CHAPTER 6

Review of 1982 and the Economic Outlook

FOR THE U.S. ECONOMY, 1982 was a year of painful transition toward price stability. The momentum of high inflation, built up over the last 15 years, was broken and inflation was reduced to its lowest rate in a decade. Success in reducing inflation, however, was accompanied by a recession that began in mid-1981 and lingered through 1982. A drop in real exports, along with inventory adjustments, accounted for the decline in U.S. production. Despite the recession, final sales to domestic purchasers increased. Expenditures for some interest-sensitive goods, such as housing and consumer durable goods, registered their first rise in recent years.

Economic developments in 1982 clearly set the stage for a recovery in 1983. The sizable slowdown in inflation contributed to the sharp drop in interest rates in the summer of 1982. The inventory cycle that held down production in 1982 is expected to turn around sometime in 1983. This development, combined with recovery in housing and durable consumer goods and continuing gains in defense spending, is expected to bring a moderate sustainable economic recovery. Prospects are good that this recovery can be maintained through the 1980s without reigniting inflationary pressures.

OVERVIEW OF 1982

Real gross national product (GNP) in 1982 was no higher than in 1979. After a surge of economic growth in 1978, the economy stalled in 1979. Cyclically volatile types of spending, such as auto sales and housing starts, had peaked in 1978. Since 1978 the output of goods and services in the United States has followed a saw-tooth pattern of alternating periods of growth and decline. The recessions of 1980 and 1981–82 bracketed the shortest economic expansion in 50 years. Employment in 1982 was below its 1979 level.

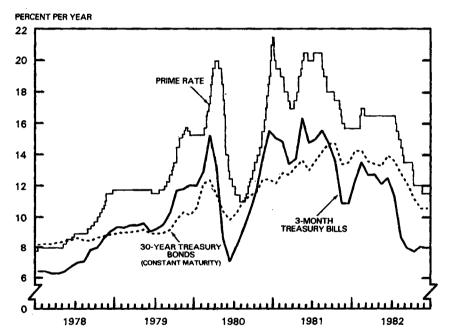
Production and employment remained sluggish for 4 years while supplies of labor and capital continued to grow, so that by the end of 1982 the unemployment rate rose to nearly 11 percent—its highest level since the early 1940s—and the capacity utilization rate fell to its

lowest point in the post-World War II period. With this high level of unused economic capacity, inflationary pressures subsided.

The inflation rate fell dramatically in 1982 to its lowest level in a decade. The upward trend in inflation from 1976 through 1980 strengthened the Federal Reserve's determination to slow the growth in the monetary aggregates and contributed to high interest rates for an extended period. By mid-1982, when evidence of progress against inflation and continued weakness in economic activity became clear, interest rates began to fall sharply. The ensuing decline reduced interest rates to their lowest levels in more than 2 years, as illustrated in Chart 6-1.

Chart 6-1

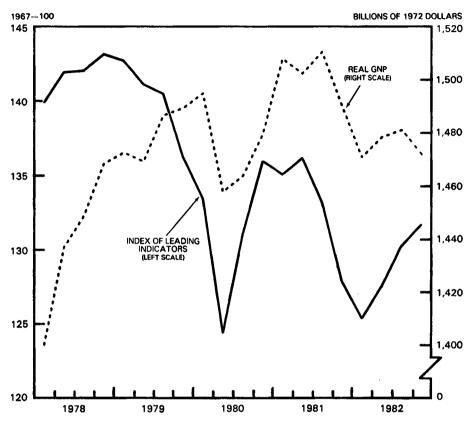
Interest Rates



SOURCES: DEPARTMENT OF THE TREASURY AND BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

The decline in interest rates brought much-needed relief to the interest-sensitive, cyclical sectors of the economy. By the end of 1982, clear progress toward recovery had been made, as reflected in continuing gains in the composite index of leading indicators of economic activity, as shown in Chart 6-2.

Index of Leading Indicators and Real GNP



SOURCE: DEPARTMENT OF COMMERCE.

MAJOR SECTORS OF AGGREGATE DEMAND

Real output declined 1.2 percent from the fourth quarter of 1981 to the fourth quarter of 1982. This was the fourth consecutive year of little change in economic activity (Table 6-1). Businesses liquidated inventories in 1982, in contrast to the previous year when inventory levels increased. Another important factor in the decline was a sharp drop in U.S. exports that reflected both the strong dollar and the worldwide recession. Real final sales to domestic purchasers increased 1.3 percent in 1982, the largest increase in 3 years. Gains in personal consumption expenditures, residential investment, and Federal purchases dominated a large decline in business capital spend-

ing. Partly in response to the drop in interest rates, residential investment increased for the first time in 5 years, and consumer purchases of durable goods increased for the first time since 1978. State and local government purchases of goods and services were virtually unchanged over the year.

TABLE 6-1.—Growth in major sectors of real GNP, 1978-82 [Change, fourth quarter to fourth quarter and 5-year average]

Component	1978	1979	1980	1981	1982 1	5-year average 1 2
Percent change:						
Real gross national product	5.8	1.4	0.7	0.7	-1.2	1.5
Personal consumption expenditures	4.4 5.7	2.1 2.5	.3 -4.6	.3 -3.8	2.6 6.5	2.1 .1
Business fixed investment	2	3.5 8.3 1.3	-2.6 -12.7 .7	4.7 -19.4 2.9	8.4 4.5 2.6	3.3 8.0 1.6
Federal		1.0 3.0 1.4	1.4 2.1 .3	10.7 9.3 -1.7	6.6 6.8 .1	2.9 3.8 .7
Real final salesReal final sales to domestic purchasers 3	5.4 4.7	2.6 1.7	4 5	.0 .6	.3 1.3	1.8 1.7
Change in billions of 1972 dollars:						
Change in business inventories	5.1 11.2	-17.5 14.9	-3.9 1.4	11.0 -9.1	-22.5 -15.4	-4.4 1.7

PERSONAL CONSUMPTION EXPENDITURES

Despite declines in production, employment, and real wage and salary income, real disposable (after-tax) personal income increased in 1982, due in part to the reduction in personal income tax rates and an increase in transfer payments. The average effective Federal personal income tax rate fell from 12.5 percent to 11.4 percent between the third quarters of 1981 and 1982. Real personal consumption expenditures increased 2.6 percent in 1982 to reach their highest share of real GNP since 1949. Although real personal saving declined from its high level at the end of 1981, the personal saving rate in 1982 was higher than in any year since 1976, as shown in Table

Consumer purchases of durable goods increased 6.5 percent in real terms in 1982, the first increase since 1978. The turnaround occurred early in the year, when auto sales rebounded from the depressed level of late 1981. Sales then languished until late in the year, when they again climbed, due in part to the decline in interest rates that produced lower financing costs. Nevertheless, domestic

¹ Preliminary.
² Based on annual data.

^a Final sales less exports plus imports.

Source: Department of Commerce, Bureau of Economic Analysis.

Table 6-2.—Real household income, consumption, saving, and residential investment, 1978-82 [Percent change, fourth quarter to fourth quarter and 5-year average]

ltem	1978	1979	1980	1981	1982 י	5-year average 1.3
Income by type:						
Labor income *	8.9	1.2 3.5 4.3	-0.4 -1.0 13.1	0.9 8.8 —.1	1.9 .7 11.1	1.6 4.6 3.9
Personal income	4.9	2.0	.7	2.5	.0	2.4
Less: Federal tax payments	10.9 5.4	5.6 1.8	1.5 .6	1.8 3.6	-5.5 3.5	3.6 3.1
Disposable personal income	4.0	1.5	.5	2.6	.6	2.3
Personal consumption expenditures		2.1	.3	.3	2.6	2.1
Personal saving	-5.3	-11.4	9.3	39.8	-22.7	4.1
Personal saving rate ⁷	6.1	5.9	5.8	6.4	6.5	6.1
Housing starts *	-1.7	-23.1	-4.3	-42.3	44.5	-11.6
Single family	-3.3 2.3	-29.2 -7.9	-5.2 -2.5	-45.0 -37.3	48.0 38.9	-14.4 -5.3
Mobile home shipments	-7.5	-9.8	-6.7	-13.1	12.1	-2.8
Residential investment	2	-8.3	-12.7	- 19.4	4.5	-8.0

¹ Preliminary.

Note.—Income items, consumption, and saving deflated by the personal consumption deflator; residential investment deflated by the residential deflator. Sources: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census) and Council of Economic Advisers.

auto sales in 1982 for the entire year were lower than in any year since the early 1960s.

The extended period of weakness in durable goods sales accompanied a reduction in the burden of consumer debt. Consumer installment debt repayments relative to disposable personal income fell steadily from their 1978 peak to reach, by the third quarter of 1982, their lowest level since 1964, as illustrated in Chart 6-3. Total household debt has also fallen sharply relative to households' net worth.

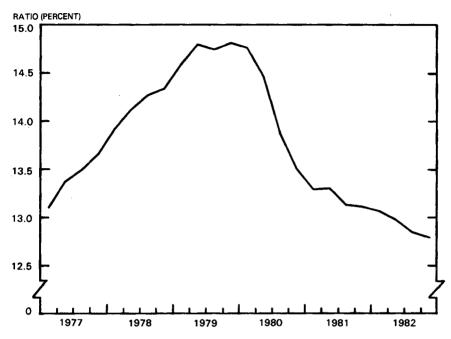
RESIDENTIAL INVESTMENT

As indicated in Table 6-2, 1982 showed the first rise in housing activity in 5 years. By the fourth quarter of 1982, housing starts rose to 1.25 million at an annual rate, up nearly 45 percent from their trough of 865,000 units in the fourth quarter of 1981. Starts averaged less than one million units until mid-1982 as interest rates on mortgage commitments stayed around 17 percent. In August, mortgage interest rates began to fall, dropping below 14 percent by year-end. This drop encour-

^{*}Preiminary.
*Based on annual data.
*Wage and salary disbursements and other labor income.
*Proprietors' income, rental income, personal dividend income, and personal interest income.
*Transfer payments less personal contributions for social insurance.
*State and local tax and nontax payments plus Federal nontax payments.

Annual average.

Ratio of Consumer Installment Credit to Personal Income



SOURCES: DEPARTMENT OF COMMERCE AND COUNCIL OF ECONOMIC ADVISERS,

aged the sale of houses, reduced the inventory of unsold new houses relative to current sales, and spurred new construction.

For the first time in recent years, house prices increased at a slower rate than general inflation. Moreover, the conventional measures of house price increases, which rose less than 3 percent, may well have overstated the 1982 rise because increased builder and seller financing at below market rates is not fully captured in the price data. Lower interest costs and more moderate house price increases helped to hold down mortgage payments and, thus, may favor a recovery in housing investment.

BUSINESS FIXED INVESTMENT

Real business fixed investment peaked in the last quarter of 1981, having grown at a 5.2 percent annual rate from 1977 to 1981. From

its 1981 peak to the last quarter of 1982, real business fixed investment dropped 8.4 percent.

The 1982 decline in capital spending was broadly based, affecting even sectors that had fared well in previous years. Industrial and commercial construction declined about 1 percent in real terms from the fourth quarter of 1981 to the fourth quarter of 1982 having grown at an annual rate of more than 10 percent from 1977 to 1981. Computer, communications, and instrumentation equipment investment fell about 4 percent in 1982, a sharp contrast to over 9 percent annual rate of real growth from 1977 to 1981.

In the energy area, real investment in coal mine development continued to rise strongly in 1982. Real investment in oil field exploration and development dropped 15 percent between the fourth quarters of 1981 and 1982 as weak oil prices impaired cash flow in the petroleum industry. Reflecting the weakness in overall economic growth, investment in transportation equipment—autos, trucks, aircraft, ships, boats, and railroad equipment—continued to decline in 1982.

Business capital spending is likely to lag behind the recovery in the economy. Contracts and orders for new plant and equipment declined about 12 percent in real terms between the last quarters of 1981 and 1982. In addition, a Department of Commerce survey of business spending plans indicated that real nonfarm investment will decline about 5.2 percent in 1983.

INVENTORY INVESTMENT

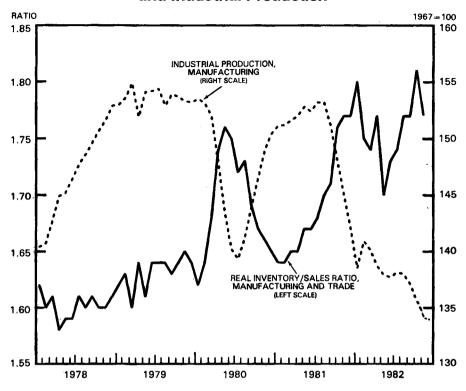
Sluggish sales and high carrying costs encouraged business to pare inventories in 1982. A sharp drop in final sales in late 1981 triggered a swing to inventory liquidation in the first half of 1982. Even the more moderate sales forecasts for the second half of 1982 proved overly optimistic, and inventory-sales ratios climbed, prompting further cutbacks in production, employment, and inventories (Chart 6-4). Toward the end of the year, inventories were brought more in line with sales. Auto inventories, which accounted for about one-third of inventory liquidation in the final quarter of 1982, were especially lean, as the industry's aggressive pricing and marketing efforts helped to increase sales.

THE FARM ECONOMY

Total income per farm family in 1982 fell about 11 percent in real terms. Over two-thirds of farm family earnings came from off-farm sources as income from farm sources declined.

Net farm nominal income from farm operations declined from \$25 billion in 1981 to about \$19 billion in 1982. Relatively tight meat

Real Inventory/Sales Ratio and Industrial Production



SOURCES: DEPARTMENT OF COMMERCE AND BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

supplies and low feed prices in 1982 contributed to larger profit margins for most livestock producers. Many crop farmers, on the other hand, were hard hit by lower prices and increased production costs. Large domestic crops were only one of several factors contributing to lower prices. Livestock production declined, and domestic use of feedgrains and meals increased slowly. The value of agricultural exports in fiscal 1982 fell about 11 percent, primarily because of lower prices and reduced shipments of corn and grain sorghum. The weak export market reflected the world recession, a strong dollar, and an increase in world grain stocks. The U.S. share of world grain stocks is expected to continue its rapid growth of recent years and to reach over 50 percent in the 1982–83 crop year.

Lower crop prices, high mortgage rates, and lower inflation were the major factors leading to a decline in land values. Farm liabilities continued to increase and farmers' debt-to-asset ratio is estimated to have increased to about 20 percent, a significant rise from the 15 to 17 percent range typical of the late 1960s and 1970s.

U.S. agricultural policies have once again become a major factor in determining farm prices and incomes. Federal budget outlays for commodity price support and related programs soared to \$12 billion in fiscal 1982 from \$4 billion in the previous fiscal year. A program of voluntary acreage controls, including payments to those who restrict production in the 1983-84 crop year, was adopted in 1982 and supplemented by the addition of the "payment-in-kind" option in early 1983.

Food prices rose about 4 percent in 1982, with marketing costs rising at more than twice the rate of the farm value component of food prices.

FOREIGN TRADE

A reduction in U.S. trade was a key factor in the decline in aggregate demand in 1982. The main causes of the decline in net exports were the strength of the dollar and the worldwide recession. In December 1982 the trade-weighted value of the dollar was about 40 percent above its low point in 1980. Because exchange-rate appreciation lowers import prices and affects trade volume with a substantial lag, it initially tends to improve the trade balance. By the second half of 1982, however, the reduced cost competitiveness of U.S. firms began to overwhelm the short-term positive factors.

A secondary cause of the deteriorating trade balance was the international debt problem. Some heavily indebted developing countries, especially in Latin America, experienced difficulty in attracting capital inflows and were forced to cut imports sharply in 1982. Because several of the major high-debt developing countries have close trading ties with the United States, a large proportion of the import cuts came out of U.S. exports.

Cyclical factors had conflicting effects on the trade balance in 1982. On one side, the recession in the United States tended to reduce import demand, so that import volume fell more than 4 percent. On the other side, the recession in other industrial countries contributed to the 13 percent decline in real U.S. exports.

GOVERNMENT PURCHASES OF GOODS AND SERVICES

Real Federal, State, and local government purchases of goods and services increased 2.6 percent from the fourth quarter of 1981 to the fourth quarter of 1982. Much of the increase was attributable to a 6.8

percent increase in real defense purchases. Federal nondefense purchases rose in real terms, due to a large increase in real purchases of agricultural commodities by the Commodity Credit Corporation. State and local government purchases were virtually flat.

LABOR MARKET DEVELOPMENTS

Along with output, employment declined 1 percent in 1982, as shown in Table 6-3. At the end of the year, employment was 1.7 million persons below the peak level reached in the second quarter of 1981. The reduction in employment predominantly occurred among production workers and other blue-collar employees. Sales, clerical, and service workers' employment did not peak until September 1982.

TABLE 6-3.—Labor market developments, 1978-82 [Fourth quarter of indicated year]

Component	1978	1979	1980	1981	1982
	Pe	rcent cha	nge from	year earlie	H 1
Change in civilian employment	3.8	2.3	-0.2	0.6	-1.0
Males 20 years and over	5.6	1.5 4.0 —.8	6 1.6 -6.6	.2 2.8 8.9	1.5 .7 8.0
White Black and other	3.3 7.3	2.2 3.3	1 6	.6 —.1	-1.2 .4
	Percent ²				
Jnemployment rate ³	5.9	5.9	7.4	8.3	10.7
Males 20 years and over Females 20 years and over Both sexes 16-19 years	4.1 5.8 16.4	4.4 5.7 16.3	6.2 6.7 18.3	7.1 7.2 21.2	10.0 9.0 24.3
White Black and other	5.1 11.5	5.2 11.2	6.5 13.7	7.3 15.3	9.5 18.6
Participation rate4	63 .5	63.8	63.7	63.8	64.1
Males 20 years and over Females 20 years and over Both sexes 16-19 years	50.1	79.6 51.0 57.9	79.2 51.5 56.3	78.8 52.3 54.6	78.8 52.9 54.1
White Black and other	63.6 62.4	64.0 62.3	64.0 61.8	64.2 61.4	64.5 62.0

 ¹⁹⁷⁸ data adjusted to reflect changes in sample and estimation procedures, which increased employment and labor force by 250,000 in January 1978.
 Seasonally adjusted.
 Intemployed as percent of civilian labor force.
 Civilian labor force as percent of civilian noninstitutional population.

Generally speaking, the older the age cohort, the lower the unemployment rate. For example, the unemployment rate for the 55 and over age group was 5.7 percent in the final quarter of 1982. Young workers experienced the highest unemployment rate. Employment of the 16 to 19 year age group has dropped in every year since 1979. This decline was far faster than the decline in the number of persons

Note.-Data relate to persons 16 years and over.

Source: Department of Labor, Bureau of Labor Statistics.

in this age group. Women workers now have somewhat lower unemployment rates than men, a reversal of the historical relation.

The labor force participation rate—the ratio of the labor force to the population over 16 years of age—has experienced a modest upward drift as women workers continue to join the labor force. The growth in adult women's labor force participation has been strong in the past. Declining participation has occurred among workers less than 20 years of age and among workers, especially males, over 55 who are likely to have an income cushion provided by social security, private pension plans, and savings.

WAGES, PRODUCTIVITY, AND PRICES

In response to slack labor markets and lower rates of price inflation, wage increases slowed substantially in 1982. As shown in Table 6-4, the rate of increase in several measures of wages and compensation declined about 2 percentage points from 1981. The 5.9 percent increase in the hourly earnings index for private nonfarm workers was the smallest since 1973. As measured by the employment cost index, wages and salaries of private industry workers increased 6.9 percent between the third quarters of 1981 and 1982. The deceleration was about the same for union and nonunion workers. A survey of major collective bargaining settlements reached in private industry showed that in the first 9 months of 1982 the agreements provided wage adjustments that averaged 3.8 percent in the first contract year, exclusive of cost-of-living adjustments, compared with 8.3 percent when the same parties last bargained. Total labor compensation in the nonfarm business sector increased 6.7 percent, compared with

TABLE 6-4.—Changes in wages and compensation, 1978-82 [Percent change, fourth quarter to fourth quarter and 5-year average]

Measure	1978	1979	1980	1981	19821	5-year average 1 *
Adjusted hourly earnings index ³	8.4	8.0	9.6	8.4	5.9	8.2
Employment cost index 4	7.7	8.7	9.0	8.8	4 6.9	8.1
Union workers	8.0 7.6	9.0 8.5	10.9 8.0	9.6 8.5	5 7.4 5 6.6	8.8 7.8
Nonfarm business sector: •						
Compensation per hour	9.0 .0	9.4 —2.9	10.6 1.7	8.8 6	6.6 2.0	9.0 —.7

<sup>Preliminary.
Based on annual data.
Private nonfarm employees.
Wages and salaries, private nonfarm industry workers.
Third quarter 1981 to third quarter 1982.</sup>

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

8.8 percent in 1981. These declines in wage inflation provide a basis for expecting that recent reductions in price inflation may be sustained.

Real compensation per hour rose 2.0 percent in 1982 as pay increased more rapidly than consumer prices. This was the first rise in this series since early 1978 and suggests that the historic trend of rising real wages and family incomes may resume.

Even though output declined for the third straight year, as shown in Table 6-5, labor productivity in the nonfarm business sector experienced its first substantial improvement since 1977. Lower rates of increase in hourly compensation and higher productivity growth together resulted in labor costs per unit of output increasing only 4.6 percent. This was less than half the rate of increase recorded in 1980, when labor productivity was weaker and hourly compensation rose at double-digit rates. The 4.6 percent increase in unit labor costs was associated with a rise of 4.3 percent in the nonfarm business sector price deflator.

TABLE 6-5.—Productivity, costs, and prices in the nonfarm business sector, 1978-82 [Percent change, fourth quarter to fourth quarter and 5-year average]

ltem	1978	1979	1980	1981	1982 1	5-year average 1 2
Output	5.6	0.2	-0.6	-0.2	-1.7	1.2
Output per hour	.3	1.9	.3	1	1.9	.0
Compensation per hour	9.0	9.4	10.6	8.8	6.6	9.0
Unit labor cost	8.6	11.6	10.2	8.9	4.6	9.0
Implicit price deflator	8.2	8.5	10.7	9.6	4.3	8.3

¹ Preliminary.

Source: Department of Labor, Bureau of Labor Statistics.

By all other measures as well, the rate of inflation declined significantly in 1982, as shown in Table 6-6. After increasing at double-digit rates in 1980 and by nearly 9 percent in 1981, the broadest measures of inflation—the GNP fixed-weight price index and the GNP implicit price deflator—increased nearly 5 percent in 1982. The all-urban consumer price index increased 4.5 percent, the slowest rate since 1972. Even when food and energy prices, which were especially weak, are excluded, consumer prices increased about 5 percent.

Beginning in 1983, the homeownership component of the consumer price index for all-urban consumers will be computed on a rental equivalence basis. On this conceptual basis, consumer prices increased about 5 percent in 1982.

Producer prices of finished goods increased only 3.6 percent in 1982, about the same as in 1972 and 1976. Price increases for both consumer finished goods and capital equipment showed a marked deceleration.

² Based on annual data.

Note.-Data relate to all persons.

TABLE 6-6.—Price changes, 1978-82 [Percent change, fourth quarter to fourth quarter and 5-year average]

Item	1978	1 9 79	1980	1981	1982 1	5-year average 1.3
GNP price measures:						
Fixed-weighted Index	8.9 8.5	9.3 8.2	10.3 10.2	8.9 8.9	5.0 4.6	8.6 8.2
Consumer prices: 1						
All items	9.0 8.5	12.7 10.7	12.6 12.2	9.6 10.2	4.5 5.2	9.8 9.4
Producer prices—finished goods:						
Total	8.7 9.0 7.8	12.7 13.9 8.8	12.4 12.6 11.7	7.2 6.8 9.1	3.6 3.4 4.2	9.1 9.2 8.7

Source: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

CREDIT MARKETS

During the first three quarters of 1982 the total amount of funds raised in U.S. credit markets averaged slightly more, at an annual rate, than the volume raised in 1981. As shown in Table 6-7, over the last 5 years the volume of funds raised by the nonfinancial sector has dropped from 18.6 percent to 13.6 percent of nominal GNP, a return to the cyclical lows recorded in 1974 and 1975.

TABLE 6-7.—Funds raised by the nonfinancial sector of the economy, 1978-82 (Billions of dollars, except as noted)

Sector	1978	1979	1980	1981	1982 1
Total funds raised	401.7	402.0	397.1	406.9	413.7
Households	169.3	176.5	117.5	120.4	87.0
Business	126.3	146.9	143.9	149.5	139.1
Federal Government	53.7	37.4	79.2	87.4	139.1
State and local government	19.1	20.2	27.3	22.3	37.2
Foreign	33.2	21.0	29.3	27.3	11.1
Funds raised as percent of GNP	18.6	16.6	15.1	13.9	13.6

¹ Average of first three quarters at seasonally adjusted annual rate.

Different sectors of the credit market experienced widely different trends in 1982. High interest rates in the first half of the year and sluggish disposable income contributed to reduced borrowing for

¹ Preliminary. ² Based on annual data. ³ All urban consumers.

Note.-Detail may not add to total due to rounding.

Sources: Department of Commerce (Bureau of Economic Analysis) and Board of Governors of the Federal Reserve System.

housing. Borrowing by the nonfinancial business sector also declined during the first three quarters of 1982. However, the easing of credit conditions in late summer encouraged an expansion in net corporate bond issues; the funds raised were used in part to pay off short-term debt.

Combined borrowing of State and local governments and the Federal Government rose approximately 60 percent in the first three quarters of 1982 from 1981 levels, as the growth of tax receipts slowed sharply relative to expenditures. For fiscal 1982, U.S. Treasury borrowing totaled \$135.0 billion, of which \$23.4 billion was used for making direct loans. Federally guaranteed loans declined sharply from 1981 levels, but borrowing by federally sponsored enterprises surged. Total Federal and federally assisted borrowing climbed to 48.9 percent of the funds raised in U.S. credit markets, surpassing the previous peacetime peak of 41 percent reached in 1976.

INTEREST RATES

As shown in Chart 6-1, interest rates rose in the first part of 1982 but began to decline sharply in the summer. The decline in interest rates partly reflected diminishing inflationary expectations that tend to be built into nominal interest rates.

The yield on 3-month Treasury bills, which had averaged just under 11 percent late in 1981, held in the 12 to 13 percent range until mid-1982 and then fell to less than 8 percent in the closing months of the year. The prime rate charged by commercial banks began the year at 15% percent, climbed to 17 percent in February, and then in July began a steady fall to 11% percent by December. The corporate Aaa bond rate, which peaked at 15% percent in February, fell below 12 percent by November.

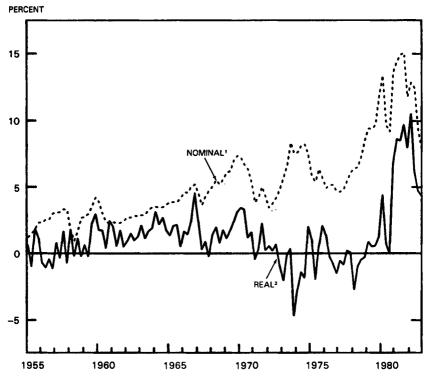
The expected real after-tax interest rate is the correct measure of the cost of credit to borrowers and lenders. It is approximately equal to the after-tax nominal interest rate less the anticipated rate of inflation. For example, with a 12 percent nominal interest rate, the after-tax cost of credit to a borrower in the 30 percent marginal tax bracket is 8.4 percent. If a 5 percent inflation rate is anticipated, the expected real after-tax cost of credit is 3.2 percent.

Because the tax brackets of borrowers differ widely and the expected rate of inflation cannot be observed directly, the realized real pretax interest rate—approximated by the nominal interest rate less the actual rate of inflation—is a more convenient measure of the cost of credit. The nominal 3-month Treasury bill rate and the corresponding realized real pretax rate are shown in Chart 6-5 for the period since 1955. The real pretax Treasury bill rate was abnormally low in 1972-73 and 1976-77, tending to increase aggregate demand.

It then moved to relatively high levels from 1980 through the first half of 1982, tending to reduce aggregate demand. By the end of 1982, however, the real pretax Treasury bill rate had fallen to about the same level as its highs in the 1950s and 1960s.

Chart 6-5

Nominal and Real 3-Month Treasury Bill Yield



'CONVERTED TO EFFECTIVE ANNUAL YIELD FROM DISCOUNT BASIS.

2EQUALS NOMINAL YIELD LESS ACTUAL RATE OF INFLATION, DEFINED BY PERSONAL CONSUMPTION DEFLATOR, OVER THE PERIOD TO MATURITY. DEFLATOR FOR FIRST QUARTER 1983 FORECAST BY COUNCIL OF ECONOMIC ADVISERS.

SOURCES: DEPARTMENT OF COMMERCE, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, AND COUNCIL OF ECONOMIC ADVISERS.

The sharp run-up and subsequent decline in real pretax rates during the 1980-82 period probably reflect in part the adjustment of credit markets to the decontrol of interest rates. During the late 1970s variable interest rate time and savings accounts were introduced by depository institutions, and the process of financial innovation speeded up the movement of funds out of regulated, fixed-rate accounts. In addition, the consumer has recently become a more vig-

orous competitor for credit as usury laws have been eliminated. As a result, the financial system now relies less on nonprice rationing of credit and may exhibit higher interest rates when credit is tight.

Even though real short-term rates have returned more nearly to the levels of the 1950s and 1960s, the equilibrium level of both longand short-term rates may now be somewhat higher than before. To the extent that the accelerated cost recovery system in the Economic Recovery Tax Act of 1981 reduced the tax on earnings of depreciable property, it raised the real interest rate that business borrowers are willing to pay. In addition, large budget deficits in many countries have lowered national saving rates, tending to lead to higher real interest rates worldwide.

At the end of 1982, long-term interest rates were considerably higher than short-term interest rates, perhaps reflecting the concern that the inflation rate may be higher in the future than at present. To the extent that these inflationary expectations decline, further declines in nominal long-term interest rates can be anticipated.

MONETARY DEVELOPMENTS

The Administration's economic program includes support for a policy of gradual reduction in the rate of monetary growth in order to bring down inflation. Consistent with this policy, the Federal Reserve reduced the M1 target growth rate range from 3.5 to 6 percent in 1981 to 2.5 to 5.5 percent in 1982. The target range for M2 growth was kept at 6 to 9 percent.

In its February 1982 review of the tentative target ranges for 1982, established in July 1981, the Federal Open Market Committee recognized that the rapid increase of M1 in December 1981 and January 1982 had already placed it well above the top of its target range. Judging that the rapid money growth was temporary and that no basic change in the relation between the monetary aggregates and nominal GNP had occurred, the committee reaffirmed the tentative targets for 1982.

Consequently, the Federal Reserve slowed the growth of nonborrowed reserves during the first half of the year, with a view to gradually bringing M1 and M2 back into their target ranges. By June, M1 was within its target range, while M2 remained somewhat above the top of its range. Because M1 had shown virtually no growth since January, resumption of growth implied a step-up in the provision of bank reserves. After midyear, continued weakness in the economy, and a more ample supply of reserves and money contributed to a sharp drop in short-term interest rates. The 3-month Treasury bill rate fell from about 12 percent in July to 9 percent in August. A series of reductions in the Federal Reserve's discount rate followed,

maintaining its alignment with short-term market rates and preventing sharp changes in the incentive for banks to borrow from the Federal Reserve.

Starting in August, M1 growth began to speed up. By the fourth quarter of 1982, M1 had risen 8.5 percent above its level in the fourth quarter of 1981, well above the upper end of the 1982 target range. Over the same period, M2 increased 9.8 percent, slightly more than the top of its target range. These increases in the monetary aggregates occurred against the background of an economy that was still in recession.

Part of the strength in M1 may be attributable to the effects of a large volume of All-Savers Certificates maturing in the fourth quarter of 1982, as the maturing funds moved through checking accounts or were temporarily "parked" there. Federal Reserve analysis suggested that an additional factor was an unusual demand for liquidity. Much of the increase in M1 was in interest-bearing negotiable order of withdrawal (NOW) accounts, which provide elements of both savings and transactions accounts. From the fourth quarter of 1981 to the fourth quarter of 1982, checkable deposits other than demand deposits grew about 35 percent. With market interest rates falling, these interest-bearing deposits, such as NOW accounts, provided a safe and convenient store of liquidity at a time of economic and financial uncertainty. Increased liquidity demand may also account for the above-target growth of M2.

As discussed in Chapter 1, the behavior of the "income velocity" measures—the ratios of GNP to the various monetary aggregates—was unusual in 1982. The velocity of M1 rose 3.2 percent a year on average over the 20 years ending in 1981, but in 1982 it declined 4.9 percent. While a tendency toward slower velocity is not unusual in the midst of a recession when interest rates generally are falling, the only other fourth quarter to fourth quarter decline in M1 velocity since the beginning of the current series in 1959 was a 0.1 percent fall in 1967. The velocity of M2, which historically has been relatively trendless, declined 6.0 percent in 1982; the largest previous decline was 3.8 percent in 1976. Without some accommodation of monetary growth—particularly for M1—to this drop in velocity, monetary policy would have been more restrictive than had been intended when the 1982 targets were established.

The number, size, and rapidity of recent changes in the financial sector may well have affected the behavior of velocity. As indicated in Table 6-8, checkable deposits other than ordinary demand deposits accounted for only 2.3 percent of M1 in December 1978. In December 1980, just before NOW accounts were authorized nationally, other checkable deposits were 6.5 percent of M1, but by December

1982 their share had risen to over 21 percent. Because these interestbearing deposits may be regarded by their holders in part as savings rather than solely as transactions balances, the reported growth of M1 in 1981 and 1982 probably overstates the growth in transactions balances.

TABLE 6-8.—Components of M1 and M2, 1978-82 [Averages of daily figures; billions of dollars; seasonally adjusted, except as noted]

	_		December		
ltem	1978	1979	1980	1981	1982 1
Currency	97.4	106.1	116.1	123.1	132.6
Plus: Demand deposits ²	257.4	265.9	271.4	240.7	244.6
Other checkable deposits	8.4	16.9	26.9	77.0	101.3
Equals: M1	363.2	389.0	414.5	440.9	478.5
Plus: Savings deposits ³	479.9	421.7	398.9	343.6	400.3
Small time deposits	533.9	652.6	751.7	854.7	904.2
Overnight repurchase agreements (RPs) and overnight Eurodollars 4	24.0	26.3	35.0	38.1	45.6
Money market mutual fund balances (excluding institution accounts) 4	7.1	34.4	61.9	151.2	177.5
Equals: M2 s	1,403.9	1,518.9	1,656.2	1,822.7	1,999.1

¹ Preliminary.

In general, the demand for any particular monetary aggregate and hence its income velocity-depends in part on the difference between market rates of interest and the rates earned on the deposits in that aggregate. Consequently, the increased portion of M1 deposits that pay interest and the decline in market interest rates have combined to lower M1 velocity.

The rapid growth of general purpose and broker/dealer money market mutual fund balances, which are included in M2 but not in M1, has tended to raise M1 velocity and to lower M2 velocity. From December 1980 to December 1982 these money market mutual fund balances grew from \$61.9 billion to \$177.5 billion, which exceeded the growth in other checkable deposits by \$41.2 billion. Although most money market mutual fund balances are subject to transfer by check, the average turnover of these accounts has been relatively low.

Interpretation of the macroeconomic significance of changes in the monetary aggregates became more difficult in late 1982 when the Depository Institutions Deregulation Committee authorized two new accounts. In mid-December, banks and thrift institutions introduced a Money Market Deposit Account with limited transactions capabilities and no interest rate ceiling. Within about 2 weeks, these accounts

² Includes travelers checks.
5 Includes Money Market Deposit Account introduced December 14, 1982.

^{*}Not seasonally adjusted.

*M2 will differ from the sum of components by a consolidation adjustment that represents the estimated amount of demand deposits and vault cash held by thrift institutions to service time and savings deposits.

Source: Board of Governors of the Federal Reserve System.

had attracted an astonishing \$87 billion. The Depository Institutions Deregulation Committee also authorized a new super NOW account effective January 1983, with no transactions limitations and no interest rate ceilings, having the same \$2,500 minimum balance as the Money Market Deposit Account.

Financial deregulation and innovation favorably affect the efficiency of the U.S. financial system but also complicate the implementation of monetary policy. Large asset reallocations caused by changes in the financial and regulatory system can have large and unpredictable effects on M1 and M2 and on their relations to nominal GNP. In light of the particular difficulties with regard to M1, the Federal Open Market Committee has voted to place greater emphasis on M2 and M3 for an indefinite period. However, the broad framework of targeting the monetary aggregates has been retained, as have the reserve operating procedures, for implementing it.

PROSPECTS FOR 1983

Assuming that the Administration's 1984 budget proposals are enacted and that the monetary aggregates grow within the Federal Reserve's target ranges, the prospects for a moderate, sustainable economic recovery beginning early in 1983 are good (Table 6-9). As was true in the early stages of previous recoveries, the unemployment rate is likely to stabilize for several months before a downward trend becomes evident. A pattern of reduced inflation in 1982 is expected to continue in 1983. The sharp rise in the Federal budget deficit reflects reduced receipts because of lower inflation, as well as the effects of the 1981-82 recession.

The expectation of economic recovery is based on the view that continuing strength in household and defense spending will bring a turnaround in the inventory cycle. Cuts in production and increases in sales brought business inventories more in line with sales by the end of 1982. Future sales gains are thus likely to be met by increases in production, income, and employment, enhancing sales further. Once even a moderate but sustained increase in sales is underway, this sequence of events may lead to a temporary surge of above-average economic growth.

Increases in sales will come primarily from households whose income will be bolstered by the third stage of the personal income tax cut, whose debt burden has declined sharply relative to income and assets, and whose financial assets, in many cases, appreciated in rallies in the stock and bond markets. With continued moderate increases in food and oil prices, more income will become available for other consumer purchases. Because outlays on durable consumer

Table 6-9.—Economic outlook for 1983

ltem	1982 1	1983 forecast
Percent change (fourth quarter to fourth quarter):		
Real gross national product	-1.2	3.1
Personal consumption expenditures Nonresidential fixed investment Residential investment Federal purchases State and local purchases	4.5 6.6	2.7 3 27.6 1.2 -2.0
GNP implicit price deflator	4.6	5.6
Compensation per hour ³	6.6	6.0
Output per hour ²	1.9	2.2
Level in fourth quarter: 3		ļ
Unemployment rate (percent) 4	10.7	10.4
Housing starts (millions of units, annual rate)	1.3	1.5

Sources: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

goods and houses have been depressed for the last 4 years, consumers are expected to devote increases in their income, and perhaps some of the recent gains in their financial wealth, to replenishing their holdings of durable goods. The sharp easing of credit terms and lower house price increases have already encouraged more households to consider buying houses. This uptrend is expected to intensify in 1983. New house purchases are invariably followed by a pickup in expenditures for furniture, appliances, and other housingrelated goods.

The pace of the recovery in 1983 will probably be moderate by historical standards. Low capacity utilization rates and the need to rebuild corporate liquidity will restrain capital spending. The worldwide recession and the lagged effect of the appreciation of the dollar will curtail the growth of exports. Continued reductions in the nondefense public sector will limit it as a source of increased aggregate demand.

PROSPECTS AND POLICIES BEYOND 1983

Economic prospects for the rest of the 1980s depend greatly on the economic policies that are followed. The Administration believes that the four-point program it has pursued-reducing the growth of Federal outlays, taxes, regulation, and the money supply—constitutes the best approach for attaining and maintaining the economic goals set forth in the Full Employment and Balanced Growth Act of 1978.

<sup>Preliminary.
Nonfarm business, all persons.
Seasonally adjusted.
Actual rate for 1982 is percent of civilian labor force; forecast rate for 1983 is percent of total labor force including persons in the Armed Forces stationed in the United States.</sup>

The Full Employment and Balanced Growth Act calls for annual numerical goals for several key economic indicators over a 5-year period. The projections provided in Table 6-10 show gradual, steady progress toward our economic goals. These figures illustrate the Administration's belief, explained in Chapter 1, that policies based on consistent, long-term objectives can simultaneously achieve full employment, price stability, and sustained growth in real income. A major cause of our present economic ills was the inclination in the past to pursue one economic goal single-mindedly, without adequate attention to the longer run consequences for other economic objectives. This Administration remains determined to avoid the errors of past policies.

TABLE 6-10.—Projections of economic goals, 1983-88
[Calendar years, except as noted]

Item	1983	1984	1985	1986	1987	1988
	Level					
Employment (millions) 1	101.5	104.2	107.0	109.6	112.3	114.9
'Inemployment rate (percent) 2	10.7	9.9	8.9	8.1	7.3	6.5
ederal budget outlays as percent of GNP (fiscal year basis)	25.2	24.3	24.1	23.9	23.5	23.0
		Per	cent chan	ge		
Consumer prices ^a	4.9	4.6	4.6	4.6	4.5	4.4
Real GNP	1.4	3.9	4.0	4.0	4.0	4.0
Real compensation per hour 4	1.2	.8	1.1	1.4	1.6	1.6
Output per hour 4	2.1	1.9	1.6	1.7	1.6	1.7

¹Labor force series includes persons in the Armed Forces stationed in the United States.

Source: Council of Economic Advisers.

A major prerequisite for achieving our economic goals is control of inflation. Marked progress toward this end has been made in the last 2 years. With continued moderate growth in the monetary aggregates, increased reliance on the private sector, and increased domestic and international economic competition, the prospects for sustaining and extending the progress against inflation are now quite favorable.

An important factor in achieving and sustaining high real economic growth is a high level of capital formation. Chapter 4 of this volume, which fulfills the legislative requirement for an annual Investment Policy Report, explains that lower inflation and the recently enacted tax incentives for saving and investment are the important first steps in fostering capital accumulation. Controlling the Federal deficit is now the single most important method of encouraging more capital formation.

²Unemployed as percent of total labor force. See footnote 1. ³Wage earners and clerical workers.

Nonfarm business, all persons.

A critical element in achieving healthy economic growth is maintaining a liberal worldwide trading system. As explained in detail in Chapter 3, the world's economies are now more integrated than ever before. This system has recently experienced severe strains. It is of utmost importance that these challenges be met in a manner consistent with an open, growing, balanced network of international trade.

Just as an open worldwide trading system is crucial for the free world economies, a competitive free market system unfettered by unnecessary government regulation is essential for a strong domestic economy. As Chapter 5 points out, substantial progress toward reduction of traditional price and entry regulation has been made in recent years, but further opportunities for deregulation exist.

The year 1983 is expected to be the first of many years of sustained economic growth. Continued economic growth is the only way to sustain progress in reducing unemployment. But macroeconomic policies alone cannot reduce structural unemployment and achieve an acceptable level of employment. Chapter 2 describes some of the macroeconomic policies that, along with a sustained recovery, are necessary to achieve noninflationary full employment. These policies are designed ". . . to foster and promote free competitive enterprise . . ." as mandated in the Full Employment and Balanced Growth Act.

One major remaining threat to a sustainable, balanced recovery is the danger that large Federal budget deficits would preclude the continuing declines in real interest rates that are necessary for healthy growth in all sectors of the economy. The Administration's 1984 budget provides a plan which can lead to a steady decline in budget deficits and thus, ultimately, to a balanced Federal budget.