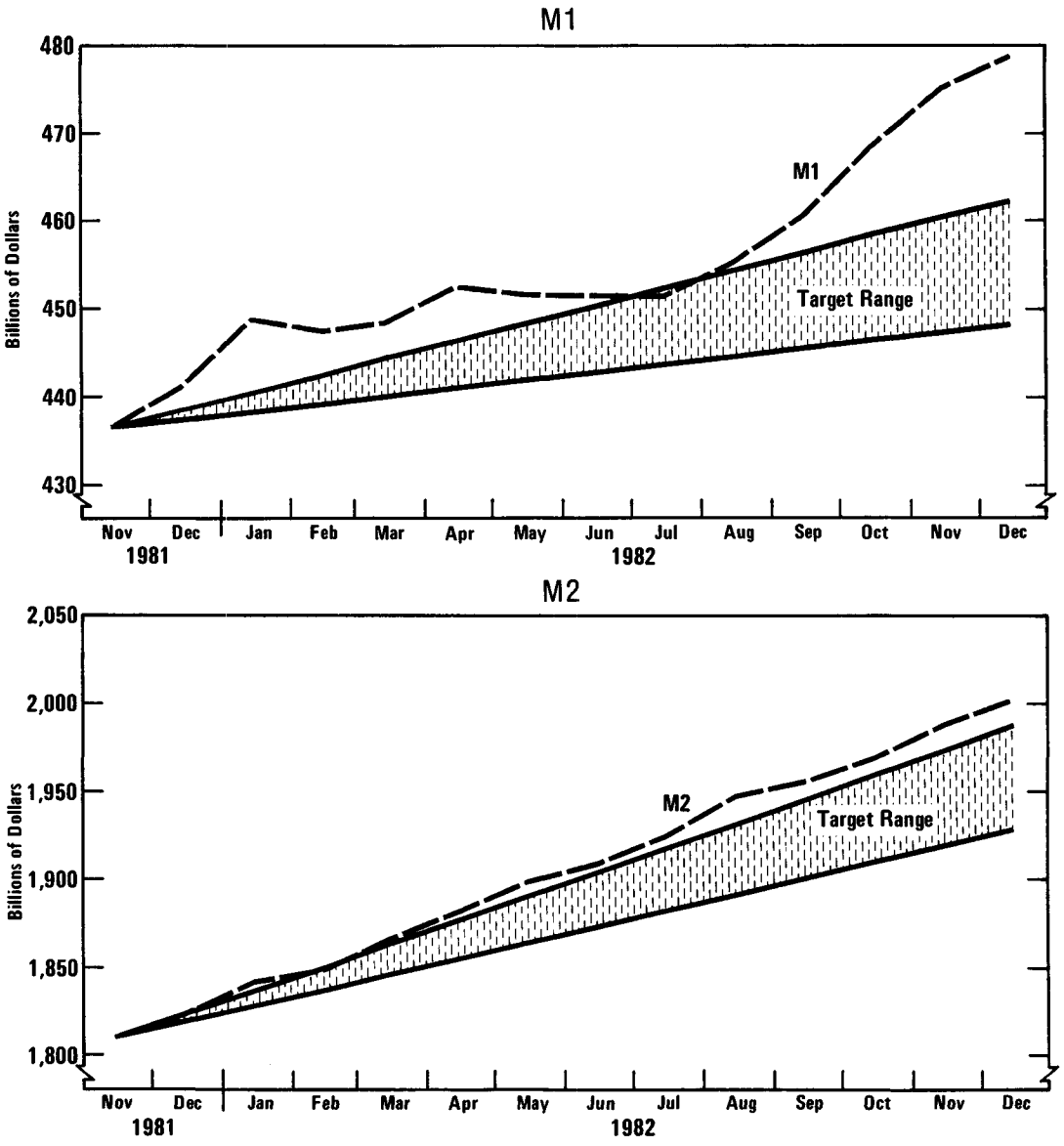
Figure 22.

M1 and M2 Levels and Targets in 1982



SOURCE: Federal Reserve Board.

NOTE: **M1** consists of currency in circulation, travelers' checks, checking accounts, and other checkable deposits at depository institutions. The target growth range for 1982 was 2½ to 5½ percent.

M2 consists of M1 plus savings and small time deposits at depository institutions, money market mutual fund shares, and some overnight repurchase agreements and Eurodollar deposits. The target growth range for 1982 was 6 to 9 percent.

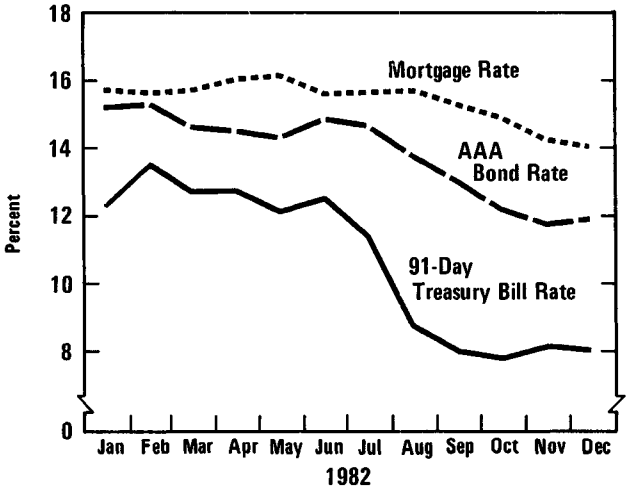
Although smaller deficits would entail a reduction in fiscal stimulus, they could be achieved gradually over time without endangering the recovery. Policies that reduce deficits in later years are likely to result in easier credit conditions and faster economic growth if monetary policy accommodates it. Many economists regard a policy mix combining fiscal restraint with some monetary policy accommodation as the one most conducive to investment and long-run economic growth.

MONETARY POLICY AND FINANCIAL CONDITIONS

How restrictive has monetary policy been during the past year? The evidence is mixed. On the one hand, the money supply by various definitions grew relatively fast, at rates well above the Federal Reserve's target range (see Figure 22). The growth in M1, sometimes regarded as the most important indicator of monetary policy, was especially rapid late in the year, suggesting that monetary policy was not restrictive. The behavior of interest rates indicates otherwise, however. Rates of all maturities were extremely high during much of the year (see Figure 23). Real interest rates were by some measures at their highest levels since the Depression.

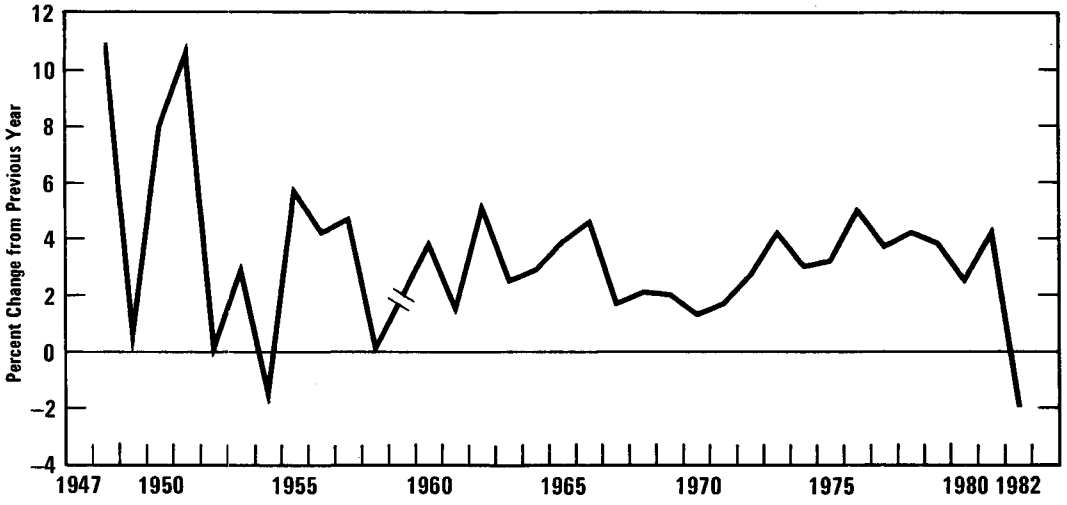
This combination of strong growth in the money supply with high interest rates reflects unusual developments in financial markets. The Federal Reserve apparently believes that people have shifted wealth into monetary assets as a reaction to recent and expected economic and financial developments, and not as a means of financing current purchases. If this is so, the increase in the money supply growth has largely reflected

Figure 23.
Interest Rates



SOURCES:
Federal Home Loan Bank Board; Moody's Investor Services; Federal Reserve Board.

Figure 24.
M1 Velocity Growth



SOURCES: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis.

NOTE: M1 was redefined in 1959.

an increase in the demand for money assets, and has not been a net stimulus to the economy. 3/

Money and "Velocity" in 1982

The unusual relationship of recent money demand to the course of the economy is reflected in the behavior of money "velocity." Velocity, the ratio of GNP to the money supply, measures the number of times on average that each dollar in the money supply is used in a transaction included in GNP during the year. As Figure 24 shows, M1 velocity declined during 1982 for the first time since 1954--a marked departure from its historical growth trend. This implies that individuals and businesses were accumulating money holdings for purposes other than spending during 1982. Money growth served largely to finance the accumulation of idle balances rather than the growth of GNP.

3/ Congressional Budget Office, The Economic and Budget Outlook: An Update (September 1982), pp. 46-49.

TABLE 13. GROWTH OF SELECTED COMPONENTS OF M1 AND M2, 1979-1982 (Percent change, fourth quarter to fourth quarter)

	M2				
	M1				
	Currency	Demand Deposits	Other Checkable Deposits (Primarily NOW Accounts)	Savings Deposits	Small Time Deposits
1979	9.5	3.0	142.6	-11.8	22.7
1980	9.3	3.2	59.0	-4.6	14.5
1981	5.6	-12.6	183.7	-16.3	15.9
1982	8.0	1.0	33.7	8.9	7.4

SOURCE: Federal Reserve Board.

The outlook for the economy in the next months depends critically on whether velocity rebounds or continues behaving sluggishly. At present, it is not known which of these two possibilities is more likely because no one understands exactly why velocity has behaved the way it has. One view is that individuals and firms have been adjusting their money holdings in response to a reduction in inflationary expectations. This hypothesis is (1) difficult to test because inflationary expectations are hard to measure; and (2) difficult to reconcile with the fact that recent increases in money holdings have been concentrated in one component of the money supply, NOW accounts (see Table 13). (This view of the cause of the increase in money holdings provides no reason to expect the increase to be concentrated in one component instead of being spread over all of them.) If the expectations view is correct, velocity may not snap back to its earlier level, but it could begin growing at trend rates again as soon as the adjustment in inflationary expectations is complete.

An alternative view argued by some economists and supported by Federal Reserve studies is that households tend to increase the share of

Money Demand

In its September economic report, the CBO presented evidence on current money demands from three statistical equations designed to predict the level of money holdings. These equations consistently underestimated the amount of money that agents in the economy were holding in 1982. The underpredictions were by amounts large enough to warrant a firm inference that money demand in 1982 did not reflect the same factors that underlie the estimated equations. The CBO has subsequently updated these estimates using later data, and found that the same conclusions can be drawn. The table below shows the amounts by which two of the money-demand equations underpredicted money holdings during the four quarters of 1982. The errors for the first three quarters are roughly the same as those reported earlier, while that for the fourth quarter is much larger.

AMOUNTS BY WHICH TWO STATISTICAL MONEY-DEMAND EQUATIONS UNDERESTIMATE THE LEVEL OF THE MONEY STOCK (M1), 1982:1 TO 1982:4
(Billions of dollars)

	Error		
	Goldfeld	Hamburger	Actual Money Stock
1982:1	9.5	8.3	448.1
1982:2	10.1	8.7	451.8
1982:3	8.0	8.8	455.7
1982:4	20.2	20.7	474.0

SOURCE: Computations described in Congressional Budget Office, The Economic and Budget Outlook: An Update (September 1982), pp. 79-85, and in this text.

their wealth held in interest-bearing liquid forms, such as NOW accounts, when the unemployment rate rises. 4/ The view that recent increases in money demand reflect this precautionary motive is therefore consistent with the fact that the increase is concentrated in NOW accounts. If this overall explanation is correct, velocity may begin to grow strongly once an economic recovery is under way. If velocity rebounds then the money growth currently tolerated by the Federal Reserve could suddenly become highly stimulative to the economy.

The uncertainty about the behavior of velocity clouds the outlook for the economy. As the discussion of fiscal policy has already shown, however, this is only one of several sources of serious uncertainty regarding the recent and prospective course of the economy.

Recent Behavior of Interest Rates

Many explanations have been advanced for the persistently high levels of interest rates. Some have emphasized the fact, discussed in this chapter, that money demands have been quite strong relative to the supply made available by the Federal Reserve, and that current and prospective federal budget deficits are extraordinarily high. Still other explanations have centered on expectations of future inflation or monetary restraint. 5/

It appears that several of these factors were working at once to sustain high interest rates during the first half of 1982. When rates finally moved downward in midsummer, however, a relaxation of monetary restraint seems to have been largely responsible, together with the enactment of a deficit-reducing fiscal package.

Interest rates began declining in July, following a reduction in the Federal Reserve discount rate and the release of the Board's midyear report. The report, and the accompanying testimony, stated that the central bank would not necessarily enforce its monetary targets during the remainder of

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4/ The fact that the velocity decline has few precedents is, according to this view, explained by the fact that the narrow supply has contained an interest-bearing component only since NOW accounts were introduced nationwide in 1981.

5/ For a detailed discussion of recent interest rates, see CBO, The Economic and Budget Outlook: An Update, pp. 39-46.

the year as long as strong money demands unrelated to the growth of economic transactions persisted. 6/ The resulting sense that interest rates would be allowed to move lower was reinforced when influential Wall Street forecasters began predicting lower rates, and when the Federal Reserve announced formally that its M1 targets were being suspended.

The reason it gave for suspending its targets was the fact that the growth of M1 was expected to be significantly distorted by the pending expiration of large quantities of All-Savers' Certificates. The expected introduction of "Money-Market" and "Super-NOW" accounts at banks and thrift institutions seemed likely to compound these problems. While these distortions are real, many observers discounted the stated reasons for the change, concluding instead that the targets were being abandoned primarily in order to give the authorities freedom to stimulate the economy. This uncertainty about the central bank's intentions has persisted, and may be having a significant impact on interest rates. The topic receives more discussion below. 7/

Economic Impact of the Drop in Rates

A number of circumstances prevented the drop in interest rates from causing a quick and strong turnaround in economic activity. Even under the best conditions, financial changes require several months before their effects are felt. It may also be that the levels of interest rates were still too high to generate a recovery. Both short- and long-term rates fell noticeably (see Table 14). Long rates, however, remained at double-digit levels, and most observers believed that the underlying real levels of both short and long rates were still very high. This is demonstrated in Figure 3, which shows the course of one measure of real short-term rates since 1950. The inflation-adjusted Treasury bill rate was higher at the end of 1982 than at any time in recent years except early 1981, just before the current recession began.

It is difficult to develop measures of real long-term rates. (Doing so requires subtracting a measure of expected inflation over the life of a given

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6/ Board of Governors of the Federal Reserve System, Midyear Monetary Policy Report to Congress Pursuant to the Full-Employment and Balanced Growth Act of 1978 (July 20, 1982), p. 19.

7/ Another factor in last summer's break in rates may have been an inflow of funds from abroad caused by a sudden increase in fears about the solvency of many foreign governments. This argument is hard to verify, however, because the evidence on such flows is mixed.

TABLE 14. LEVELS AND CHANGES IN SELECTED INTEREST RATES, 1982 (In percentage points)

	January to June Average	October to December Average	Change
Short-Term Rates			
Discount rate	12.0	9.3	2.7
Federal funds rate	14.4	9.3	5.1
3-month Treasury bill rate	12.6	7.9	4.7
Yield on commercial paper	13.6	8.8	4.8
Prime rate	16.4	12.0	4.4
Long-Term Rates			
Mortgage rate	15.8	14.3	1.5
Moody's AAA Corporate Bond Yield	14.8	11.9	2.9
Memo: Inflation Rate (stripped CPI)	5.7	5.1	0.6

asset--20 or 30 years, or even more--from the nominal rate on that security.) 8/ There are reasons to speculate, however, that real long rates are even higher than real short-term rates. For example, if agents in financial markets expect large future budget deficits and tight future monetary policy they probably expect short-term real interest rates to be high in the future as a result. This could raise current real long-term rates.

Another factor that may have raised real long-term rates is the unusual degree of uncertainty about the future course of both monetary and fiscal policy. Will future budget deficits be reduced significantly? Will

8/ In principle, real interest rates would be observable if the Treasury issued discount bonds whose face value was indexed to an appropriate measure of the price level. The discount would reflect only the real interest rate and, possibly, tax factors.

velocity begin growing again? What monetary targets will be reimposed? Will the targets be adjusted for shifts in velocity? If the targets are not reinstated, which of several alternative strategies, discussed below, will the Federal Reserve adopt? Such questions give rise to uncertainties about the future behavior of bond and stock prices, and may raise longer-term real interest rates by increasing risk premia.

Alternative Monetary Policy Strategies for 1983 and Later Years

Monetary policy is at a crossroads. The Federal Reserve's stringent monetary policies have contributed to the decline in inflation, but at the cost of a severe recession both in the United States and elsewhere. The monetary targeting system may have made the recession worse than the Federal Reserve expected. Moreover, there is a risk that adhering to the same strategy in the future might either stifle recovery or generate inflation, depending on the behavior of velocity. Some observers believe that the Federal Reserve should choose an alternative strategy. In assessing this proposal, however, it is important to bear in mind that only some results of policy during the past three years reflect technical aspects of the particular (monetary-targeting) approach that has been in use. In other respects, the way the economy has behaved reflects the anti-inflationary goals of monetary policy. High unemployment would likely emerge regardless of the strategy chosen, as long as the goals of policy were the same. It would therefore be useful for Congress and others to know what the Federal Reserve's objectives for GNP, prices, and unemployment are so that the objectives could be changed if they seemed inappropriate.

The main technical difficulty with the use of monetary targets, particularly rigid ones, is that the relationship between money and GNP (velocity, as defined in the last section), may change. When this happens, an offsetting adjustment is needed in money growth targets to ensure that GNP growth and interest rates do not swing sharply, as happened in 1982. Such adjustments may not be successful, however. Information about the behavior of GNP is delayed and the magnitude of monetary policy effects are uncertain and occur with a lag.

Alternatives to Monetary Targets

Some observers favor abandoning the money-targeting strategy. The principal alternatives that have been discussed so far include:

- Targets for nominal GNP;
- Targets for real interest rates;

- o Targets for commodity prices;

- o Targets for the growth in total debt.

Nominal GNP Targets. Under this approach, the Federal Reserve would announce a goal for growth in total nominal GNP instead of, or in addition to, its targets for the growth in various monetary aggregates. The Federal Reserve would then be able to adapt to evidence of a changing economic environment without having to change all of its previously announced targets. This would eliminate much of the present confusion caused by shifts in velocity.

A virtue of GNP targets is that they would, if their announcement was sufficiently detailed, entail an explicit statement by the Federal Reserve of the levels of prices and real output that it believes are consistent with a given GNP target. Such a statement would make it easier for the Congress and others to decide whether the central bank's objectives are appropriate. A problem is that if the monetary authorities failed to hit their GNP targets precisely, it might erode public confidence in the Federal Reserve System.

Interest-Rate Targets. An alternative approach would be for the Federal Reserve to announce targets for one or more short-term interest rates. In most versions of this proposal, a real interest rate would be used--that is, the level of some rate after subtracting a measure of the expected rate of inflation.

Interest-rate targets would need to be raised or lowered over the course of the business cycle to avoid making the cycle worse. 9/ It would be difficult to tell at exactly what level the target should be set, however, because of unpredictable changes in the way interest rates affect the economy. (This is the same problem that arises under monetary aggregate targets because of shifts in velocity.) Another problem stressed by officials of the Federal Reserve is that real interest rates themselves are difficult to measure because expectations of inflation are unobservable.

9/ Under monetary-aggregate targets when velocity is not behaving erratically, interest rates should be expected to fall during recessions and rise during recoveries, and thus automatically help stabilize the economy. It is questionable in any case whether the Federal Reserve could maintain a fixed interest rate target for a long period if inflationary expectations changed sharply.

Commodity Price Targets. Targeting an index of commodity prices would contribute to stabilizing the price level. Proponents of this course argue that reducing uncertainty about the price level would permit better allocation of resources, thus increasing the level of economic output. Other analysts believe that the cost of achieving this stability of the price level would be high in terms of short run losses in output and employment.

Debt Targets. Another possibility, as an alternative or supplement to the present approach, would be the use of targets for total debt in the economy. Recent studies have shown that debt is as closely associated with GNP as is the money supply. Since the Federal Reserve can indirectly control a large component (bank credit) of total debt, some argue that it is possible to control of GNP through this approach. A liability at present is that little is known about why debt and GNP are so closely related; no well-developed theory exists, as in the cases of money and real interest rates.

Monetary Policy in 1983

What strategy will the Federal Reserve choose from among those that have just been discussed? There has been no indication that the bank will abandon money aggregate targets. Thus, many observers, including CBO, assume that it will continue to announce monetary aggregate targets, but will adapt these targets more quickly to changes in velocity than it has hitherto, thus moving somewhat closer to a system of nominal GNP targets. On a concrete level, statements by the bank's officials suggest that their targets, of whatever kind, will be chosen with a view to fostering a moderate economic recovery in 1983.

CBO has assumed that the Federal Reserve will adopt a target of 6 to 9 percent growth in M2, but will continue to permit growth above this range if velocity fails to rebound from its sluggish performance of last year. If this happens, interest rates may stay low enough (despite the pressures from large federal budget deficits) to stimulate and sustain the recovery. If velocity does shoot up, the bank may hold money growth at or near the bottom of the target range. This would hold the economy to a moderate recovery. Indeed, if the Federal Reserve did not offset a rapid "snap back" in velocity with lower money growth, many economists would worry that a new round of inflation would threaten.

While the bank may be expected to offset any clear swings in velocity in order to achieve its GNP targets, doing so may be difficult because sustained changes in velocity are not easy to recognize. There is a risk, for example, that interest rates could rise sharply and stifle economic recovery. A sharp rise in rates might also exacerbate the already-serious debt-service problems of many foreign governments and U.S. corporations, perhaps

leading to defaults. Loans that entail a serious default risk currently represent a significant percentage of all assets of some U.S. banks. One or more major defaults would probably raise fears about the solvency of banks, causing funds to be withdrawn and forcing the central bank to intervene as lender of last resort. The resulting increase in bank reserves might expand the money supply significantly. 10/ At the same time, nominal and real interest rates would perhaps increase, reflecting both an increase in the perceived riskiness of financial assets in general and a perception that a period of reinflation was at hand.

Conclusion

Some improvement in credit conditions, particularly long-term interest rates, appears essential for a strong and enduring economic recovery. Whether it occurs will depend, however, on the course of fiscal and monetary policies. Current projections of a federal deficit climbing continuously for the foreseeable future are troublesome in this respect, because financing such a deficit would put upward pressure on interest rates. The CBO estimates that the deficit reduction needed in coming years, by the standards discussed earlier in this chapter, is very large--in the range of $110 to $260 billion by 1988.

Although there is widespread agreement on the need for budget policies that will reduce future deficits, there is less agreement concerning the appropriate course of monetary policy. Some observers believe that the Federal Reserve must hold short-term interest rates down for a time if the recovery is to be sustained, but it is not yet clear to what extent the central bank shares this objective, or what targeting strategy it will undertake in 1983 and later years. Others believe, on the other hand, that the Federal Reserve should continue to hold money growth within target ranges on the ground that an interest rate policy would inevitably lead to a resurgence of inflation. One difficulty is that the environment in which money targeting operates--particularly the behavior of the velocity of money--is also highly uncertain.

10/ The central bank might try to offset the increase in reserves through contractionary open-market operations. This would put upward pressure on real interest rates, which might already be quite high despite the initial monetary expansion. The bank could probably not offset the initial expansion precisely, so a significant net change in the money supply would almost certainly occur.

From a longer-term perspective, the financing of the large structural budget deficits currently being projected threatens to draw so heavily on the capital markets that it will crowd out private investment. This could have serious long-run consquences for the U.S. economy. Much depends, however, on the strategy that monetary policy adopts in the meantime. A system of rigid monetary-aggregate targets would increase the danger of crowding out private investment.

CHAPTER V. POLICY OPTIONS TO REDUCE UNEMPLOYMENT

Slow growth in the economy since 1979, including two recessions, has substantially lowered inflation but raised unemployment to record postwar levels. Most forecasters expect it to decline very slowly, remaining around 10 percent at the end of 1983 and 9 percent at the end of 1984.

A principal issue that confronts policymakers is whether or how to respond to this persistent slack in the labor markets. Three avenues of approach would be:

- Countercyclical policies--either to stimulate the economy through monetary and fiscal measures, or to provide jobs through public works and public service employment.

- Long-run policies aimed at reducing noncyclical unemployment--for example, by strengthening competition, and by retraining workers.

- Income transfer policies to mitigate the hardship of unemployment--such as extended unemployment insurance benefits, work-sharing, and increased access to welfare for some groups of the unemployed.

After reviewing the unemployment situation, this chapter analyzes each of these general approaches. Its major conclusion is that policymakers are faced with a choice between fighting inflation and fighting cyclical unemployment. In the short run, it is impossible to do both effectively. It would, however, be possible to continue fighting inflation and at the same time to reduce the burden of unemployment by strengthening the income safety net.

UNEMPLOYMENT: A REVIEW OF THE SITUATION

At the end of 1982, the unemployment rate stood at 10.8 percent of the labor force--the highest rate in more than 40 years. In all, about 12 million workers were unemployed in December. Many more, perhaps about 28 million, experienced unemployment at some time during 1982. 1/

1/ Information on the total number of workers who experienced unemployment during 1982 will not become available until well into 1983. In

The Natural Rate of Unemployment

Economists refer to the "natural rate of unemployment" as occurring when labor markets are in overall balance. It represents the level of unemployment consistent with unchanging inflationary pressures in the labor market. In the absence of disturbances from outside the labor market such as oil price shocks, competitive adjustments tend to bring about the natural rate of unemployment--though this could take a long time. The term "natural" does not refer to laws of nature or imply that unemployment could not be further reduced by changes in institutions, or by providing training, labor market information, and placement services.

Estimates of the natural rate of unemployment have increased substantially over the last two decades. In the early 1960s, 4 percent unemployment was thought to represent the lowest noninflationary unemployment rate. Four percent was selected because unemployment had reached approximately that level in the mid-1950s without a major acceleration of inflation. In later years, attempts were made to determine the level of unemployment that corresponded to the earlier 4 percent standard, in terms of economic slack. Economists have also attempted to estimate the natural rate of unemployment using econometric techniques. Recent estimates of the natural unemployment rate, while subject to great uncertainty, have tended to be in the $5\frac{1}{2}$ to $6\frac{1}{2}$ percent range--with some as high as 7 percent.

At times, special cost trends outside of the labor market may affect the level of the lowest nonaccelerating inflation rate of unemployment, or "NAIRU." For example, in the early 1980s, most economists expected oil prices to trend upward in real terms during the decade, and some expected food prices to do likewise. These assumptions tended to raise estimates of NAIRU, but neither assumption seems as compelling now. Thus, the improved outlook for food and energy prices should reduce NAIRU.

From 1978-1979 to the end of 1982, unemployment increased nationally by about five percentage points, primarily because of two recessions and a lack of economic growth. 2/ The effect of the recession has been very uneven, however, as Table 15 shows. Rates have been highest among blacks, Hispanics, and teenagers. Goods-producing sectors have been much more affected than service-producing sectors. Credit-sensitive sectors of the economy, such as construction and durable goods manufacturing, have been particularly hard hit. The highest overall rates of unemployment have been among blue-collar workers, notably in areas such as the industrial Midwest. Factors other than the recession, such as the appreciation of the dollar and structural changes in the economy, have also played a part.

Unemployment rates do not adequately describe the extent of the current slack in labor markets (see Table 16). The number of discouraged workers--persons who report that they want a job but are not looking for it because they believe they cannot find a job--rose to 1.8 million in the fourth quarter of 1982. That is substantially above the 1.2 million level reached in the previous deep recession of 1973-1975. Another 6.4 million persons were working part-time for economic reasons in the fourth quarter of 1982, compared with a previous high of 3.7 million in early 1975. Not counted in these estimates were all those who were bumped down in the depressed job market and had to accept jobs that did not make use of their skills.

The hardship occasioned by unemployment is difficult to measure directly, but several indirect measures are available. One is the duration of unemployment. In the fourth quarter of 1982, about 4.0 percent of the labor force, or more than 4.5 million workers, had been unemployed for 15 weeks and over, while 2.1 percent had been unemployed half a year or longer. In early 1975, the corresponding figures were approximately 2.0 and 1.0

1/ (Continued)

1981, approximately 23.4 million workers experienced unemployment sometime during the year, while unemployment averaged about 8.3 million--a ratio of about 2.8 to 1. In 1982, unemployment averaged about 10.7 million; however, during recessions the average duration of unemployment tends to increase, changing the ratio between total and average.

2/ Most of the increase in unemployment during recessions results from workers losing jobs, with little change in unemployment occurring in the categories of job leavers, reentrants, and new entrants (Table 16). From July 1981 to December 1982, most of the increase in unemployment (about 80 percent) was associated with job losses.

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TABLE 15. UNEMPLOYMENT RATES AMONG SELECTED GROUPS AND STATES (In percents)

	1978	1979	1982 3rd Qtr.	1982 4th Qtr.
All Civilian Workers	6.1	5.8	10.0	10.7
Black and other	11.9	11.3	17.7	18.6
Black	12.8	12.3	19.3	20.4
White	5.2	5.1	8.8	9.5
Hispanic	9.1	8.3	14.4	15.2
Teenagers	16.4	16.1	23.9	24.3
Black and other	35.9	33.2	46.2	44.6
White	13.9	14.0	20.8	21.5
Youths, ages 20-24	9.6	9.1	15.1	16.1
Older workers, 55 years and over	3.2	3.0	5.2	5.7
Married men, spouse present	2.8	2.8	6.9	7.6
Women who head families	8.5	8.3	12.0	12.3
Veterans				
Ages 25 to 29	5.9	5.7	13.3 a/	15.8 a/
Ages 30 to 34	3.1	3.3	8.3 a/	9.3 a/
Poverty Areas				
Metropolitan	12.4	11.5	17.7 a/	17.7 a/
Nonmetropolitan	6.6	6.4	10.9 a/	11.7 a/
Experienced Wage and Salary Workers	5.6	5.5	9.5	10.4
Industry				
Construction	10.6	10.3	20.9	22.1
Durable goods manufacturing	5.0	5.0	13.7	16.7
Nondurable goods manufacturing	6.3	6.5	11.3	11.4
Transportation and public utilities	3.7	3.7	7.0	8.1
Wholesale and retail trade	6.9	6.5	10.1	10.7

(Continued)

a/ Not seasonally adjusted.

TABLE 15. (Continued)

	1978	1979	1982 3rd Qtr.	1982 4th Qtr.
Finance, insurance, and real estate	3.1	3.0	5.1	5.2
Service	5.7	5.5	7.6	8.3
Government Workers	3.9	3.7	4.8	5.0
Agriculture	8.9	9.3	13.9	15.1
Occupation				
White-collar workers	3.5	3.4	4.9	5.4
Professional and technical	2.6	2.4	3.3	3.6
Managers and others	2.1	2.1	3.7	3.9
Sales workers	4.1	3.9	5.5	6.2
Clerical workers	4.9	4.7	6.9	7.7
Blue-collar workers	6.9	7.0	14.8	16.1
Craftspeople	4.7	4.5	11.0	11.6
Operatives, except transport	8.2	8.5	18.5	20.7
Transport equipment operatives	5.3	5.5	12.0	13.1
Nonfarm laborers	10.8	10.9	18.5	19.8
Service workers	7.5	7.2	10.6	11.4
Farm workers	3.9	3.9	6.2	7.2
Ten Largest States				
California	7.1	6.2	10.3	11.0
Florida	6.6	6.0	7.5	9.4
Illinois	6.1	5.5	12.2	12.8
Massachusetts	6.1	5.5	8.0	7.5
Michigan	6.9	7.8	15.2	17.0
New Jersey	7.2	6.9	8.8	9.5
New York	7.7	7.1	8.4	9.4
Ohio	5.4	5.9	12.4	14.2
Pennsylvania	6.9	6.9	10.9	12.2
Texas	4.8	4.2	7.3	8.0

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

TABLE 16. CHARACTERISTICS OF THE UNEMPLOYED AND MEASURES OF HIDDEN UNEMPLOYMENT
(In percent except as noted)

	1978	1979	1982 3rd Qtr.	1982 4th Qtr.
Unemployment Rate for All Civilian Workers	6.1	5.8	10.0	10.7
Rates by Reason for Unemployment				
Job-loser rate	2.5	2.5	6.0	6.6
Job-leaver rate	0.8	0.8	0.7	0.7
Reentrant rate	1.8	1.7	2.2	2.3
New entrant rate	0.9	0.8	1.2	1.1
Rates by Duration of Unemployment				
Median, all workers (weeks)	5.9	5.4	8.7	9.9
Distribution				
15 weeks and over	22.8	20.2	33.4	37.4
27 weeks and over	10.4	8.7	17.1	20.0
Unemployed 15 Weeks and Over	1.4	1.2	3.3	4.0
Percent Unemployed 27 Weeks and Over	0.6	0.5	1.7	2.1
Part-time Workers for Economic Reasons	2.8	2.8	5.3	5.8
Discouraged Workers	0.8	0.7	1.5	1.7

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

percent respectively. Another indirect measure of hardship is the extent of income support received by the unemployed. In this recession, a smaller proportion received unemployment insurance benefits than in the 1973-1975 recession. For example, in 1982 only 45 percent of the unemployed were receiving unemployment insurance (UI) benefits, compared with 75 percent in 1975. 3/

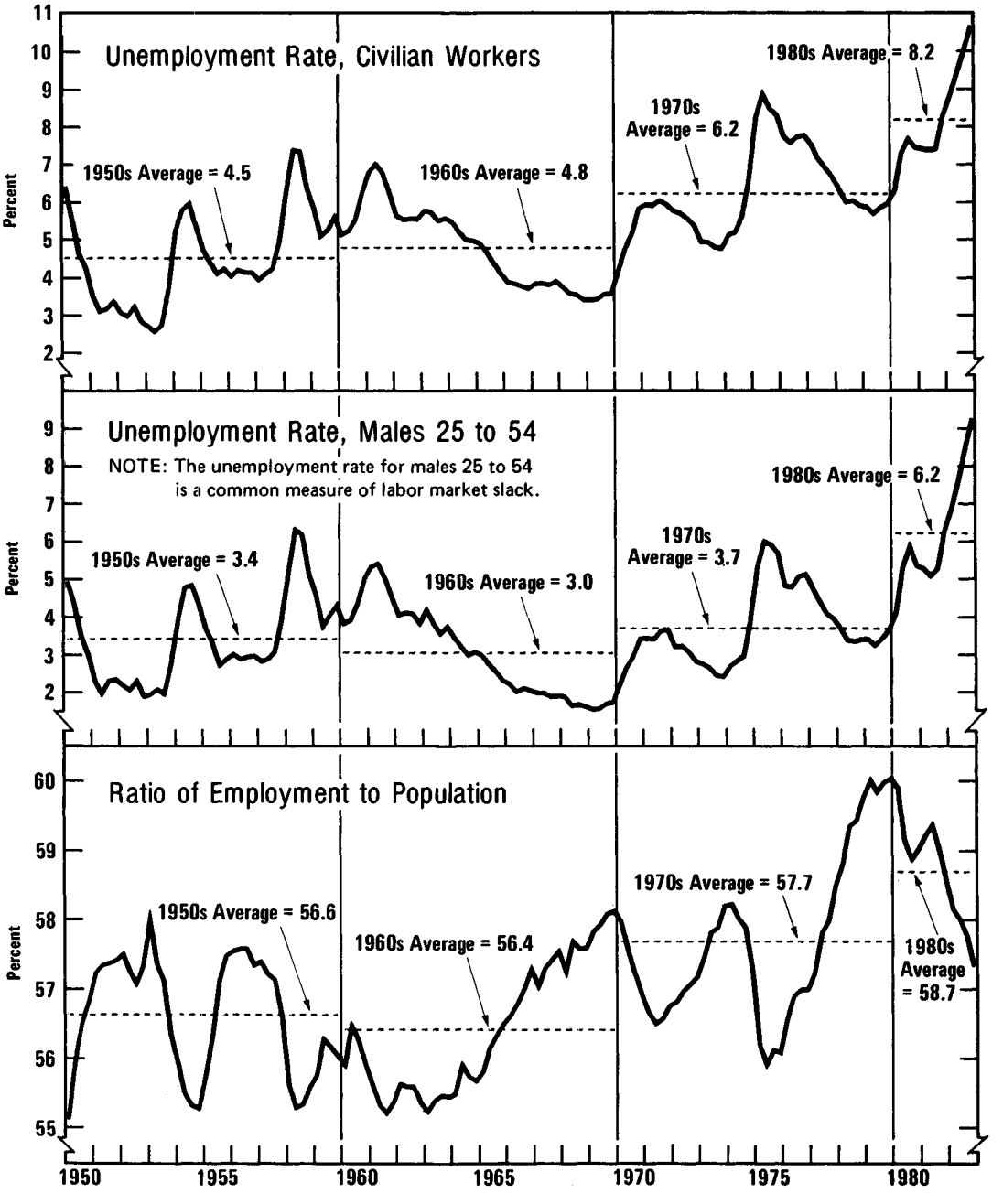
Some groups of the population suffer high unemployment even when the economy is relatively prosperous, as in the 1978-1979 period when unemployment stood at over 12 percent among blacks, 16 percent among teenagers, and 11 percent in poverty areas of cities. In addition, some occupations--generally less skilled occupations--are characterized by high unemployment in both good times and bad.

Two longer-term trends have been especially pronounced. First, while the overall unemployment rate is quite cyclical, it has drifted upward since the late 1960s (see Figure 25). Part of the upward drift is the result of demographic changes in the labor force and of increases in the scale of federal transfer programs--particularly unemployment insurance. However, the unemployment rate for adult males aged 25-54, which is relatively unaffected by these developments, has also drifted upward. The upward drift has occurred despite rapid growth in employment and a rising employment-to-population ratio during the decade of the 1970s.

The other trend has been an increase in the dispersion of unemployment rates among particular groups of the labor force (see Figure 26). Historically, the unemployment rate for blacks has been about twice that for whites; but as unemployment rates in general have moved up, the difference in percentage points has widened markedly. Recently, the racial gap reached 11 percentage points--21 percent unemployment for blacks as against 10 percent for whites (see Figure 27). Among black teenagers, measured unemployment rates have approached 50 percent (see Figure 28). In addition, the unemployment gap between youths and adults has widened considerably in the last 15 or 20 years. Finally, there are indications that unemployment resulting from factors such as international competition, technological change, and the energy price shocks may have become more widespread in recent years.

3/ Although some information is available on the wage earnings of families with an unemployed member, the lack of current information on all sources of income of the unemployed, including income transfers, makes it extremely difficult to monitor the extent of hardship.

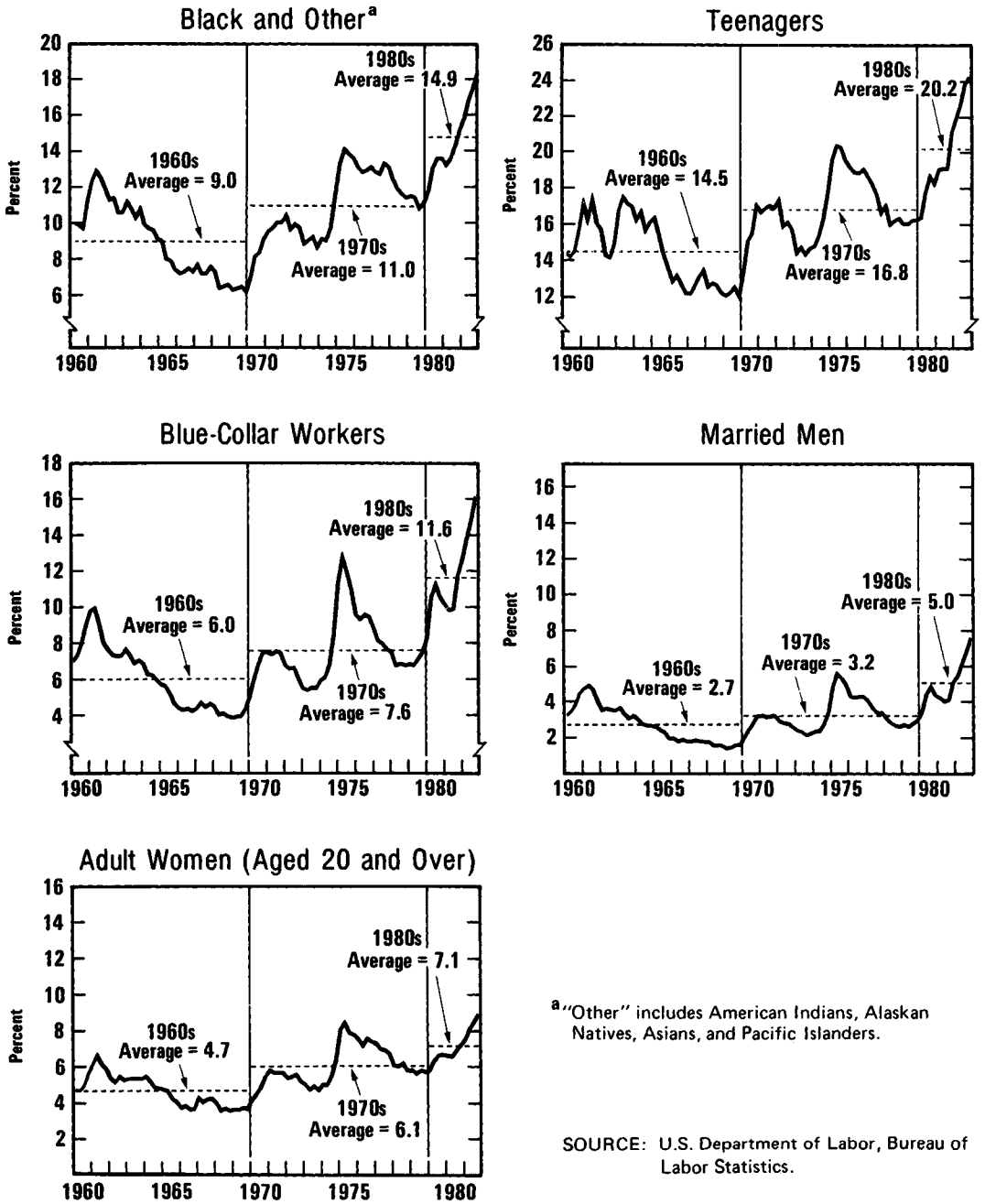
Figure 25.
Labor Market Trends



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of the Census.

Figure 26.

Unemployment Rates, Selected Groups

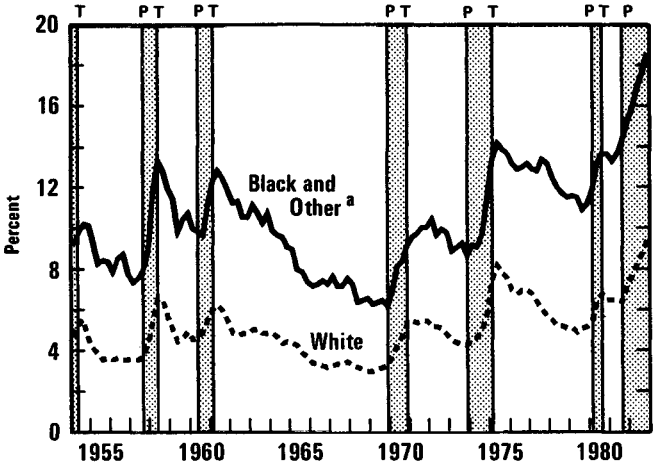


[a]"Other" includes American Indians, Alaskan Natives, Asians, and Pacific Islanders.

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

Figure 27.

Unemployment Rates by Race



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

[a] "Other" includes American Indians, Alaskan Natives, Asians, and Pacific Islanders.

NOTE: P and T lines represent business cycle peak and trough dates.

CYCLICAL UNEMPLOYMENT AND THE LIMITATIONS OF COUNTERCYCLICAL POLICIES

Most of the increase in the unemployment rate since 1978-1979 is a product of the economic slump. According to most estimates, about five percentage points of the current near-11 percent unemployment rate are recession-related and therefore not permanent. 4/ But improvement will be slow because the recovery is expected to be very weak by historical standards. Moreover, it will take a relatively large increase in output to make much change in the unemployment statistics. The reasons are:

- Productivity growth, or increase in output per worker-hour, tends to be especially rapid during the early phases of economic recovery, when businesses are able to increase production without a corresponding increase in the number of hours worked;

- The average length of the workweek also tends to increase during economic recoveries as part-time workers return to full-time work, and overtime hours increase; and

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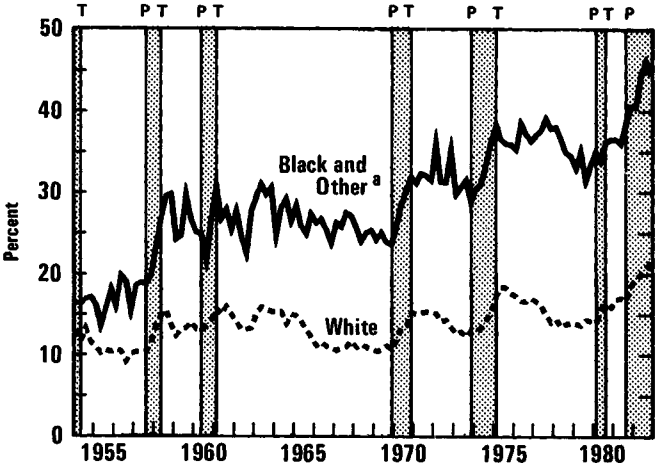
4/ Measured from the business cycle peak of the third quarter of 1981, the increase in unemployment has been only 3.3 percentage points. However, the recent recession was preceded by the shortest recovery in the post-World War II period. The recovery in 1981 was incomplete, leaving unemployment still relatively high.

Figure 28.

Teenage Unemployment Rates by Race (Ages 16 to 19)



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

[a] "Other" includes American Indians, Alaskan Natives, Asians, and Pacific Islanders.

NOTE: P and T lines represent business cycle peak and trough dates.

- The labor force also tends to grow more rapidly during economic recovery, in part because discouraged workers are encouraged to seek jobs and thus become counted in the work force.

A rule of thumb used by many economists is that it takes about two and one-half percentage points of sustained economic growth above the trend to lower the unemployment rate one percentage point after one year. If the upward trend in output is about 2½ percent annually, then 5 percent growth will lower the unemployment rate by only about one percentage point over one year's time. At that rate, it would take almost five years to return to an unemployment rate of 6 percent from the current rate of nearly 11 percent. At 4 percent growth, it would take about eight years. This rough relationship between economic growth and unemployment suggests that unemployment is likely to remain high for a number of years. 5/

5/ The rule of thumb is known as "Okun's Law." Economists recognize that it is a rough relationship, subject to change over time. In addition, Okun's law predicts relatively less accurately around turning points in the business cycle than at other times. See Arthur Okun, "Potential GNP: Its Measurement and Significance," Proceedings of the Business and Economic Statistics Section of the American Statistical Association (1962), pp. 98-104; and R. G. Sheehan and F. Zahn, "The Variability of the Okun Coefficient," Southern Economic Journal, vol. 47, no. 2 (October 1980), pp. 488-96.

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Monetary and Fiscal Policies

The federal government could try to hasten the decline in the unemployment rate by stimulating the economy. The question is whether this would be inflationary. Some economists believe that policymakers should aim at a moderate recovery involving 3 to 4 percent growth. Their rationale is that a moderate pace would maintain sufficient slack to keep inflation falling and bring down inflationary expectations. In addition, some economists believe that it is important that monetary policy not become expansive during recoveries. According to this view, even a moderate loosening of monetary policy could interfere with the downward adjustment of inflationary expectations--particularly in financial markets, but also in labor markets as well.

A case can be made for a somewhat faster economic expansion based on the very depressed state of the economy, particularly in sectors such as housing, automobiles, and capital goods. A prolonged slump could stall investment in new, more efficient plant capacity, in research and development, and in human capital such as worker training.

Under current conditions, stimulative monetary and fiscal policies would probably spur recovery without much adverse impact on inflation--at least for the first year or two. 6/ With record unemployment rates and low capacity utilization rates inflation would not be likely to heat up soon, although there might be some rise in price levels with the ending of the recession. Food and energy prices are unlikely to rise much in the near future. Moreover, other industrial economies have also been beset by stagnant growth and have large amounts of unused resources. Thus conditions for controlling inflation are generally more favorable now than they were in the middle and late 1970s. Stimulative policies might, during the first two years or so, involve some postponement of further reductions in the inflation rate--but probably not a major reacceleration of inflation.

Alternative Monetary Policies Estimates of possible unemployment and inflation rates under different rates of economic expansion have been made by Professor Robert J. Gordon of Northwestern University. Using an econometric model of the inflation process that emphasizes the roles of the unemployment rate and of past inflation, Gordon analyzed the economic

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6/ Also relevant are the monetary policies being pursued in other industrial countries. If U.S. monetary policy became much more expansive than those of other countries, it could depreciate the dollar and add to inflation through higher import prices. But it would encourage U.S. recovery by making exports more competitive.

implications of expanding nominal GNP at three alternative rates: 10.3 percent per year, 7.8 percent, and an intermediate path starting at 10.3 percent but decelerating to 7.8 percent in early 1986. With rapid expansion, inflation does not accelerate until after 1986, when unemployment falls below 6 percent; but by 1992 inflation approaches double-digit levels. With slower expansion, inflation continues to decelerate to approximately a 3 percent rate in 1986, but unemployment takes two years longer to reach the 6 percent level. Finally, with the intermediate path, a faster expansion is achieved but without an acceleration of inflation, because the unemployment rate does not fall below 6 percent. 7/

The alternative economic paths analyzed by CBO (Chapter III) show relationships between unemployment and inflation that are broadly consistent with the Gordon results. With the CBO high growth path, the unemployment rate falls to 7.0 percent in 1986, compared to 8.4 percent in the CBO baseline. The inflation rate is about half a percentage point higher in 1986, and about one percentage point higher in 1988 (see Table 9, Chapter III).

The estimates by Gordon, as well as the CBO alternative economic projections, suggest that GNP could grow quite strongly for a period of time without risking a speedup of inflation, since unemployment and idle capacity are now so high. Such estimates are highly uncertain, however, since economists do not know precisely where the borderline or "natural" unemployment rate is below which acceleration in inflation becomes likely; nor do they know with certainty how fast the economy could expand without increasing the risk of inflation even though unemployment might be somewhat above its so-called natural rate. 8/

7/ Robert J. Gordon, "Beyond Monetarism," testimony prepared for the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, December 1, 1982.

8/ Other economists disagree with this analysis, arguing that increased money-supply growth could quickly increase both inflation and interest rates, and would therefore create problems as serious as those it was intended to solve. This view emphasizes the distinction between anticipated and unanticipated money growth, with only unanticipated money growth affecting output.

(Continued)

General Fiscal Measures. The use of fiscal policy to further stimulate the economy is severely constrained by high budget deficits. Measures that further increase the long-term deficit could add significantly to upward pressures on real interest rates, unless accommodated by monetary policy. Most economists believe that a temporary increase in the deficit while there is yet considerable slack in the economy would have smaller effects on real interest rates than a long-term increase in the deficit.

Monetary-Fiscal Policy Mix. A shift toward a less restrictive monetary policy in combination with a less stimulative fiscal policy would mean lower deficits and lower interest rates. Accordingly, it might encourage investment and longer-run growth; it might also reduce some of the dispersion in unemployment rates among industries and areas. In the short run, however, a balanced shift in the monetary/fiscal mix would primarily affect the composition of output and employment, rather than the level.

Targeted Fiscal Measures

Several types of special fiscal measures to stimulate jobs have been proposed for dealing with cyclical unemployment. These approaches--all of which have been used in previous recessions--include:

8/ (Continued)

CBO has developed estimates of the inflationary risk implied by this analytic point of view using the small rational-expectations model developed by Robert Barro and Mark Rush (see Barro and Rush, "Unanticipated Money and Economic Activity" in Stanley Fisher, ed., Rational Expectations and Economic Policy (University of Chicago Press, 1980)). The model used in making the estimates reported here was a reestimated version of that in the original paper, but its properties were similar. (Details are available upon request.) According to this model, using a steady money-growth policy to increase nominal GNP at rates near those in Gordon's intermediate alternative path results in an acceleration of inflation beginning in 1984. By 1986, the inflation rate measured by the GNP deflator is 7.1 percent, about two percentage points above that in Gordon's intermediate alternative. The forecasting record of this model and others like it has been poor in recent years. Moreover, the assumptions about the flexibility of prices and the availability of information on which it is based are highly unrealistic. For a discussion of some of the forecasting issues raised here, see Albert Ando, "Failure of Keynesian Economics and 'Direct' Effects of Money Supply: A Fact or a Fiction," University of Pennsylvania unpublished manuscript, July 1982.

- o Public works, particulary infrastructure construction or repair;
- o Public service employment;
- o Tax credits or wage subsidies for new private-sector employment;
- o Countercyclical general-purpose grants to state and local governments. 9/

A principal advantage of these approaches is that they can be targeted on individuals or areas that have been most severely affected by the recession.

In addition, some economists believe that carefully designed jobs programs can "shift the Phillips curve" by focusing on industries or areas that are most depressed, where increases in demand are less likely to lead to wage and price increases. 10/

There are two special points to be made about countercyclical jobs programs in the current context. First, unemployment is so large that jobs programs could help only a small fraction of the unemployed. Second, if credit conditions are tight, the stimulus effect of the jobs programs on overall employment would be substantially reduced. That is because the resulting increase in the deficit could exert upward pressure on interest rates and crowd out investment.

Public Works. One attraction of public works is that they represent capital investments and may even contribute to economic growth. Another

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9/ For a more detailed discussion of these and other measures to assist the unemployed see Congressional Budget Office "Strategies for Assisting the Unemployed," staff working paper (December 1982).

10/ The Phillips curve measures the relationship between inflation and unemployment. It implies that decreases in unemployment may be associated, at certain levels, with increases in inflation. See A.W. Phillips, "Employment, Inflation and Growth," Economica, New Series, vol. 29 (February 1962), pp. 1-16. Shifting the Phillips curve would be difficult if the programs themselves stimulated large numbers of people to enter the labor market. In addition, even though unemployment may be high in some unskilled labor markets, wages in those markets may still be responsive to reductions in unemployment. However, if the minimum wage has prevented wages from falling in such markets, some additional demand might be accommodated without resulting in wage increases.

advantage is that public works could provide employment for the especially depressed construction sector. But the amount of time needed to initiate, select, and complete projects tends to be long for most kinds of public works, particularly large-scale projects. The time lags involved in public works are a less serious drawback when unemployment is expected to remain at high levels for several years. Nevertheless, the impact on the deficit could come when the recovery is well underway--thus competing with private credit demands. Also, studies of past programs suggest that a relatively small share of the funds has gone directly to hire unemployed or unskilled workers.

Public Service Employment (PSE). Past experience suggests that direct job creation might proceed rapidly through the public service approach. Public service employment rose by about 40,000 per month under the economic stimulus package of 1977. Also, the job impact might be large per dollar of government spending because the bulk of the spending would go directly for wages and salaries, and the wage rates paid could be kept low. Past experience has shown, however, that these advantages are at least partly, and perhaps largely, offset by fiscal substitution, or the hiring of PSE workers in place of others who would have been hired without the program. Most analysts believe that targeting PSE on more disadvantaged workers tends to reduce the amount of substitution, but it slows implementation and creates additional problems for state and local governments. In addition, it has been difficult to cut back public service employment progams in a timely, countercyclical way.

Employment Tax Credits. Giving employers tax credits for increasing employment would have several potential advantages: First, the added employment and output would be in the private sector. Many people feel that the size of government ought to be diminished. Second, a job in the private sector may be permanent, and the job experience may have longer-run payoffs. Third, it would tend to reduce labor costs in the private sector, thus helping control the inflationary pressures resulting from the fiscal stimulus. Fourth, it would be carried out on a decentralized basis by private enterprise. On the other hand, critics question whether or not tax credits would lead to much additional employment. Some economists doubt that over short periods businesses have much flexibility in the amount of labor used to produce a given product or service. Limiting the tax credit to wages paid for increases in employment over some base period, as was done when this approach was tried in 1977-1978, might mitigate the concern, although some economists question whether the incremental approach is actually more cost-effective. The incremental approach favors firms in cyclical industries and firms that are growing relative to those that are stagnant or

declining. The incremental approach is also administratively more complex. 11/

Fiscal Assistance for State and Local Governments. General grants (revenue sharing) might be targeted to state and local governments that have been suffering most from recession. Such funds might help to maintain needed public services in those areas and/or prevent increases in local taxes that depress local economic activity. Past experience suggests, however, that the benefits might be quite delayed, partly because budget cycles are normally determined well in advance. Moreover, many areas hardest hit by recession are also experiencing longer-run adjustment problems, which might make it difficult to end the program.

Reducing Unemployment vs Reducing Inflation

As the previous discussion suggests, policymakers are faced with a choice between reducing inflation or reducing unemployment. Both cannot be done effectively in the short run at the same time.

The Short-Run Tradeoff. Most economists believe that there is a short-run tradeoff between unemployment and inflation, but that there is no tradeoff in the longer run. During a recession, high unemployment exerts downward pressure on the rate of wage increases, while slack demand depresses commodity prices and profit margins. During prosperity, the process is reversed. Beyond a certain point, nominal wage gains are likely to increase, and inflation tends to accelerate. Thus, relatively high unemployment tends to be associated with downward pressure on inflation,

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11/ The New Jobs Tax Credit (NJTC) was part of the Economic Stimulus Program of 1977. It was a general credit, in contrast to one targeted on specific groups such as the long-term unemployed. For studies of the NJTC, see Robert Tannenwald, "Are Wage and Training Subsidies Cost Effective?--Some Evidence from the New Jobs Tax Credit," New England Economic Review (September/October 1982), pp. 25-34; John Bishop," Employment in Construction and Distribution Industries: The Impact of the New Jobs Tax Credit," Discussion Papers, Institute for Research on Poverty, University of Wisconsin (1980); J. Perloff and M. Wachter, "The New Jobs Tax Credit: An Evaluation of the 1977-78 Wage Subsidy Program," American Economic Review, vol. 69, no. 2 (May 1979), pp. 173-79; and M. Kaufman and T. Neubig, "A Critique of Employment Tax Credits," presented at the Eastern Economics Association meeting (April 29, 1982). In addition, the Treasury and Labor Departments are preparing a study of the NJTC mandated by law.

and very low unemployment with strong upward pressures on inflation. One reason that the tradeoff is short-run rather than long-run is that inflation expectations get adjusted upward so that very low unemployment is not sustainable.

During recessions, markets tend to adjust in ways that eventually bring about recovery. Expansive monetary and fiscal policies can be used to stimulate more rapid recovery, but they run the risk of stepping up inflation. The amount of added inflation will depend, among other things, on the size of the stimulus, the amount of slack in the economy, and the pace of the recovery.

The Costs of Unemployment and Inflation. Both unemployment and inflation have their costs. The costs of the former are easier to identify and measure than the costs of the latter. In economic terms, the cost of unemployment includes the production forgone. Since 1979, the cumulative costs of reducing inflation may have been as much as 20 percent of GNP, or roughly one-half trillion dollars (see Chapter 2). Much more difficult to quantify are the human costs such as mental and physical suffering, higher crime rates, and increased usage of drugs and alcohol. 12/

The costs of inflation are generally expressed in qualitative terms, including:

- o Distortions of the economy through the tax system if it is not indexed for inflation;
- o Distortions in relative prices and incomes that are determined in markets;
- o Distortions in regulated prices, such as those of public utilities;
- o Increases in uncertainty, especially as to future prices and interest rates;
- o Losses in the information content of price changes, when market participants have to separate relative price changes from general price changes;

12/ M. Harvey Brenner, Estimating the Social Costs of National Economic Policy: Implications for Mental and Physical Health, and Criminal Aggression, a study prepared for the use of the Joint Economic Committee, U.S. Congress, U.S. Government Printing Office (1976).

- Increases in resources devoted to attaining speculative gains and to minimizing cash balances.

In addition to these costs, which in principle could be measured in terms of reductions in real growth, inflation causes an arbitrary redistribution of wealth and income. It is particularly hard on people with fixed incomes.

To a great extent, the costs of inflation are associated with unanticipated inflation. When people anticipate inflation, they can take steps to avoid many of the costs by planning for inflation. Policymakers can index the tax system and remove certain financial regulations. 13/

Conclusions

Unemployment is not likely to decline soon unless special measures are taken. Expansive monetary and fiscal policies could be used to hasten its decline, but stimulating the economy would mean slower progress in reducing inflation and run a risk of eventually reigniting it. In the short term, however, the inflationary risk would be held down by economic slack in this country and in other industrialized countries.

Job-creating measures targeted on individuals or areas might be used alone or as a complement to general expansionary policies. But experience with these approaches has been mixed. In the current situation of high real interest rates and massive unemployment, they could not make a substantial difference in overall unemployment.

NONCYCLICAL UNEMPLOYMENT AND POLICIES TO REDUCE IT

While the recession accounts for perhaps five percentage points of the present unemployment rate, there are other reasons for the remaining six or so percentage points. It is generally conceded that macroeconomic policies would be inappropriate tools for attempting to deal with this noncyclical component.

13/ For two recent studies of the costs of inflation, see Stanley Fischer, "Toward an Understanding of the Costs of Inflation: II," in Karl Brunner and Allan H. Meltzer, eds., The Costs and Consequences of Inflation, Carnegie-Rochester Conference Series on Public Policy, vol. 15 (Autumn 1981); and Dean W. Hughes, "The Costs of Inflation: An Analytical Overview," Economic Review, Federal Reserve Bank of Kansas City (November 1982), pp. 3-14.

Perhaps three or four percentage points of this noncyclical component represent what is called frictional unemployment--associated with entry into the labor market, seasonality, and normal job changing. Some unemployment is unavoidable in an economy with free markets, and even contributes to its efficiency. It may be possible to minimize frictional unemployment by providing better job information or modifying the unemployment insurance system. But part of the noncyclical component of unemployment represents long-term problems stemming from factors such as lack of skills, obsolete skills, and discrimination. This "structural" unemployment causes severe hardship and a waste of resources.

Noncyclical unemployment is thought to have increased over the years, from perhaps 4 to 5 percent in the mid-1950s to 5½ to 6½ percent currently, with some estimates as high as 7 percent. 14/ One reason is changes in the demographic composition of the labor force--specifically, relatively large increases in the numbers of women and youth in the labor force. Traditionally, these groups have had higher unemployment rates, in part because of their more frequent movement in and out of the labor market. Also, the large increase in the size of the youth and female groups is believed to have resulted in some relative increase in their unemployment rates and some relative reduction in wages, to the extent that demographic groups are not perfect substitutes in the labor market. 15/

14/ The unemployment rate in the mid-1950s of about 4 percent was formerly taken as a benchmark for full employment. However, some recent studies have concluded that 4 percent may have been somewhat below the sustainable, noninflationary unemployment rate even for that period. For recent studies of the lowest noninflationary rate of unemployment or "NAIRU," see Robert J. Gordon, "Inflation, Flexible Exchange Rates, and the Natural Rate of Unemployment," in Martin N. Baily, ed., Workers, Jobs, and Inflation (Brookings, 1982), pp. 89-152; Phillip Cagan, "The Reduction of Inflation and the Magnitude of Unemployment," in William Fellner, ed., Contemporary Economic Problems 1977 (American Enterprise Institute, 1977), pp. 15-49; and Otto Eckstein, Tax Policy and Core Inflation, Joint Economic Committee, U.S. Congress, 96:2 (1980).

15/ Estimates of the impact of demographic changes on the natural rate of unemployment range from about one-half to one percentage point. Using 1956 unemployment rates, changes in the demographic composition by the mid-1970s would have added about one-half percentage point to the overall unemployment rate. However, if the prime-age male unemployment rate is taken as a benchmark, the estimated impact of demographic change is about 1 percent. See, Council of Economic Advisers, Economic Report of the President, 1978 and 1979.

Unemployment: Definition and Measurement

The Bureau of Labor Statistics estimates unemployment using a monthly sample survey of households. In general, an unemployed person is one who did not work during the survey week, made specific efforts to find a job within the previous four weeks, and was available for work during the survey week (except for temporary illness) Also counted as unemployed are persons waiting to be called back to a job from which they believe they have been temporarily laid off; and persons waiting to report to a new job within 30 days. The "duration of unemployment" is the length of time that an unemployed person has been continuously looking for work.

Traditionally, the unemployment rate has been calculated by dividing the number of unemployed workers by the size of the civilian labor force (which consists of the number of unemployed workers plus the number of employed workers). However, beginning in January 1983, the Bureau of Labor Statistics will include U.S.-resident military personnel in the denominator. The Bureau estimates that the inclusion of the military will have the effect of reducing the unemployment rate by about one- or two-tenths of a percentage point, compared with the traditional civilian unemployment rate.

Another change beginning in January 1983 concerns the racial classification of workers. Unemployment and other labor force data will be published for the "black" group instead of for the broader "black and other" group that includes American Indians, Alaskan Natives, Asians, and Pacific Islanders. At the time of the 1970 Census of Population, 89 percent of the black and other group were black. The unemployment rate for blacks is substantially higher than that for the broader group--20.4 percent as against 18.6 percent in the last quarter of 1982.

The term "discouraged workers" refers to persons who report that they want a job but have not taken specific steps to look for a job because they believe they cannot find one. Because they have not actually looked for work, they are not counted as "unemployed."

A second (and probably less important) factor accounting for some of the increase in noncyclical unemployment is the growth of other means of support for unemployed workers. Income from unemployment insurance and food stamps has grown. 16/ Other family members now contribute more to household income: as more women and youths have taken jobs, a higher proportion of families have more than one earner. The availability of alternative income removes some of the pressure for unemployed workers to obtain employment.

A third factor has been a declining trend in productivity growth, together with a strong momentum of real wages. Many workers, particularly unionized workers and workers in large firms, continued to demand and obtain customary real wage increases of 2 to 3 percent after the basis for such gains in increased productivity had ceased to exist. This added to inflationary pressures, and required additional slack in labor markets to offset it. 17/

Other factors outside the labor market exacerbated inflation and therefore required more unemployment to counterbalance them. Examples from the last decade include energy and food price shocks, increases in payroll taxes, and the depreciation of the dollar on foreign exchange markets. Bottlenecks in plant capacity may also have played a more important role than in the past, for a variety of reasons including the sharp increases in relative energy prices and the effect of inflation on business tax liabilities.

Still another factor may be an increase in the pace of structural change in the economy. Increases in the relative cost of energy, and intensified international competition, have resulted in declining output and

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16/ Some economists estimate that the growth of unemployment insurance may have added a few tenths of a percentage point to the underlying unemployment rate. See, for example, Phillip Cagan, "The Reduction of Inflation and the Magnitude of Unemployment," already cited, and Stephen T. Marston, "The Impact of Unemployment Insurance on Job Search," Brookings Papers on Economic Activity, 1975:1, pp. 13-48.

17/ Other minor factors may include the extension of the federal minimum wage to most of the economy, and the adoption of work registration requirements for the welfare system. The end of the draft in the early 1970s may have removed some of the pressure for male youths to stay in school, and thereby increased the size of the labor force and the unemployment rate for youths.

employment in particular industries and geographic areas, thus contributing to structural unemployment. 18/

Groups Suffering From Structural Unemployment

Among the groups of workers who suffer from structural unemployment are:

- o Youths, particularly those who are from economically disadvantaged families;
- o Adults with low skills who suffer chronic or recurrent unemployment; and
- o Dislocated experienced workers, particularly where there are large-scale plant closings in concentrated geographic areas.

These groups have relatively high unemployment rates, both in good times and bad. Moreover, during periods of recession or slow economic growth, their unemployment rates tend to rise more, in terms of percentage points, than the unemployment rate in general (see Table 15). Correspondingly, these groups would benefit markedly from a vigorous economic expansion. 19/

Youth Unemployment. Youth unemployment accounts for a relatively large part of total unemployment, especially during times of lower overall unemployment. In 1978-1979, for example, youths 16 to 24 comprised almost half of the total number of unemployed workers. Youth unemployment rates have increased relative to adult and unemployment rates since the 1950s and 1960s. The reasons include rapid growth in the youth population, rising labor force participation rates among youths, and more slack in labor markets. Moreover, the outlook for youth unemployment is not good in the near and intermediate term (less than five years), even though this age group will be a declining part of the total population. For one thing, unemployment

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18/ David M. Lilien, "Sectoral Shifts and Cyclical Unemployment," Journal of Political Economy, vol. 90, no. 4 (August 1982), pp. 777-94.

19/ See, for example, Kim B. Clark and Lawrence H. Summers, The Demographic Composition of Cyclical Variations in Employment, Technical Analysis Paper No. 61, Office of the Assistant Secretary of Labor for Policy Evaluation and Research, U.S. Department of Labor (January 1979).

among black youths is particularly acute (see Figure 28), and their number is expected to decline much less than that of youths in general. For another, the overall job market may be quite slack for the next several years, which would disproportionately affect young entrants to the labor force. A rule of thumb is that the youth unemployment rate changes about 1.5 percentage points for every one percentage point change in the overall unemployment rate. 20/

Unemployed youths constitute a highly diverse group. Part of the difficulty in designing appropriate policies, therefore, is to determine which youths seriously need help. Recent research suggests that a relatively small proportion of unemployed youths suffer from serious, long-run problems, and that this accounts for the bulk of total youth unemployment. 21/

A recent study by the Labor Department attempted to estimate the size of the youth labor force with serious employment problems. It found that in 1977, about 2.9 million youths of ages 16-24 experienced at least 15 weeks of unemployment; 700,000 of them were from economically disadvantaged families. When the economically inactive group of youths from disadvantaged familes were included--those not in the labor market or school and not caring for children--the estimate was substantially larger, approximately 2.1 million. 22/

Unemployment by itself is not a very adequate indicator of youths' situation in the labor market, since many experience it only for a short

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20/ For more detailed studies of youth employment problems, see Congressional Budget Office, Youth Unemployment: The Outlook and Some Policy Strategies (April 1978); and Improving Youth Employment Prospects: Issues and Options (February 1982).

21/ For example, one recent study found that over half of the unemployment among teenage males was accounted for by just the 8.4 percent of that labor force group who were unemployed more than 26 weeks out of the year. Moreover, all groups, a mere 2.4 percent of the labor force, who were unemployed more than 26 weeks accounted for approximately 40 percent of total unemployment in 1974. Kim B. Clark and Lawrence H. Summers, "Labor Market Dynamics and Unemployment: A Reconsideration," Brookings Papers on Economic Activity, 1979:1, pp. 13-60.

22/ See U.S. Department of Labor, Office of the Assistant Secretary for Policy, Evaluation and Research, The Nature of the Youth Employment Problem: A Review Paper (March 1980), pp. 77-81.

time, or while they are still primarily in school. Moreover, youth labor force participation rates tend to rise as employment prospects improve. Thus the success or failure of youth employment programs may not be adequately shown by their impact on unemployment. A "successful program" may improve the long-run prospects of participants but have little short-run effect on youth unemployment since better opportunities may cause more youths to enter the labor market.

The Low-Skilled, Chronically Unemployed. This is the group of unemployed workers who are perhaps most difficult to identify and to help. Many workers in the low-wage labor market face long periods of unemployment or are employed only fitfully. Many withdraw from the labor market for a time. In urban areas their difficulties tend to take the form of high unemployment, while in rural areas they are more likely to be those of underemployment. Minorities have higher-than-average unemployment rates (see Figure 27). In general, the likelihood of being unemployed is inversely related to a person's level of education and economic skills.

When all this is said, however, it is still frequently difficult to identify the chronically unemployed as a group. The condition of being unemployed at any one time is not their distinguishing characteristic. This is evident from the fact that, in the low-wage labor market, the possibility of employment may bring out many people who were not previously counted as unemployed. Thus a "successful" employment program may have little effect on the official unemployment rate. This illustrates the limitations of measured unemployment as a social indicator. One useful indicator is the census category, "poverty areas of metropolitan areas." In 1978-1979, the unemployment rate in these areas was about twice the national average; and the areas had about 750,000 unemployed workers.

The persistence of chronic high unemployment in urban low-wage labor markets has many complex causes, including lack of skill, discrimination, and isolation. Frequently, the available jobs offer no future, so that there is little incentive for workers to stay. Employers, for their part, have little incentive to invest in the training of workers who frequently quit. The net result is high turnover in particular jobs, little investment in human capital, and high frictional unemployment.

Dislocated Workers. In a dynamic economy, thousands of workers lose their jobs every year because of technological change, import competition, and changes in consumer demands. Many suffer substantial loss in earning capacity, and many more experience some unemployment before they find

other work. But generally these adjustments do not result in large-scale, chronic unemployment. 23/

The number of dislocated workers may have become substantially higher since 1973, and especially since 1978-1979. Sharp increases in energy prices have affected industries and regions very differently, some gaining a relative advantage and some losing it. Foreign competition has intensified in recent years, particularly in such basic industries as steel, automobiles, rubber, and textiles. Finally, slow growth in the economy, and two back-to-back recessions, have exacerbated structural problems in many basic industries, producing massive layoffs. It is doubtful whether employment in a number of basic industries such as steel, automobiles, and textiles will ever again approach pre-1980 levels. 24/

Estimates suggest that this group now numbers in the hundreds of thousands. 25/ The problems resulting from structural changes would be difficult enough with full economic recovery. But the outlook for only a weak recovery from present low levels exacerbates these adjustment problems.

Policies to Reduce Noncyclical Unemployment

Two kinds of policies are frequently proposed for reducing the noncyclical or trend component of unemployment: anti-inflation policies (other than restrictive demand policies) and longer-run employment policies such as training and job-finding assistance. Such policies might reduce the level of unemployment consistent with sustained noninflationary growth, and in the current situation reduce inflationary pressures resulting from expansive aggregate demand policies.

Anti-inflation Policies. Policies to make the economy less inflation-prone would tend to lower the natural level of unemployment--that is, they

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23/ There are notable exceptions. For example, the displacement of labor by technological change in agriculture in the South led to massive migration to urban centers and contributed to high unemployment in some cities.

24/ For a more detailed study, see Congressional Budget Office, Dislocated Workers: Issues and Options (July 1982).

25/ Recent estimates by CBO suggest that several hundred thousand workers may face prolonged unemployment as a result of long-term changes in the economy. See Dislocated Workers: Issues and Options.

would permit lower unemployment without significant inflationary pressures. Such policies might include removal of international trade barriers, minimal use of farm price supports, and a weakening of Davis-Bacon type regulations in federal contracting. Income transfer programs might be modified to reduce their adverse effects on incentives and on the efficiency of labor markets. 26/ The overall objective of such policies would be to allow markets to function more efficiently.

Various types of incomes policies--that is, policies to prevent inflationary wage and price increases--would be in line with this approach. On the positive side, tax-based incomes policies may merit further study. On the negative side, three-year wage contracts that are not synchronized in time, the almost automatic granting of real wage increases, the use of the Consumer Price Index to adjust contracts for inflation, and the use of import quotas may need to be scrutinized. 27/

Longer-run Employment Policies. Traditional efforts to reduce structural unemployment include measures to:

- o Raise the productivity of workers, such as training;
- o Increase the mobility of workers, such as relocation assistance and the provision of job market information;

26/ Some economists have argued that the present unemployment insurance program adds unnecessarily to unemployment. For example, experience-rating procedures used in some states weaken the connection between the tax that employers pay and their record in laying off workers. Tighter experience rating might reduce layoffs. Another proposal would subject all unemployment insurance benefits to the income tax, to strengthen incentives to work. See, for example, Martin S. Feldstein, "The Effect of Unemployment Insurance on Temporary Layoff Unemployment," American Economic Review, vol. 68, no. 5 (December 1978), pp. 834-46.

27/ For a discussion of factors contributing to the momentum of inflation, see Congressional Budget Office, The Prospects for Economic Recovery (February 1982), Chapter IV. Distortions in the Consumer Price Index are discussed earlier in Chapter II of the current report. Moreover, the CPI includes foreign goods and it may not be feasible to protect all groups from increases in the cost of living, particularly from foreign sources.

- o Increase the demand for selected kinds of labor, such as a targeted wage subsidy or tax credit, public service employment, and reductions in the minimum wage.

Economists emphasize two rationales for these longer-run employment policies. First, if successful, they may reduce the inflationary pressures associated with fuller utilization of resources. Second, private markets may produce less than an optimum amount of training or labor market information.

Improving Workers' Productivity. Current federal programs aimed at improving workers' productivity include the Job Training Partnership Act of 1982, vocational education, and support for students at the post-secondary level such as the Pell Grant program.

Evaluations of such programs have been mixed. In general, training for disadvantaged adults seems to have been most effective in raising the earnings of persons who have not had much exposure to the job market. It has been of substantial help to female participants, but little if any help to males. Another fairly consistent finding is that the increases in earnings resulted primarily from increases in time worked rather than from increases in wage rates. 28/ Possibly more intensive training may be required over a longer period to assist workers who have been in the labor force for some time but have not acquired marketable skills. Or, because of the current and prospective slack in labor markets, perhaps greater emphasis should be placed on the attainment of general rather than highly specific skills.

Mobility--Information and Placement. The Employment Service (ES) is a cooperative effort by the federal and state governments. A primary responsibility of ES is to administer the job-search provisions of the unemployment insurance system. Its placement activities are concentrated on the unskilled sector of the labor market and most of its services are localized, with very little placement activity occurring across state lines. In general, it provides little information to unemployed workers about conditions in other labor markets.

The provision of more job information might be considered, as well as migration assistance: subsidies for moving expenses, and assistance in finding housing. Some countries, notably Sweden, have traditionally made use of policies to assist workers in relocating from labor-surplus areas to

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28/ See Congressional Budget Office, CETA Training Programs--Do They Work for Adults? (July 1982); and Laurie J. Bassi, "Estimating the Effect of Training Programs With Nonrandom Selection" (unpublished), The Urban Institute (July 1982).

relatively expanding areas. A number of experiments or demonstrations involving migration assistance have been made in the United States. 29/

Currently, the principal program for providing employment assistance to dislocated workers is the Job Training Partnership Act. Title III of that act authorizes matching funds for state programs that develop adjustment assistance programs. It authorizes job-finding assistance and migration assistance, as well as training. As yet, however, only $25 million has been appropriated for Title III.

Other proposals for assisting dislocated workers include modifying the unemployment insurance system to assist workers in adjusting to new job situations. 30/ Currently, unemployment insurance benefits are simply income support payments, which in some circumstances may slow workers' adjustments to long-run changes in the economy. One way to encourage workers to move or undergo retraining would be to grant a final lump-sum payment after some period of unemployment, particularly after plant closings. Another might be to encourage or require persons receiving UI benefits to take training programs and, if enrolled, to complete them before looking for work. Still another approach, used by some countries of western Europe, would be to require businesses to give advance notice before closing a plant. 31/

29/ For an evaluation of some of these demonstrations, see Charles K. Fairchild, Worker Relocation: A Review of U.S. Department of Labor Mobility Demonstration Projects, Final Report to the U.S. Department of Labor, Manpower Administration, Contract No. 87-34-69-01 (1970).

30/ A recent report to the President's National Productivity Advisory Council by its Subcommittee on Human Resources proposed that states be given greater flexibility in the use of UI funds and that labor-management consultations before plant closings should be encouraged as a way of easing worker adjustments. See Daily Labor Report, No. 191 (October 1, 1982), Bureau of National Affairs, Inc.

31/ Restrictive trade policies are sometimes proposed as a way of reducing high unemployment in some sectors of the economy. This is only a short-run solution at best, because it merely redistributes employment opportunities in the short run, and reduces economic efficiency and growth in the long run. See Congressional Budget Office, "The Fair Practices in Automotive Products Act (H.R. 5133): An Economic Assessment," in Domestic Content Legislation and the U.S. Automotive Industry, Subcommittee on Trade, Committee on Ways and Means, U.S. House of Representatives, 97:2 (1982).

A variety of measures could be taken to increase the demand for certain groups of workers. These include wage subsidies or tax credits, such as the existing Targeted Jobs Tax Credit. 32/ Public service employment of a structural kind--in contrast to countercyclical PSE--is another approach, previously used in connection with CETA programs.

Finally, a differential minimum wage, involving a lower minimum for youths for a limited period of employment, has frequently been proposed as a means of increasing employment opportunities for youths. Minimum wage studies suggest that youth employment is relatively sensitive to changes in the minimum wage. Moreover, it might be especially sensitive to a differentially lower minimum wage. 33/ A disadvantage, however, is that it could lead some employers to hire youths rather than adults. Opponents charge that this displacement would be large, although little evidence is available.

Conclusion

The range of policy options for attempting to reduce noncyclical unemployment is broad. Even though inflation has temporarily abated, structural policies to reduce inflationary biases in the economic system would contribute to lower unemployment in the long run. Employment policies, such as training and job-finding assistance, and wage subsidies could also play a role.

It need hardly be said that efforts to reduce noncyclical unemployment would stand less chance of success in a time of prolonged recession or labor market slack. As mentioned earlier, the same groups who suffer high underlying rates of unemployment are also relatively more affected by prolonged slack in labor markets. Programs to train workers, to increase their mobility and upgrade their skills, flourish when labor markets are

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32/ The Targeted Jobs Tax Credit permits a tax credit for wages paid toward the employment of workers who qualify for the credit. One recent proposal would add the long-term unemployed to the groups of eligible workers which now include disadvantaged youths, ex-offenders and AFDC recipients.

33/ For a recent survey of minimum wage studies, see C. Brown, C. Gilroy and A. Kohen, "The Effect of Minimum Wage on Employment and Unemployment," Journal of Economic Literature, vol. xx, no. 2 (June 1982), pp. 487-528.

tight. During recessions, such investments in human capital fall off considerably. 34/ The current economic outlook, unfortunately is for a slow recovery, with unemployment remaining very high for several more years. Following upon two recessions with virtually no economic growth in three years, the outlook for private investment in human capital is not encouraging.

REDUCING THE HARDSHIP OF UNEMPLOYMENT

A third strategy for dealing with unemployment would aim at reducing its hardship. This would remove some of the pressure to stimulate the economy, permitting a higher priority on reducing inflation. Some possibilities are:

- o Extending unemployment insurance (UI) benefits.
- o Sharing work--that is, paying partial unemployment insurance benefits to workers on reduced work schedules;
- o Liberalizing transfer programs for the unemployed.

Extending the Duration of UI Benefits. The federal government could lengthen the duration of UI benefits to provide additional support to the long-term unemployed. The maximum duration of the benefits under the Federal Supplemental Compensation program could be increased further; or some of the recent legislative changes affecting the availability of extended benefits could be repealed. In either case, however, the additional benefits would have to be financed through higher taxes or a higher federal deficit, since the UI system is already facing financial difficulties. 35/

Work Sharing. In most states, the unemployment insurance system encourages firms to lay off some workers entirely, while keeping others employed full time because workers on a moderately reduced schedule do not qualify for benefits. In recent years, some states including California and Oregon have permitted UI benefits in certain circumstances to be paid on a prorated basis to workers on temporarily reduced work weeks. That

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34/ See for example, Wayne Vroman, "Worker Upgrading and the Business Cycle," Brookings Papers on Economic Activity, 1977:1, pp. 229-50.

35/ For a more detailed discussion, see Congressional Budget Office, "Strategies for Assisting the Unemployed," pp. 42-46.

practice is also followed in several countries of Western Europe, including France. 36/

Liberalizing Transfer Programs for the Unemployed. Large gaps still exist in the income safety net for the unemployed poor. Many unemployed persons do not qualify for unemployment benefits, either because they are not eligible or because they may have exhausted their eligibility. In more than half of the states, two-parent families are not eligible for Aid to Families with Dependent Children (AFDC). For workers with no children, there remain only food stamps and general assistance--the latter entirely state-financed.

The income safety net for the unemployed might be strengthened in a number of ways. In some countries, including Sweden, reduced unemployment benefits are paid to long-term unemployed workers who would not otherwise be eligible. Another possibility might be to encourage or require states to make two-parent families eligible for AFDC. Since that would not help people without children, federal assistance might also be granted to states for their general welfare assistance programs. More ambitious proposals include some form of negative income tax or guaranteed job program at low wages. These, however, would require substantial new budgetary commitments.

CONCLUSIONS

Most forecasts suggest that unemployment will remain very high for years to come, and this has prompted many proposals for policy changes to reduce it or alleviate its hardship. Policies that generate rapid growth would make by far the largest contribution to reducing unemployment. Moreover, a strong recovery would surely help, although not cure, the labor market problems of groups who suffer from structural unemployment. However, fiscal policy is already stimulative. An expansive monetary policy would likely improve growth prospects at the cost of higher inflation--not double-digit inflation, but less progress in reducing inflation, or possibly some upward drift from the rate established during the past year. If expansive policies were maintained too long with economic slack substantially less than it is currently, the inflationary risk would become greater. Thus, policymakers are faced with the choice of continuing to fight inflation

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36/ For a discussion of experience with prorating UI benefits to encourage work sharing, see Fred Best and James Mattesich, "Short-time Compensation Systems in California and Europe," Monthly Labor Review (July 1980), pp. 13-22.

or of fighting cyclical unemployment. Available macroeconomic policies cannot do both effectively.

Because the impact of economic conditions on unemployment has been so uneven, targeted employment measures might be considered, such as public works, public service employment, and expanded employment tax credits. Under conditions of tight credit, however, such policies are less effective as a stimulus to total employment--though they would affect the distribution of employment and unemployment.

Problems of structural unemployment might be addressed with longer-run policies such as increased job training, measures to improve mobility, and expanded use of targeted jobs tax credits. Such programs are not likely to have a large impact on unemployment in the short run, particularly given the slack in the economy; but over several years or a decade they might make a significant contribution.

If policymakers choose not to pursue a rapid recovery, there are measures available to reduce the hardship of unemployment, such as extending unemployment insurance benefits or expanding the Aid for Dependent Children Program to include more two-parent families with an unemployed head. Many of these proposals, however, as well as many programs to reduce structural unemployment, would raise budget deficits unless offset by budget reductions or tax increases.

Economic growth is surely the key to reducing unemployment. Unless the economy performs well in terms of a strong sustained recovery, unemployment will remain at very high levels. Moreover, structural policies to enhance employability are not likely to be effective as long as the labor market remains very loose; moves such as fostering market competition are less likely to be undertaken in a depressed economy.